

MAKING

LES

IMMATÉRIEAUX

BROECKMANN

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The Making of *Les Immatériaux*

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The Making of *Les Immatériaux*

Andreas Broeckmann

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This book is dedicated to all the teams.
Ce livre est dédié à toutes les équipes.

Preface

This book has evolved over a period of 10 years and reflects a confluence of many interests. The first of them was that, on a trip to Paris in June 1985 as a young student, I happened to see the exhibition *Les Immatériaux*. A fellow student at Ruhr University Bochum, Dieter Wieczorek, who had also first pointed me to the writings of Lyotard and Deleuze and Guattari, told me that if I went to Paris, I should not miss the show that was on at the Centre Pompidou. The exhibition visit left a deep impression on me, though I couldn't really make heads or tail of what I had experienced. Many years later, I retained no more than a faint memory when the young Chinese philosopher Yuk Hui asked me in 2013 whether I knew anything about the famed exhibition. Hoping to explain to Yuk—and to myself—what the show was about, I got onto the research trail. I quickly found the important texts by Francesca Gallo and Antony Hudek, but more than anything it was Antonia Wunderlich's detailed description of the exhibition in her chapter "Phénoménologie de la visite" which propelled my own interest. (The publication of an extended, co-authored version of Wunderlich's texts translated into English is forthcoming and will form a complement to the present volume.)

The second main motivation for the research toward this book came from an irritation caused by Wunderlich's book title, *Der Philosoph im Museum: Die Ausstellung Les Immatériaux von Jean-François Lyotard*. Wunderlich's book remains a huge achievement because it offers a broad historical contextualization and, even more importantly, the first attempt at a full description and interpretation of all the exhibition sites. However, the insinuation of the title and many passages in the book, namely that Lyotard was its sole author, clashed with my own experience as a curator, from which I knew that a project like this could only be realized in collaboration with many others, including project managers, assistants, administrators, advisors, co-curators. So, I began by looking for these other contributors and found my way into the meshwork of relations and knowledge trajectories which form the red thread of this study.

My two main guides were Martine Moinot and Jean-Louis Boissier, for whose generous support and friendship I'm immensely grateful. They helped me to get in touch with members of the exhibition team, including Katia Lafitte, Chantal Noël, and Sabine Vigoureux, as well as with members of the former CCI like Marc Girard, François Burkhardt, and Jean Dethier. I would soon meet many of the artists and other contributors, including Bernard Blistène, Daniel Buren, Jacques-Élie Chabert and Camille Philibert, Gisèle Cloarec, Frédéric Develay, Pascale Deville, Hadmut Holken, Catherine Ikam, Jean-Pierre Ozil, Arnaud Petit, Philippe Puicouyoul, Annegret Soltau, Liliane Terrier, Katerina Thomadaki, and others. I am grateful for all the stories that they shared, not

least those about their own encounters with Jean-François Lyotard and Thierry Chaput, both of whom had already passed away in the 1990s.

In this meshwork of relations, Dolorès Lyotard holds a special position, having been both a contributor (as editor of the texts for the exhibition soundtrack) and Lyotard's partner in the years following 1985. I thank her for her trust and for offering important insights into Lyotard's life and thinking.

Among the scholars of Lyotard who have helped me—a philosophical amateur—I want to highlight Corinne Enaudeau, Lyotard's daughter, who is an expert on his thinking and a philosopher in her own right. She as well as Kiff Bamford, Clarisse Bardiot, Beatrice von Bismarck, Jean-Louis Boissier, Francesca Gallo, Jérôme Glicenstein, Antony Hudek, Sergio Meijide Casas, Lucy Steeds, and Ashley Woodward have read early drafts of individual chapters or the entire manuscript and have offered valuable hints for improving the text, though I confess that I did not always follow their advice.

Ever since we met in 2016, Marie Vicet has been a most steadfast companion in the archival research, not least in deciphering documents and photographs. We received the vital and generous support of Jean-Philippe Bonilli and Jean Charlier in the Pôle Archives of the Centre Pompidou. The same is true of the Bibliothèque Kandinsky where Nicolas Liucci-Goutnikov, Mica Gherghescu, and their colleagues took a continuous and always supportive interest in the project. Another invaluable source proved to be the archive of Lyotard's writings at the Bibliothèque littéraire Jacques Doucet. And support of both the practical and the passionate kind was offered by Marcella Lista, Julie Champion, and Philippe Bettinelli in the New Media Department of the Musée national d'art moderne, MNAM/CCI.

I'm also grateful to the students in my seminars at Leuphana University Lüneburg, Carl-von-Ossietzky University Oldenburg, and at the Academy of Fine Arts in Leipzig; teaching these seminars helped to advance the research that this book is based on. I thank Yuk Hui for asking that initial question, Lívia Nolasco-Rozsas for her trust in a yet fledgling project, Didier Schulmann for an important piece of advice, and Thierry Dufrêne for sharing my initial enthusiasm, which was later augmented by so many others.

The research of the past 10 years was supported in different ways by Leuphana University Lüneburg, Carl-von-Ossietzky University Oldenburg, and the Academy of Fine Arts in Leipzig. It was given an important boost when the New Media Department of the MNAM/CCI received its funding from the Creative Europe program for its cooperation project with the ZKM Karlsruhe, "Beyond Matter." And its completion was made possible by a grant from the German Research Foundation which generously supported the project "The Exhibition *Les Immatériaux*: Interdisciplinarity, Epistemology, Curatorial Subjects" (DFG grant BR 6317/2-1). I remain grateful to the jury and the reviewers who saw

the relevance of the endeavor. A big thanks to Paula Woolley for improving both the language and appearance of the manuscript, and to Meson Press for making the book possible in its current form, both printed and digital.

A big thanks to the friends who hosted me in Paris, especially Jens Hauser, Stéphanie Pécourt and Julien Maire, and—beyond all measure—Martine Moinot and her family.

And none of this would have been possible without the companionship, advice, and support of Sandra Kuttner.

Editorial Notes

The research for this book has mainly drawn on documents from the public Archives of the Centre Pompidou (CPA); the document titles in the footnotes include references to the respective archive boxes (e.g., “1977001W130,” “1994033W669”), the extensions like “_001” indicate the unique code of a specific document in those boxes. The scans of many of these documents are available online through an *Instrument de recherche* on the website of the Bibliothèque Kandinsky.

All translations from French and German are by the author, unless noted otherwise. (A draft version of this text with all original quotations is available upon request.) Quotations from the *Inventaire* catalogue and the *Petit journal* are taken from the English versions, translated by Robin Mackay in 2022.

Several of the chapters are based on texts which were published in earlier versions as Working Papers in the *Les Immatériaux Research* series; all of the Working Papers are online at <http://www.les-immateriaux.net/working-papers/>.

To make it possible for individual chapters to be read out of the context of the entire book, some basic information gets repeated occasionally.

Introduction to a Collaboration

A Stroll through the Exhibition at the Centre Pompidou in the Spring of 1985

Eight years after its opening in 1977, the Centre Pompidou is still a spectacle, and its large exhibitions, performances, screenings, and other programs promise cultural relevance, thematic diversity, and curatorial ambition. The show that is presented in the main exhibition space of the Grande Galerie on the fifth floor in spring 1985, *Les Immatériaux*, however, is unusually enigmatic, compared with the major monographic art exhibitions—including *L'Œuvre de Marcel Duchamp* (1977), *Pollock* (1982), *Kandinsky* (1984)—or thematic shows whose titles are programmatic summaries: *Paris–Moscou, 1900–1930* (1979), *Cartes et figures de la terre* (Maps and figures of the Earth, 1980), *Architecture et industrie. Passé et avenir d'un mariage de raison* (Art and industry: Past and future of a marriage of convenience, 1983). What to expect of an exhibition whose title is a neologism destined to be misunderstood (fig. 1)?¹

Many of the people who visit the exhibition *Les Immatériaux* have heard that it has been curated by Jean-François Lyotard (1924–1998), a French philosopher of international fame whose hypothesis about the new “postmodern condition” of contemporary culture and philosophy, first published in 1979, has been discussed widely, in academic circles as well as in the art world (Lyotard 1984). Reason enough for artists and academics as well as members of the

1 The term *immatériaux* is hard to translate, given the valences of *matériaux* between “raw materials” and “hardware,” and the slippage introduced by the prefix *im-*, between negation and inversion. I occasionally use “im-materials” (with a hyphen) as an approximate English translation.



[Figure 1] *Les Immatériaux*, poster, 1985. Design by Grafibus / Luc Maillet. © bpk / CNAC-MNAM / Bibliothèque Kandinsky, Centre Pompidou.

broader Beaubourg audience to join the queues for tickets and admission. In the case of this show, it is barely an advantage to read one of the newspaper reviews or to know someone who already saw the show: what the reports say is difficult to understand, they speak about a somber atmosphere, about an overabundance and diversity of exhibits, about technical devices and futurist themes, and they convey a lasting sense of both frustration and curiosity. Like the print publications that accompany the exhibition, the reviews only really begin to make sense after the visit. So if you really want to know what's cooking in *Les Immatériaux*, there is no other way to find out than to go and see for yourself.

At the entrance the visitor is asked to take a set of headphones—still unusual in 1985, at a time when the Walkman has barely hit a mass consumer market, mobile MP3 players are still 15 years away, and being in your own sound bubble is a private home experience, not a public one. This historical specificity of the headphone system highlights an important difficulty of explaining what *Les Immatériaux* was, and what made it special: there were aspects of the exhibition which were unusual or totally new for many of the visitors, including the holograms, the music video clips, the film images of

biogenetic experiments, the interactive networked computer terminals of the Minitel system—aspects which, 40 years and several generations of television and internet culture later, are common, if not somewhat dated everyday phenomena. The curiosity, or surprise, or shock that visitors may have felt at the time would have been different from person to person, especially because these “new” things were combined with all sorts of other phenomena that were more easily recognizable and that were perhaps only strange to see in combination with other common things from wildly different contexts. Unlike other exhibitions, *Les Immatériaux* did not take an analytical approach that would have placed the exhibits in an order in which they could be easily recognized, compared, and understood. Rather, the 60 “sites” in which the exhibits were presented juxtaposed them in such a way that every passage through the exhibition felt like a zigzag course on which no precise thematic sequence could be construed.² Even today, the catalogue brings up that same feeling. It came in three parts: a bound softback volume with theoretical texts (*Épreuves d'écriture* [Trials of writing]), a brochure presenting facsimiles of preparatory materials (*Album*), and an unbound stack of sheets, one for each of the sites (*Inventaire* [Inventory]). The *Inventaire* made it tangible that there would be no fixed, linear order, and that reading this exhibition could take many forms. The itinerary offered in the slim exhibition guide, the *Petit journal*, was only one option, and only a theoretical one, because it would not have been possible to follow its logic, which would have required teleporting to the starting point several times (fig. 2).³ To be true to the organizing principles of *Les Immatériaux*, there's no other way but to take the lack of order and the contrasts for what they are.

The exhibition visit begins in the *Vestibule d'entrée* (Entrance chamber), a corner space that introduces the visitor to some main features of the exhibition scenography, the darkness, the theatrical lighting, the soundtrack (fig. 3). Over the headphones, the visitor hears the sound of human breathing, close to our ear, an intimate sonic encounter which prepares us for others to come. Faintly lit in a dark corner of this vestibule is a stone relief which shows a female Egyptian goddess offering a symbol of life to the pharaoh king standing in front of her: the divine gift of the soul, *l'âme* (fig. 4). Gaston Bachelard, the French historian of knowledge and an intellectual guide for many in Lyotard's generation, said that *âme* is one of the few words which mean what they perform: it is the breathing out, and so the goddess

2 In the literature, the counting of the sites varies slightly, depending on whether the eight “sections” in the *Labyrinthe du langage* are counted separately, and whether the *Galerie de sortie* [Exit corridor] is taken into account. For a synopsis of the French titles and their English translations, see Appendix 2.

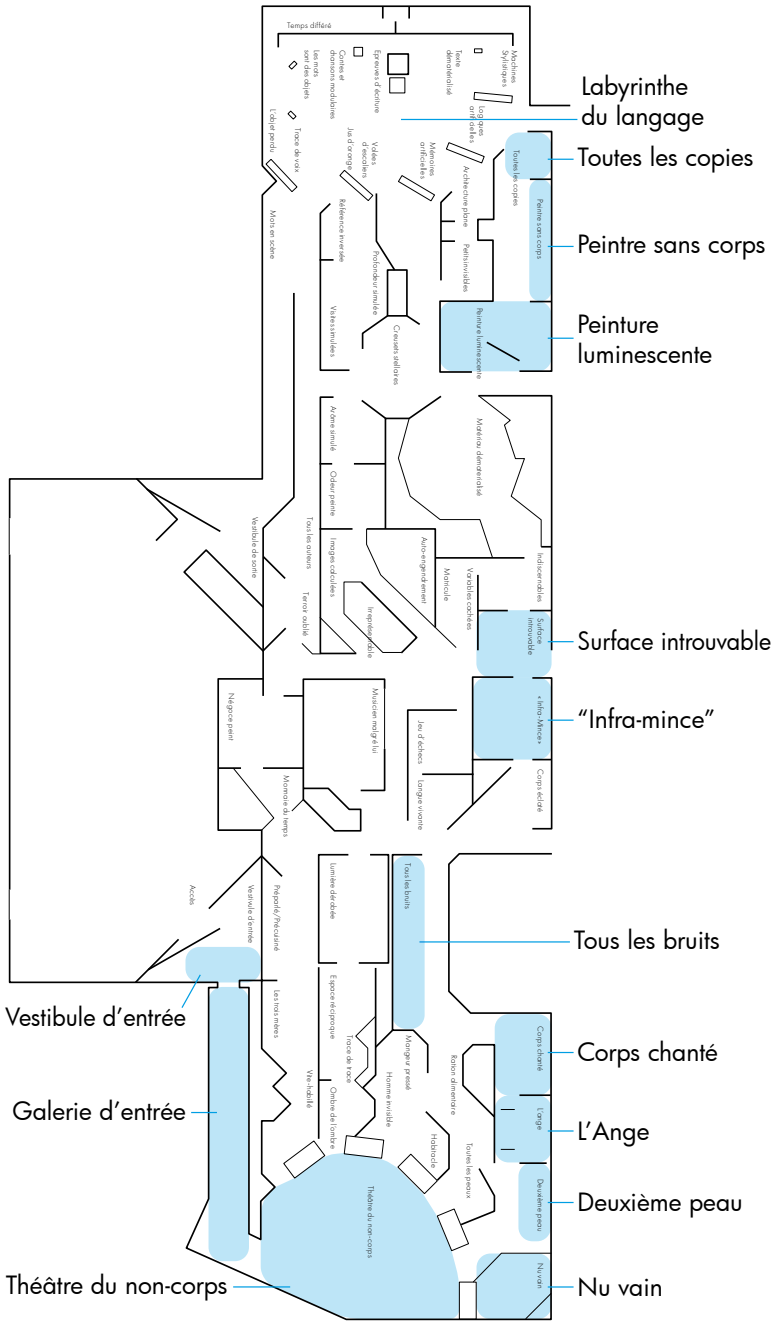
3 In addition to the catalogue volumes (vol. 1, *Épreuves d'écriture*, 1985; vol. 2, *Album et Inventaire*, 1985) and the *Petit journal* (1985), there was also a brochure with English translations of the French texts of the audio track, entitled *Route: Zones & Sites* (1985).



[Figure 2] Visitor with *Petit Journal* exhibition guide. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0479]

who breathes life into the pharaoh says to him, “*âme*, breathe and receive this soul!” This first exhibition site is also a first lesson about the meaning of the “im-material” of the exhibition title, which signifies the multiple and in-between states of the things we encounter. The visitor hears the breathing and sees the symbol of life passing from goddess to pharaoh, the hearing and the seeing complemented by a visceral sense of the hardness and the coolness of the old stone into which the image has been carved, almost a square meter in size, 10 centimeters thick, a massive weight that strangely contrasts with the ephemerality of the faint breeze of breath and the weightlessness of the soul that it carries.

Next to the Egyptian bas-relief is the entrance to a corridor, the *Galerie d'entrée* (Entrance corridor), the only possible way to continue. As we enter, the soundtrack switches from the breathing to an abstract, pulsating sound of descending scales. Perhaps it is the electronically manipulated sound of a heartbeat, or of blood pulsating in the veins. The long corridor suggests this association, perhaps even the coalescing of the blood and the breath, the visitor moving in the flow, being part of the flow. The sound also suggests a descent, a slow-motion fall whose interpretation as a “dreamscape” I will here attempt only in the speculative, final chapter. For now, it is the sound of transition, a hint at the inside of the body, a body that is present, the visitor’s body, without which there would have been no movement, no switching from one sound to the other, from breath to blood flow, and no passage through the corridor. It leads to another corner, with a mirror placed obliquely, which



[Figure 3] Plan of the exhibition *Les Immatériaux* (from *Inventaire* 1985), with labels added to show the locations of the sites described in this “stroll.”



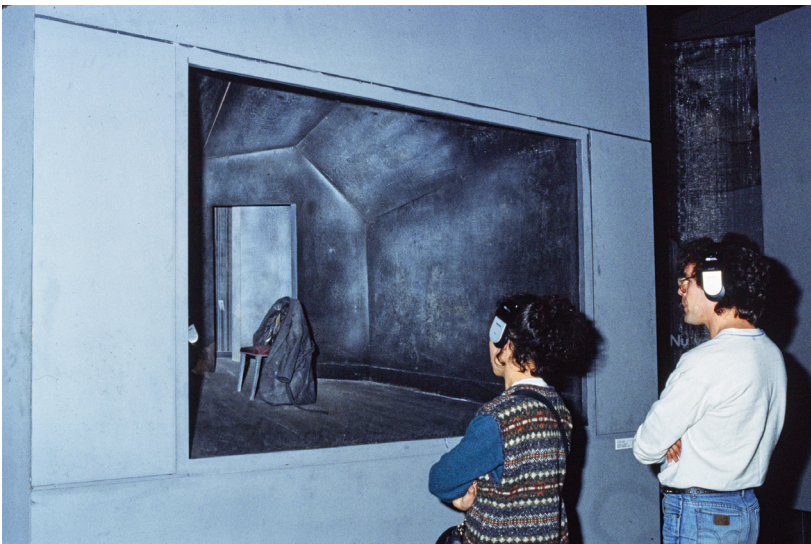
[Figure 4] Site *Vestibule d'entrée* (Entrance chamber), Egyptian bas-relief. Filmstill, Zajdermann/Soutif, *Octave au pays des Immatériaux*, 1985 (min. 04:24). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

cannot be passed without taking a glance at the human body that is visiting the exhibition and that occasionally calls itself “I.”

As this body enters into the large space that opens up to the left, a male voice is heard over the headphones, murmuring sonorously and in French, “I gave up before birth, it is not possible otherwise, but birth there had to be, it was he, I was inside, that’s how I see it, it was he who wailed, he who saw the light, I didn’t wail, I didn’t see the light, it’s impossible I should have a voice, impossible I should have thoughts, and I speak and I think, I do the impossible, it is not possible otherwise ...,” and so on and on (Beckett 1976, 31). The space is designated as a “theatre of the non-body,” *Théâtre du non-corps*, and its semicircular shape is formed by five dioramas with miniature theatre stages, showing scenes of unnamed plays from which the human actors are conspicuously absent (fig. 5, 6). They left their traces—a coat thrown over a chair, ashtrays with their abandoned cigarettes still smoldering, even some empty shoes moving on their own in a ridiculous tap-dance. The only hint at a physical presence (other than that of the exhibition visitors) is a disembodied mouth, suspended in the darkness of the central diorama like the Mouth in Samuel Beckett’s play *Not I*, perhaps intended here as the source of the voice in the soundtrack, and in each visitor’s head, “... there will be no more I, he’ll never say I any more, he’ll never say anything any more, he won’t talk to anyone, no one will talk to him, he won’t talk to himself, he won’t think any more, he’ll go on, I’ll be inside ...,” and so on (Beckett 1976, 32–33).



[Figure 5] Site *Théâtre du non-corps* (Theatre of the non-body), with audience, dioramas and corridor of one of the *Mât* paths. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0307]



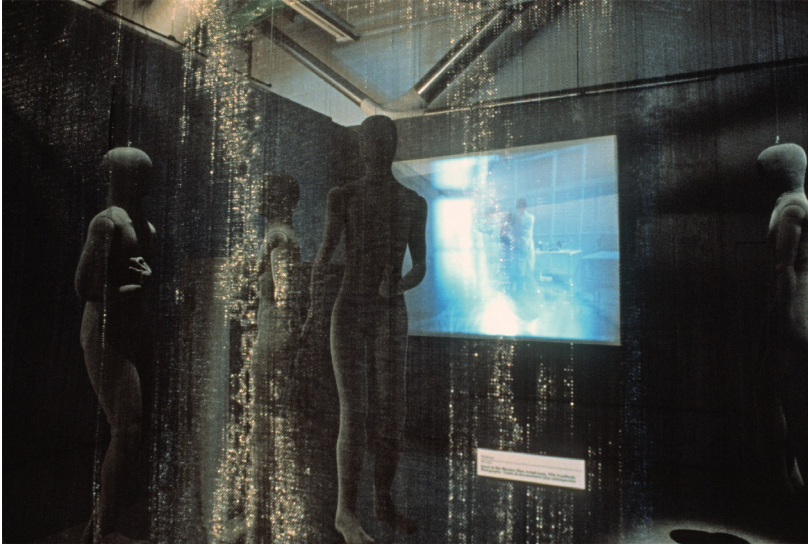
[Figure 6] Site *Théâtre du non-corps*, diorama *Pas la parole: matrice* (Not Speech: Matrix), with visitors. Diorama design by Gérard Didier and Jean-Claude Fall, after an original stage design for the play by Samuel Beckett, *Dis Joe*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0779]

Between the five dioramas, there are paths leading into different parts of the exhibition, none of them more promising than the others. One way to move on is to continue our peripheral path, choosing the passage between the two dioramas on the right. Here the visitor experiences another important feature of the exhibition design: the individual spaces of the exhibition are separated by semitransparent grey gauze, suspended from the ceiling. The separators offer a view of what lies beyond them, hazily lit objects and surfaces, more or less recognizable through the metal mesh. And since they are suspended off the ground by half a meter, the floor can be seen to continue, the neighboring sites with their occasional pedestals and the shuffling feet of fellow visitors in clear sight.

Unlike these transitional spaces which defy strict separation, the switching of the soundtrack from one program to another is unambiguous. The terminology of the exhibition calls them "audio zones," each comprising between one and four sites, the acoustic signal tying them together as a semantic unit. Leaving the *Théâtre*, we enter a zone where the spoken texts address the precarious and uncertain status of the body. To the right, in a niche and behind a veil of the metallic gauze, a handful of human-size white figures floating in mid-air, homunculi that might be going up or down, are suspended (fig. 7, 8). The title printed on the gauze is *Nu vain*, meaning "vain nakedness." Behind the figures, the rectangle of a projection screen, showing the black-and-white image of a man who holds the striped clothes of a prison camp detainee in front of his emaciated naked body. Then the image changes and we see a film scene, a male doctor in his white coat examining a naked woman, the unresisting subject to his undignified gaze and grasps. The nakedness on display here is that of the human body at its degree zero.

What most visitors cannot know at this moment is that this small passage from the *Théâtre du non-corps* to *Nu vain* is the most distressing constellation of images of the entire show; nowhere else will *Les Immatériaux* be as sorrowful as here. In the neighboring site, *Deuxième peau* (Second skin), there are samples of artificial skin, or natural skin artificially grown, displayed in glass dishes and in frames on the wall. In the context of the previous site, one might associate this display with the exploitation of bodies in the German extermination camps, but the skin research represented here was originally geared at the repair of epidermal damage, performed in war surgery as well as in cosmetic surgery.

To the left, through the metal gauze, the visitor can see a whole cluster of functional clothing suits suspended from the ceiling, in the site *Toutes les peaux* (All kinds of skins). They are different forms of artificial outfits that protect human bodies and make it possible for firefighters to enter burning houses, for divers to survive in the deep sea, and for fencers to practice their deadly sport without getting killed.



[Figure 7] Site *Nu vain* (Vain Nakedness). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0266]



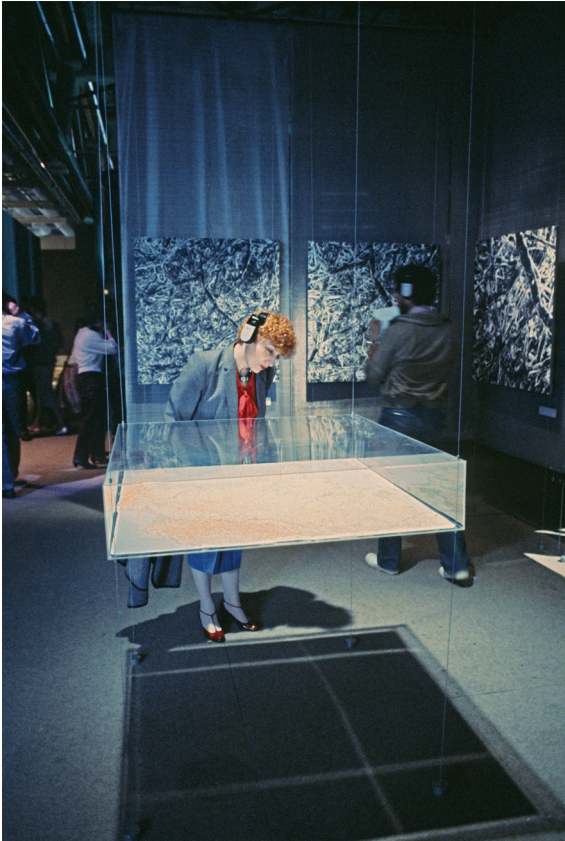
[Figure 8] Exhibition view from site *Nu vain* (Vain nakedness), background center left *Toutes les peaux* (All kinds of skins), center right *Deuxième peau* (Second skin). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0415]

As we move ahead to the site *L'Ange* (The angel), we're still in the same audio zone in which the disembodied voices weave their words about the precarious body around the abstract sounds of atmospheric electronic music. Here the visitor meets another confrontation with a naked body and its skin surface, in this case in the form of a large photograph showing the pregnant body of a woman seated in a leather armchair, pieces of the photograph torn and turned and stitched together again—an image of a torn and sutured body, barely repaired yet smiling, perhaps a smirk in reaction to viewing such a fractured self-portrait. German artist Annegret Soltau's image is placed opposite a frieze of photographs by the Greek-French artists Klonaris/Thomadaki, a quasi-cinematic sequence of images in which the female artists dress in men's clothes and hold mirrors, performing the transgression of boundaries of gender and identity.

Should we perceive all of these different materials and images together, compose the shifting of references and contexts into an overall, synthetic impression? Or are all of these encounters with things separate instances that will enter different constellations and meanings as we continue our passage through the exhibition? It is too early for the visitors to tell. In this first little passage, we get a sense of the density of the presentation and of the diversity of media and themes that the exhibition presents. If we take off the headphones for a moment and look at the expanse of the ceiling overhead, above the grid that holds the metal meshes, and if we add up the glimpses of the neighboring sites and corridors that we have caught through and underneath the meshes, it becomes clear that we have entered a world that expects us to immerse ourselves in its soundscape and in the sequence of sites and exhibits, and to go slowly, to drift passively rather than trying to explore with determination. Abandon all hope for clarity and explication.

If the visitor has come on this route, now passing under a large, suspended panel with the photograph of a marble hermaphrodite—another human body shapeshifter proposed by Klonaris/Thomadaki—they enter a bland space in which three television monitors draw the attention to a dynamic and colorful montage of music videos, *Corps chanté*, the singing body. This is the first time we see a set of electronic screens. In the course of the visit, and despite the multiple screens clustered in the final space of the exhibition, the *Labyrinthe du langage* (Labyrinth of language), it will become clear that this show, often lauded for its presentation of new media technologies, has only a relatively small number of sites—in fact, less than a quarter—which actually have video or computer screens on display.

We will not review all of these sites here, but will only go for an initial stroll to get a general sense of the exhibition and its main scenographic features. We will soon shift our attention away from the actual show, and toward the people and the processes that made it.



[Figure 9] Site *Surface introuvable* (Elusive surface). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0281]

But for the moment, let's accompany the visitors walking away from the visual and sonic, pop-musical exuberance of the *Corps chanté*, and into the elongated rectangle of *Tous les bruits* (All kinds of noises) where, despite the title, they pass the silent display of the notation of a music and dance piece, rich in graphic and photographic annotations, perhaps invoking the potential sounds in the mind. The visitors who have been following their path in the exhibition guide, the *Petit journal*, feel a bit lost now because the site *Tous les bruits* isn't featured in the linear sequence of the guide, as it belongs to a different one of the five paths and is not described until two pages later. But this is not the last time that the visitor experiences the labyrinthine *dérive* that will soon characterize the visit, and that cannot be captured in the linear medium of a brochure. Once we have reached the main space at the other end of the show, the *Labyrinthe du langage*, exploring other parts of the exhibition will for the first time require us to move in reverse to the order described in the guide.

Tracing our way and current location in the 16-page *Petit journal* will from now on be a bit more difficult, but finding it among the 70 loose sheet pages of the *Inventaire* catalogue is almost impossible. The best a visitor can do is to give up on the attempt to follow a linear narrative and to enter the labyrinth of *Les Immatériaux* without worrying—you cannot go wrong.

However, for this first passage, we keep the eastern wall of the gallery on our right and arrive at the five large posters, multiplied by a wall-size mirror, of the site *Corps éclaté*, the exploded body, shown in drawings from an encyclopedia of different aspects of the human physique—the muscles, the respiratory system, the heart. These drawings are documents of the objectifying medical gaze; they represent the idealized look underneath the surface, a gaze that is oblivious to the precarious status of the body as it appears in the site *Nu vain*, and rather is a fruit of the technoscientific mind that, because of the body's limitations and vulnerabilities, invents the protective suits we saw in *Toutes les peaux*.

The adjacent site is moderately lit, and its unobtrusive exhibits are easy to miss: a video playing on a monitor, of faint, colorless shapes fading into white, further obscured by a bright neon tube placed overhead; a slide projector, apparently pointed nowhere in particular, whose message—a slide showing the word “visible”—is only revealed when a visitor passes by and their body becomes an involuntary and momentary projection screen; and a small vitrine containing some inconspicuous snippets of paper (fig. 40). The scenographic understatement deliberately obscures the crucial relevance of these paper snippets for the curatorial conception of the entire exhibition. They are handwritten notes by Marcel Duchamp on the notion of the “ultra-thin” or “infra-thin,” the “*infra-mince*” which has also lent its name to this visually meager site. In these notes, mostly written in the 1920s, Duchamp provided an early exposition of what Lyotard would come to mean by the term *immatériaux*, a state of being ephemeral, transitory, barely noticeable, an in-betweenness of things and impressions, a state that marks the opposite of knowing what and how things are.

But even the visitors who have missed this elusive bunch of conceptual keys get a second chance to encounter a core instance of the “im-material” vagueness whose topical variations constitute the exhibition. The site *Surface introuvable* (Elusive surface) displays several sheets of paper, all of the exact same square-meter size, showing different versions of what such a surface of paper can be and what it can show: a blank white sheet, the material support of a printed map, but also the support for a microscopic photograph of the same paper in which it appears not as a flat surface, but as a porous volume, more richly textured than the Earth's surface represented by the map would normally appear to the human eye (fig. 9).



[Figure 10] Site *Labyrinthe du langage* (Labyrinth of language), right *Architecture plane* (Flat architecture). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0441]

In the site *Peinture luminescente* (Luminescent painting), several contemporary artworks riff on the way that light can be an artistic medium. Their diversity and formal particularity draws the attention away from the fact that they are also examples of how the phenomenon of light is itself “im-material,” adding yet another dimension to the material deconstruction offered by the exhibits of *Surface introuvable*. Artworks tend to make their own rules, and in a context like this show, they struggle to not be subsumed into the maelstrom of mutually amplifying or contrasting phenomena. This is another lesson visitors will have learned by now: this exhibition challenges the classification of its exhibits as models, samples, mimetic representations, works, and so on, and puts them on display as things which make sense depending on the constellations in which they are perceived and interpreted. The four large panels of the work by the French painter Jacques Monory, in the neighboring site entitled *Peintre sans corps* (Bodiless painter), each of which repeats the motif of a crashing airplane, are at first a Monory painting, but they are also an explicit exercise in visual reproduction, using a mix of manual and photomechanical techniques in the different iterations. And then they act as an introduction to the following installation, where under the title of *Toutes les copies* (All kinds of copies), an assisted photocopier is awaiting the visitors to request that instant images be made of all kinds of things collected in a glass cubicle. If the goal of this postmodern exercise in aesthetics is the freedom of the photocopier, then in comparison Monory’s efforts seem like an

unnecessarily laborious attempt at shedding the myths of authorship and the painter's body.

Beyond *Toutes les copies*, we enter the *Labyrinthe du langage* (Labyrinth of language), concluding the passage of what the curators have conceived as the first path, dedicated to the "im-material" deconstruction of raw material (*Matériau*) (fig. 10). There are four other such paths, *Matrice* (Matrix), *Matériel* (Hardware), *Matière* (Content), and *Maternité* (Maternity), along which the other 50-odd exhibition sites are organized, sometimes montaged in pairs and as short sequences, though more often with distinct contrasts. We already saw on two occasions that it was barely possible to stay on the track of these paths, which were frequently crossed, interrupted, or skipped to a forward position that no visitor could recognize as a continuation of what they had seen before. Lyotard had proposed the five "mat-" terms based on a communication-theoretical model, in order to structure the investigation of "im-materials."⁴ This overarching structure was referred to as the *Mât* paths or the *Mât* system. It offered a certain narrative logic that made it possible to speak from a bird's-eye perspective about a sequence of sites like the ones we have just visited. But this was an abstract perspective that hardly any of the visitors could conceive. There were no guided tours offered that would have disclosed this organizational layer of the show; the soundtrack and its texts didn't elucidate but rather complexified the already overwhelming experience; and the catalogue and exhibition guide offered no easily accessible reading of these conceptual structures either.

The Curators, the Team, and the Question of the Curatorial Subject

Visitors were thus deliberately confronted with a setting in which the "im-materials" manifested in a diverse multiplicity of ways. The question of who was responsible for this labyrinthine exhibition, or who was the curator of *Les Immatériaux*, has for the past 40 years usually been answered very briefly, with the name of Jean-François Lyotard. The present study is based on the conviction that this answer has always been too short, and that *Les Immatériaux* can only be understood if the many people who contributed to the effort are also taken into account. This book therefore offers a much longer answer to the same question. Moreover, its more general methodological mission with regard to studying the histories of exhibitions is to make all the "who" questions that are asked of exhibitions more complicated, and the answers longer. This book focuses on the preparation of this particular exhibition, and it barely touches upon the visitor experience or the exhibition's reception

4 See CPA 1977001W130_009, 5. See also the comments about the *Mât* model in Hudek (2015), 74-75.

and legacy. Instead, its main purpose is to highlight the process of making *Les Immatériaux*. The following chapters will therefore offer in-depth analyses of the cooperation among the members of the curatorial team, based at the Centre Pompidou's design department, the Centre de Création Industrielle (CCI), and headed by Lyotard and Thierry Chaput (1949–1990). They worked together with a host of different players, including a group of scientists who acted as scientific advisors and several contributing curators from different departments of the Centre Pompidou. Detailed descriptions of the curatorial work on the realized projects—as well as some unrealized ones—seek to differentiate our understanding of the complex processes that led to the exhibition which opened its doors to the public in spring 1985.

During the opening press conference on 26 March 1985, four men were there to present the project and to answer journalists' questions. Besides Jean-François Lyotard and his co-curator, the young design theoretician and CCI project manager Thierry Chaput, there were Jean Maheu, president of the Centre Pompidou, and François Burkhardt, director of the CCI since 1984. It had been Burkhardt's predecessor, Paul Blanquart, who had contacted Lyotard in May 1983 to discuss an exhibition project for which the CCI was looking for a conceptual figurehead. Chaput and a team of researchers had been working on an exhibition about "new materials and creation" for one and a half years, but the exhibition proposal that Chaput submitted in April 1983, under the title of *La matière dans tous ses états* (Matter in all kinds of states) had seemed an insufficient basis for the ambitious exhibition project that Maheu and others wanted to see. When he was contacted, Lyotard immediately showed a guarded interest, and only days later, at the beginning of June, Lyotard and Chaput met for the first time. They got along well and found that they could imagine working together on such a project.

At this moment, Lyotard was completely inexperienced in the organization of exhibitions and the curatorial work of researching, selecting, and arranging exhibits. In contrast, Chaput and his team—Martine Moinot (born 1944), Nicole Toutcheff (1949–2001), and Sabine Vigoureux (born 1951)—had been working on the CCI's exhibitions and public displays for years, though Chaput hadn't previously been responsible for such a large show, planned to be presented in the Grande Galerie of what was then counted as the fifth floor of the Centre Pompidou (fig. 11, 12).⁵

Two months later, Lyotard submitted a first exposé for the exhibition, usually referred to as *Esquisse* (Sketch), an eight-page typescript dated 10 August 1983. It introduces the neologism "Les Immatériaux" as a provisional title for the project, and offers an outline of the basic conceptual considerations developed by that time (Lyotard 1983). This exposé was written in the weeks during

5 Two other team members, Chantal Noël (born 1950) and Catherine Testanière (born 1951), would join this group in the following months.



[Figure 11] Jean-François Lyotard in the CCI office, 1984/1985. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0510]



[Figure 12] The team of *Les Immatériaux* in the CCI office, 1984/1985, from left Catherine Testanière, Thierry Chaput, Jean-François Lyotard, Sabine Vigoureux, Martine Castro, Nicole Toutcheff, Martine Moinot. © bpk / CNAC-MNAM / Photographer unknown. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0541]

which Lyotard met with Chaput and the team in a series of initial, sometimes day-long meetings.⁶ The frequency of these summer meetings was so high not least because it was urgent to confirm the cooperation with Lyotard before he would leave at the end of September to teach the fall semester in the US. These were intense exchanges during which Chaput and his team explained the research that they had done so far, and sought in dialogue with Lyotard to explain and synchronize their respective ideas.⁷

In the *Esquisse*, Lyotard complicated the notion of materiality applied by Chaput, by introducing the neologism of “*le immatériel*”:

There is no longer any material [*matériau*, raw material] as an independent entity. The principle upon which the operating schema is built is not that of a stable “substance,” but an unstable set of interactions. The material [*matière*, content] model is replaced by a language-based model. (1983, 10)

Lyotard argued against Chaput’s sociological focus on design practice and technoscientific achievements, and connected the critique of such pragmatism to his own philosophical discourse on the precarious status of the human:

What is disturbing for “man” is the possibility of losing his (alleged) identity as a “human being.” Yet it is a feature of “immaterials,” and by no means the least significant feature, to suggest just such a loss of identity. In the same way that matter [*le matériau*, raw material] is the complement of a subject who masters it in order to achieve his or her own ends, the “immaterial” signifies, on the contrary, a matter [*matériau*] that is no longer the material [*matière*, content] (“raw” or otherwise) for a project, intention or plan—which indicates, in turn, a correlative dissolution of the side of “man.” (1983, 4)

This is Lyotard critically responding to the institutional philosophy of the CCI. The examples that he drew on to illustrate his point partly derive from Lyotard’s own discourse (e.g., biotechnology, particle physics, astrophysics, painting), and they partly refer to examples that Chaput and his team had researched previously (e.g., digital media, architecture).

The *Esquisse* is a document of an ongoing dialogue, written by Lyotard and from his perspective, but the questions and words he formulated were drawn from the exchange with the CCI team. Chaput, in his own conceptual sketch written during these weeks, articulates a scenographic principle that would come to play a crucial role for how the exhibition took shape:

6 The first meetings with the team took place on 23 June, 13 July, 2 and 12 August, and on 5, 7, and 15 September 1983.

7 See Moinot’s handwritten report of the first meeting on 23 June 1983, and the handwritten conceptual considerations written by Moinot and Chaput, presumably formulated as responses to the discussions during this first meeting; CPA 1994033W233_008.



[Figure 13] Thierry Chaput in the CCI office, 1984/1985. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0532]

first and foremost, we have to convey as many ideas as possible through sensibility, i.e., make people feel rather than understand.⁸

It is not clear who first formulated this notion. It had been a cornerstone of Lyotard’s aesthetic theory for over a decade and was one of the tropes that Lyotard used when speaking about the exhibition and its way of addressing the audience. Therefore, in this handwritten remark penned by Chaput in the summer of 1983, we have a document of how the ideas between Lyotard and Chaput began to mesh. In this sense, then, not only was the *Esquisse* a message to the Centre Pompidou leadership about how Lyotard strove to place the theme of new materials and creation into a broader philosophical framework, but it also affirmed that there was a productive and growing conceptual rapport between the CCI team around Chaput, and Lyotard.

The collaborative dimension of *Les Immatériaux* was realized on several levels. First, there was the cooperation with Thierry Chaput and his team of project managers—Martine Moinot, Chantal Noël, Catherine Testanière, Nicole Toutcheff, and Sabine Vigoureux (fig. 12, 13). In his retrospective tribute to this collaborative effort, “*D’un travail*,” Lyotard would later call their ensemble “a mind with seven heads” (2021, 5). The next layer was constituted by the CCI, its employees, and research network. It was prominently represented by the architecture theorist and curator Alain Guiheux who worked for the CCI and who, in his dialogue with Lyotard in 1984, developed the concepts for three

8 CPA 1994033W233_008, 15.

exhibition sites dedicated to architecture (see chapter 6). From the summer of 1984 onward, the architect and scenographer Philippe Délis (1951–2014), together with Centre Pompidou architect Katia Lafitte (born 1953), became an important collaborator in the realization of the project. And in order to broaden the scientific scope of the research for the exhibition, Chaput and Lyotard constituted a committee of scientific advisors with whom they met on a monthly basis during the winter and the spring of 1983–84; this committee included computer scientist Mario Borillo, chemist and science theoretician Paul Caro, astrophysicist Michel Cassé, microbiologist Jean-Pierre Raynaud, and mathematician Pierre Rosenstiehl. In the second half of 1984, these advisory dialogues continued in a series of meetings with the philosopher and life science theorist Michel Tibon-Cornillot who, like the scientists, contributed as an author to the catalogue volume of *Épreuves d'écriture*.

Of course there were, during the 18 months of Lyotard's involvement, also multiple other, formal and informal encounters and consultatory meetings with contributors and noncontributing colleagues. The author and editor Élie Théofilakis prepared a collected volume in the *Autrement* book series, entitled *Modernes, et après? Les Immatériaux* (1985), which came out in the opening week and contained 30 texts presenting the broader theoretical and scientific discourses around the themes of the exhibition. The philosopher Christian Descamps organized a series of debates at the Centre Pompidou, which staged the philosophical and interdisciplinary discussions the exhibition sought to elicit. The film artists Claudine Eizykman and Guy Fihman curated an extensive program of film screenings, announced under the title *Ciné-immatériaux* and screened in a space near the actual exhibition.⁹ And halfway through the exhibition period, the television director Paule Zajdermann and the art critic Daniel Soutif produced a documentary film, *Octave au pays des Immatériaux* (Octave in the land of the Immaterials), which was commissioned by the Centre Pompidou and which sought to explain the curatorial program of the exhibition as well as give an impression of the audiovisual experience of visiting it. Even if these projects were organized independently, Chaput, Lyotard, or other members of the team were in continuous contact with the various collaborators.

Another, more formal layer of collaborations was instituted with the other departments of the Centre Pompidou, the national museum of modern art (MNAM), the sound and music research center IRCAM, and the public library, BPI. The exhibition project that Chaput started working on in 1981 was initially conceived as an interdepartmental project led by the Centre de Création

9 Eizykman and Fihman were students at the university in Nanterre in the second half of the 1960s when Lyotard was teaching there. They collaborated with Lyotard in a workshop on film from 1969 to 1975 while Lyotard was at Université Paris VIII in Vincennes; see Eizykman and Fihman (2014). For an analysis of their curatorial work for the *Ciné-immatériaux* program, see Balsom (2023).

Industrielle, to which the other departments would have contributed. These contributions were thrown into doubt when the concept developed by Chaput became more and more focused on design issues. It was therefore necessary to reconstitute the relations with the other departments in meetings that Lyotard held with their directors in September 1983, namely, Dominique Bozo of the MNAM, Pierre Boulez of IRCAM, and Michel Melot of the BPI. In the end, the tangible results of these dialogues, which in the case of IRCAM and BPI built on the conversations that Chaput had initiated earlier, were a series of sites with works of visual art, co-curated by Lyotard with the young MNAM curator Bernard Blistène; several co-productions of installations and an elaborate concert program, *Sons et voix* (Sounds and voices), presented by IRCAM during the exhibition period; and a series of projects related to electronic archives and computer-based language processing, curated by BPI curator Catherine Counot and presented primarily in the exhibition's *Labyrinthe du langage*.

The following chapters look more closely into the ways in which these multiple layers of collaborations and contributions intersected and led to the exhibition that was eventually presented in the spring of 1985. The chronology of this process can be gleaned not only from the various archival documents but also from the preserved personal calendars of Martine Moinot and Jean-François Lyotard, in which they recorded hundreds of appointments held during the preparation phase.¹⁰ We get another foretaste of the entanglement of agencies by quickly reviewing the sites visited on our initial stroll through the show. Among the small number of exhibits decisively chosen by Jean-François Lyotard himself were the Egyptian bas-relief in the *Vestibule d'entrée*, the site *Nu vain*, and the presentation of the painting by his artist friend Jacques Monory, in the site *Peintre sans corps*. The artworks presented in the sites "*Infra-mince*" and *Peinture luminescente* were mostly proposed by Blistène and then selected together with Lyotard. The theme of transsexuality which motivated the site *L'Ange* was introduced by Lyotard, but it was project manager Martine Moinot who found and curated the artworks by Klonaris/ Thomadaki and Annegret Soltau, and Moinot also conceived and realized the scenographic installation presented here, together with Gérard Chiron of the audiovisual service.¹¹ The montage of music videos presented in the site *Corps chanté* had been initiated by Chaput well before Lyotard came on the scene, as was the case for the site *Toutes les copies*, discussed by Chaput with the artists Liliane Terrier and Jean-Louis Boissier since 1982. And it was the scientific advisor Paul Caro who proposed the concept for the site *Surface introuvable*.

10 For the multiple appointments of the exhibition's preparation phase, see Broeckmann and Vicet (2020), here occasionally also referenced as *Chronology*.

11 For remarks about Moinot's work on *L'Ange*, see Wunderlich (2008), 129n31, and Hudek (2001), 18.

All of the sites in the exhibition resulted from variegated constellations of people, research trajectories, proposals, and passions. And it was this meshwork of relations, conversations, and ideas which led to the gradual development of the exhibition concept. Lyotard's own first sketch of August 1983 made reference to the first exposé prepared by the CCI's design curator Raymond Guidot in 1981, and to Thierry Chaput's *La matière dans tous ses états* (Matter in all kinds of states) of April 1983. Lyotard's second main attempt at describing the conceptual and scenographic framework for the exhibition was formulated as a spoken discourse, later transcribed as the 50-page document *Après six mois de travail* (March 1984). This text was not intended for publication, but it became the conceptual quarry from which the first comprehensive concept was developed in April 1984, the *Présentation*, prepared for Centre Pompidou president Jean Maheu and later widely distributed to potential collaborators.¹²

There can be no doubt that Lyotard was the main writer of these texts, just as he was the one who penned most of the conceptual notes for the sites, first written for the *Présentation* and then developed into the *Inventaire* catalogue entries in December 1984. But Lyotard was working with ideas and phrases that he had picked up in the various consultations. For example, Lyotard's reference to Kevlar fibers in the *Inventaire* introduction to the *Matériau* (Raw material) path is taken straight from Chaput's April 1983 concept, and some passages in the catalogue texts for the sites suggested by the scientific advisors directly paraphrase earlier formulations by Paul Caro or Michel Cassé. Each of the contributors, Lyotard as well as Chaput, Délis, and the others, appears not primarily as an author but as a medium for the collaborative process of making *Les Immatériaux*.

Developing the Exhibition Scenography with Philippe Délis

The elaboration of the exhibition scenography—its general features and the ways in which each exhibit was presented—further highlights the cooperative structure of the curatorial process. In addition to a large number of individual and more specialized meetings, this process primarily took shape in the

12 The *Présentation* of April 1984 played an important role also for the reception of *Les Immatériaux* because it became the basis of what people would expect of the exhibition (CPA 1977001W130_009). It was also referenced extensively, e.g., by Jacques Derrida in his contributions to the *Épreuves d'écriture* catalogue. Even though in its details it differed decisively from the exhibition, an English version was published in 1985 by *Art & Text*, a text republished in Greenberg et al. (1996), and from there erroneously taken as a basis for an analysis of the exhibition by Moss (2019). For an archival document that precedes the *Présentation* and shows how these texts were the result of collaborative text editing, see the short summary concept drafted by Chaput and amended, in handwriting, by Lyotard (undated, ca. 1983–1984), CPA 1994033W669_003.

framework of the regular bi-weekly team meetings at the CCI. Every other Thursday morning was dedicated to practical, conceptual, and philosophical discussions among the team members, who were joined by other contributors and advisors as was deemed necessary for the project.¹³

One of the members of this extended team was the architect Philippe Délis, who was commissioned in June 1984 to realize the scenography for the planned exhibition (fig. 14). In the summer months, a series of meetings was held with Délis, but his role became more pivotal when in September the bulk of the exhibits had been defined. Multiple papers in the archive document the gradual evolution of the design principles for the show, including the suspended wall system, the choice of the metallic fabric with its changing transparencies, the labyrinthine spatial structure, and the theatrical lighting which would isolate the individual exhibits and offer only very limited orientation. Lyotard and Chaput had insisted that Délis should not start with the design concept before the exhibits had been determined. They wanted to avoid a situation where the overall scenography would take priority over the exhibits.

A crucial moment in this process was a series of meetings in August and September 1984, in which the planned sites and exhibits were presented and explained to Délis by the various curators and team members. During these meetings, Délis took notes and made sketches for each site, recording and translating what he heard—conceptual ideas, names of artists, descriptions of exhibits—into written and visual material for developing scenographic ideas. Like other handwritten notes from such meetings, the jotted words and diagrams can be taken as more or less direct records and translations of things that were being said, noted in a form as Délis understood them and made sense of them at that particular moment. He made some of these notes on papers that had been prepared by the CCI team, with photocopies of the short descriptions of the individual sites from the April overview document used as header information. Over the following weeks, Délis extended these initial sketches and notes, the differing styles of writing and pens used clearly indicating the gradual evolution of ideas.

Importantly, Délis's notes were also photocopied for the other team members, suggesting a dialogical process of speaking, writing, and drawing, in which each of these expressive modes was also influencing the other planning processes, the evolving scenography both emerging from and shaping the thinking about the exhibition.¹⁴ It seems impossible to ascertain retrospectively from these notes who said what, and which of the remarks are perhaps

13 For a sense of the collaborative spirit among the team, see Lyotard (2021); interview with the CCI team conducted by Philippe Merlant, in Théofilakis (1985), 15–20; and *Épreuves* (1985), “Postscriptum,” 259–263.

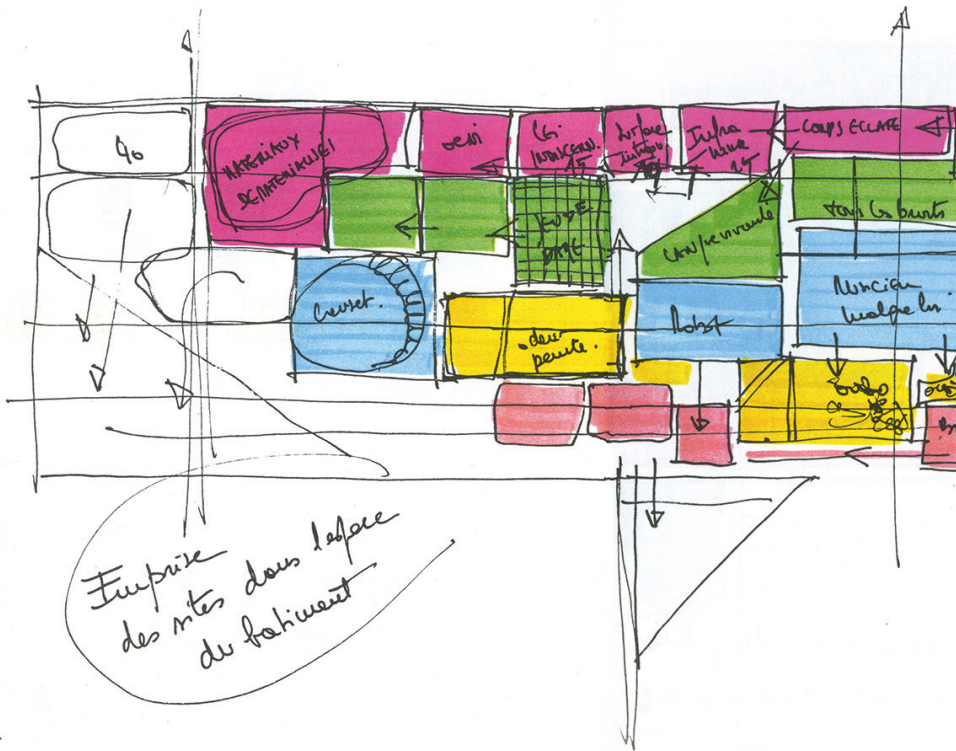
14 The files exist in several archived copies; see CPA 1995052W027 for an almost complete set preserved by Katia Lafitte.



[Figure 14] The architectural and technical team of *Les Immatériaux* in the CCI office, 1984/1985, from left Philippe Délis, Katia Lafitte, Stéphane Iscovesco. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0518]

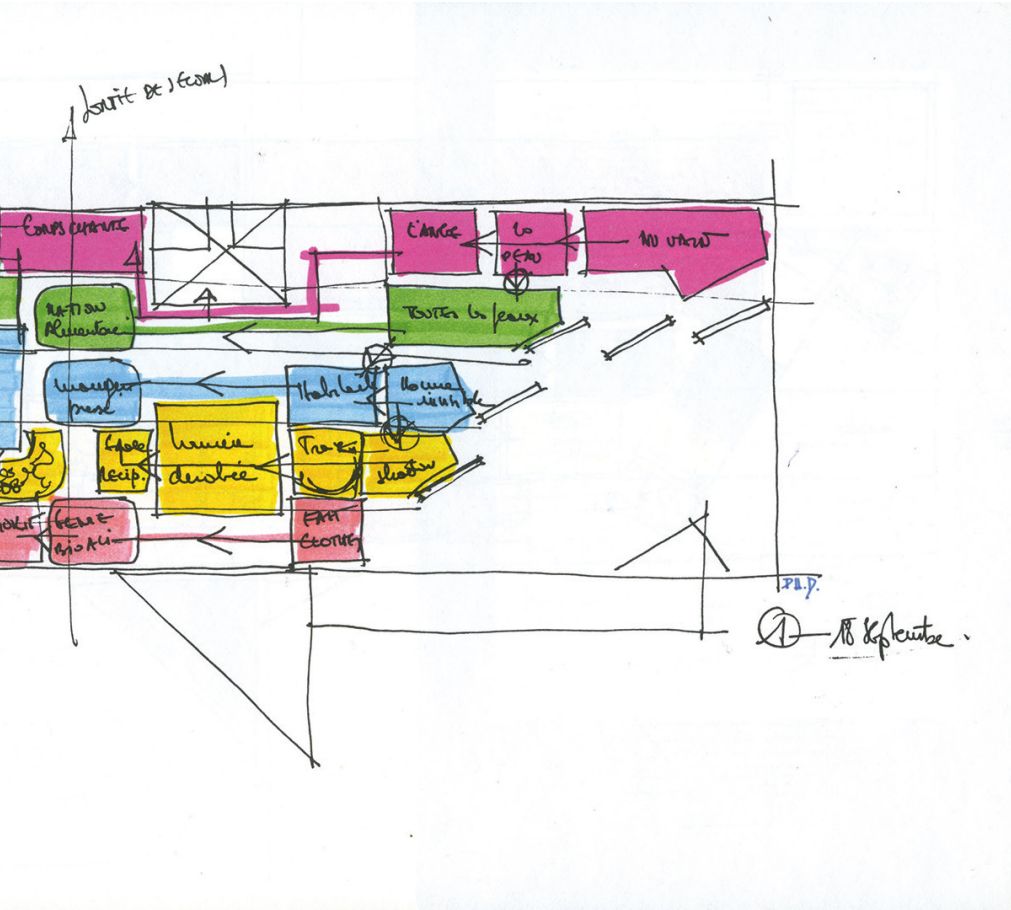
based on Délis's own reflections, even though a close reading might, in some cases, make it possible to conjecture the "voices" of individual curators, whether Lyotard, Blistène, Caro, or others. The archival documents do, however, allow for a minute reconstruction of some of the processes that engendered the scenography as it was eventually realized.

For instance, there are a number of dated diagrams that Délis drew in order to define the sequence of the sites, their placement on the conceptual *Mât* paths, and the relative position of sites between the paths. These diagrams were deemed so important that they were photocopied multiple times and used as material for the further elaboration of the exhibition. Several of them are also facsimiled in the *Album* part of the catalogue, signaling their crucial importance. The drawing dated 4 September 1984 shows the sequence of sites in a logic to be read from left to right, suggesting a linear narrative of the sites on the five paths (*Album* 1985, 53). In this diagram we also see an early indication of how the sites might be grouped into the zones of the audio track, here marked by thin lines encircling certain blocks of sites. Two weeks later, in a sketch dated 18 September, Délis has drawn the same set of sites, this time to be read from right to left and, for the first time, mapped to the floor plan of the Grande Galerie in the Centre Pompidou (*Album* 1985, 54–55) (fig. 15). Another day-long meeting was planned for Thursday, 20 September, and we can imagine how Délis prepared his materials for this meeting two days before, translating what had been discussed into the first suggestion of



[Figure 15] Sketch by Philippe Délis, first projection of all sites according to the gallery space, 18 September 1984. Reprint, *Album*, page 54–55. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

a concrete spatial arrangement. Consequently, these drawings made it both possible and necessary for the curators to think about the sites not as isolated entities, but as elements in a concrete, physical configuration. Philippe Délis described this entanglement of ideas and design, of spatial concepts, words, and drawings: “Conceptual division carries with it its own spatialization. ... The written becomes a drawing, and the plan becomes the drawing of the written. It’s the surface of the word on the paper surface that’s at work, the word surfaces, the concept spatializes. The space-time setting is elaborated in writing” (Théofilakis 1985, 22–24).



In the following discussions of the scenography, lighting became a major concern. The lighting engineer Françoise Michel, experienced in working for theatre performances, had first been contacted in May 1984, around the time of the first meetings with Délis, but it was only in October and November that Délis and the curators drew on Michel's expertise. In his minutes of one of these meetings, Délis describes the role of lighting as a way to separate the sites and exhibits, to indicate the *parcours*, and to visually highlight thematic connections between sites, even where there may not be immediate access ("on voit mais on n'a pas forcément accès").¹⁵ Observations like these would have been the result of joint deliberations, the curators and designers voicing their opinions about what could and what should be achieved in the combination of lighting and the placement and density of the metal meshes.¹⁶

15 CPA 1994033W228_013, minutes of the meeting on lighting, 7 November 1984.

16 A parallel narrative can be gleaned from the documents relating to the metal meshes, for which a first financial estimate is given by Manufacture de Rougemont on 10

In the deliberations about particular sites that followed, specific directions were given for the expected lighting effects: the atmosphere in the *Vestibule d'entrée*, the *Théâtre du non-corps*, and *Nu vain* should be “somber,” the ambiance in the *Galerie d'entrée* “carceral” (*ambiance carcérale*), while in the site *Deuxième peau* it should resemble that of a scientific laboratory (*ambiance LABO*). We can imagine how the different team members would contribute to these conversations, describing exhibits and pointing out existing sources of light, glowing monitor screens, or reflective surfaces which Michel must take into consideration.

The Project for the Soundtrack

Lyotard took credit only for a small number of projects in the *Immatériaux* exhibition, among which was the original idea for the audio program, the *bande sonore*, a soundtrack with readings of philosophical and literary texts. This was an important scenographic feature that would not so much illustrate or explain the exhibits, but rather add an experiential dimension to the visit. However, even in this case, we see the “ideator” Lyotard immersed in a collaborative network in which his suggestion was realized: he selected the texts together with Dolorès Rogozinski, the sound recordings were made by Gérard Chiron of the Service audiovisuelle, the montage of the voice recordings with musical pieces was accomplished by the young IRCAM composer Arnaud Petit, the technical realization of the headphone system for transmitting the soundtrack—so essential for its scenographic impact—was coordinated by Thierry Chaput and Martine Castro, and the overall production was managed by Annyck Graton.¹⁷

The *Album* contains the facsimile of a handwritten note by Lyotard, dated 8 October 1983 (22), which was presumably the first formulation of the principle that the visitors would be perusing the exhibition with an audio device that would offer orientation and commentary. Délis, reflecting on the scenographic design process, emphasized the primacy of the *bande-son*. In his text for the edited volume *Modernes, et après?*, Délis described how the overall layout of the exhibition was conceived as a “suite of places, without apparent links; organized by a set of questions, a spoken question, a soundtrack. It is the text-sound that delimits the spaces, exposes them, sketches them. It is the manifestation of the fluid space-time, where time takes precedence over space, where ‘time engenders the surface’” (Théofilakis 1985, 24). Given the dialogical curatorial and design process described above, we can imagine that these were ideas which represented the consensual understanding of the soundtrack, the curatorial chorus here formulated by Philippe Délis.

September, whereas the final offer—after negotiations about different fabrics, densities, etc.—was made on 19 December 1984; see Faugeron (2021).

17 See “Sons et voix” in *Inventaire*, n.p.; Vicet (2019); Broeckmann (2020).

The structure he described had been determined by the curators before Délis was engaged in the summer of 1984. In a concept drafted in March of that year, Lyotard and Chaput describe the spatial arrangement planned for the exhibition in the Grande Galerie on the fifth floor of the Centre Pompidou. They emphasize how the audio zones (“20 to 30”) would structure the exhibition and the placement of the individual sites. This suggests that, even at this stage, the soundtrack played a crucial role for conceptualizing the overall experience and for imagining the space: a sonic structure—however abstract at this early moment in the preparation, when neither the texts nor the accompanying music had been selected—into which the individual sites were projected or inscribed.¹⁸

For Lyotard, it was important that the scenography of the exhibition would be determined temporarily, rather than spatially, and that in its reception, the listening ear would be as important as the seeing eye. In March 1984 he speculated: “Of course these same receivers could receive musical signals, whether these signals are mixed with text, or whether on the contrary there is an entirely musical zone, as IRCAM have suggested. Once more, the arts of time, oral speech and music, with all the intermediaries between the two, including noises, are much superior to reading” (2015, 62). Even at this early moment, the dispositive of the headphones and the soundtrack was intended, first, to isolate each individual visitor in an overall silent exhibition space, and secondly, to create the impression that occasionally the exhibits themselves were speaking and addressing the visitor through the *bande-son* (2015, 62, 65).

In order to make these effects possible, Chaput had to find a technical system that would be easy to carry and that would allow for the distribution of the different parts of the soundtrack in distinct zones of the exhibition space. He found it in the form of a prototype for headphone receivers with an infrared transmission system which the electronics company Philips had recently developed and which could be secured for a first major experimental application in the *Immatériaux* exhibition.

The selection of the texts for the soundtrack was made by Lyotard together with the writer Dolorès Rogozinski.¹⁹ In a dialogical process that began in July 1984 and that culminated in a dense sequence of meetings in October, it was mainly Rogozinski who suggested excerpts of philosophical and literary texts which could complement the themes of the respective audio zones. This required Rogozinski to understand the concepts of the sites as well as of the zones, and to juxtapose these with texts that would both resonate with and expand them. Her understanding evolved in a dialogue with Lyotard, who

18 See the “deuxième état” (second state) of the exhibition concept, dated March 1984, CPA 1994033W666_027, 7–8; see the equivalent passage in the official *Présentation* document, April 1984, CPA 1977001W130_009, 6.

19 For a description of their collaboration, see Dolorès Lyotard (Rogozinski) (2019).



[Figure 16] Thierry Chaput and Jean-Louis Boissier, 11 November 1983. Photograph by Edmond Couchot. Collection J.-L. Boissier.

himself had to think through and learn about the sites and zones by speaking about them and arguing with Rogozinski about authors and texts. The final selection comprised writings by 20th-century authors like Proust, Beckett, Artaud, and Borges, as well as some older authors including François Rabelais, Heinrich von Kleist, and Lewis Carroll. And in some cases, Dolorès Rogozinski edited and montaged texts, or added passages written by herself, in order to match the thematic trajectories of the exhibition zones.

The text selection was then further prepared for the soundtrack. In the studio of the Service audiovisuel, recordings were made of contemporary actors reading the texts. Some of these interpretations were delivered in a rather neutral tone, while others were read with a strong emotional modulation that would no doubt also affect the exhibition visitors. This emotional impact was further enhanced in the final montage, in which the composer Arnaud Petit added to the text recordings excerpts from musical productions by the IRCAM sound research center.

Hence, the soundtrack was an elaborate technical, textual, and musical production which constituted a crucial dimension of the exhibition's scenographic design. Like other elements of *Les Immatériaux*, it was the result of a complex collaboration and is therefore also an exemplar of distributed curatorship.

Gaps in the Archive: The Example of Jean-Louis Boissier

The described cooperations and collaborative structures have left their traces in the archive, in the minutes of meetings, concept drafts, notes. But the archive also has its lacunae, and there are dimensions of the collaborative meshwork that we can currently only guess at and for whose understanding we need further sources.

One example of such a lacuna is the artist, theorist, and teacher Jean-Louis Boissier (born 1949), mentioned in the exhibition catalogue as the artist of the interactive installation *Le Bus*, presented in the site *Visites simulées* (Simulated visits) (fig. 16). What is less obvious is that Boissier had also acted as an informal advisor to Thierry Chaput ever since 1982, when Boissier was on Frank Popper's curatorial team for *Electra*, a major exhibition about the impact of electricity on art of the 20th century, presented at the Musée d'Art Moderne de la Ville de Paris in November 1983 (Popper 1983). Chaput and Boissier first spoke with each other in October 1982 because there appeared to be a conceptual overlap between the exhibition that Chaput was preparing and the already advanced plans for *Electra*. In the end, there was no cooperation between the CCI project and *Electra*, but Boissier's contacts at the arts department of the University Paris VIII in Vincennes, later Saint-Denis, as well as his own artistic practice, proved valuable for Chaput.²⁰ Over the following months, in the winter of 1982-83, Boissier introduced Chaput to a variety of artistic approaches to new technologies, and thus also informed the project that became *Les Immatériaux*. When Lyotard joined the project a little later, he believed it was important to introduce modern and contemporary visual art in the exhibition project, a goal that he fostered through the cooperation with the MNAM. But the artistic projects which explored electronic and digital technologies and their aesthetics were brought in through the liaison and agency of Boissier, who met with Chaput and other members of the team at least once a month, often twice, throughout 1983 and 1984. Boissier arranged appointments for Chaput, for instance, with theoretician and curator Frank Popper, with the scholar of literature and informatics Roger Laufer and his team, as well as with artists and theoreticians like Edmond Couchot and Jean-Pierre Balpe, and the artist Liliane Terrier. Couchot was invited to contribute an interactive installation to *Les Immatériaux*, while Balpe, who was a member of the ALAMO group of artists experimenting with computer-based literary production, later arranged the presentation of several projects in the *Labyrinthe du langage*. And Terrier, whose copy art installation was presented in the site *Toutes les copies*, also curated a part of the *Electra* exhibition and first established contact with young artists like Jacques-Élie Chabert

20 For the history of "Paris VIII," see Soulié (2012).

and Camille Philibert, who not only contributed their own projects to the *Labyrinthe du langage* but also brought in the private agency SERPEA, which would play an important technical and conceptual role for the collaborative writing experiment of *Épreuves d'écriture*.

Besides such direct and indirect networking activities, Boissier also accompanied Chaput on visits to international fairs and festivals of electronic culture, like *IMAGINA* (Monaco, 1983, 1984), *Computer/Culture* (Villeneuve, 1984), and *Siggraph* (Minneapolis, Minnesota, 1984), sharing his international contacts with Chaput and guiding him into a creative and media cultural scene which Chaput hadn't been in contact with previously. At *Electra*, Boissier was responsible for the catalogue, whose content was produced only by computer, a technical accomplishment that inspired Chaput to try to realize the *Immatériaux* catalogue completely "online," that is, only electronically, from the collaborative development of the text content in the *Épreuves d'écriture* project to the technical production of typesetting and printing. Chaput's ambitious publication project did not fully succeed, but it was part of the pushing at technical and conceptual boundaries which *Les Immatériaux* later became famous for. The presence of innovative technological objects, mainly in the form of video, interactive, and computer artworks, was thus founded on the dual basis of Chaput's technophilia and curiosity and Boissier's artistic and aesthetic interest.

There is a certain irony in the fact that Boissier is only mentioned in the exhibition catalogue as an artist and not as the crucial advisor he was. This omission was due to the fact that the catalogue's credits page had no category for an informal role like the "amicable guide to Thierry Chaput." And while the hiatus between the historical events and the archive can in Boissier's case be filled retrospectively with information gleaned from the *Chronology* and from personal memories, such sources are not available in other cases, such as SERPEA director Alain Rey for his contribution to the technological vision of *Les Immatériaux*, or the role of BPI curator Catherine Counot, who coordinated, together with CCI project manager Nicole Toutcheff, the projects for the *Labyrinthe du langage*.²¹

Lyotard and the Curatorial Subject of *Les Immatériaux*

In the face of the diversity of cooperation and the entanglement of various interdisciplinary contributions that characterized the preparations of the exhibition project, the claim that "Lyotard was the curator of *Les Immatériaux*"

21 Two years later, Catherine Counot co-curated with philosopher Bernard Stiegler the exhibition *Mémoires du futur* (Centre Pompidou, 1987).



[Figure 17] Thierry Chaput, François Burkhardt and Jean-François Lyotard during the opening of *Les Immatériaux*, 26 March 1985. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0050]

seems untenable (fig. 17). Instead of the individualistic model of “the curator”—often identified with “heroic” figures like Harald Szeemann (Phillips et al. 2018), Pontus Hultén (Gedin 2020), Hans Ulrich Obrist (2015), or Lawrence Alloway (Bradnock et al. 2015)—we must conceive of the “curatorial subject” of *Les Immatériaux* as a collective subject, manifested in a distributed and collaborative practice. Such a differentiated perspective is missing in the existing literature on *Les Immatériaux* with its excessive focus on Lyotard (e.g., Wunderlich 2008; Moss 2019; Birnbaum and Wallenstein 2019).²² This misconception of Lyotard’s role is unfortunate because it impedes a critical understanding of the particular, diverse structure and design of the exhibition, and it ignores the decidedly unheroic position that Lyotard claimed for himself. The exhibition derived an important part of its significance from the very fact that it drew together a huge variety of ideas and influences, a formation that Lyotard himself was well aware of and that he sought to foster through the relatively diverse consultatory structure which Chaput and his team coordinated throughout 1984.²³ There is no good reason to hypostatize Lyotard as an *über-author*. The resulting exhibition’s curatorial subject was

22 For an attempt at an analytics of collaboration, see Barner (2022).

23 We have to qualify the level of diversity of these consultations as “relative” because, viewed from today’s perspective, they were seriously lacking in terms of gender, social, and cultural diversity.



[Figure 20] Thierry Chaput and Jean-François Lyotard during the team's private reception, celebrating the exhibition opening, March/April 1985. Photographer unknown. Private collection.

a "Postscript" which Lyotard co-authored with the editors Élisabeth Gad, Chantal Noël, and Nicole Toutcheff.

This is not the place for a thorough evaluation of the position that *Les Immatériaux* took in the philosophical *œuvre* of Jean-François Lyotard. Such an analysis would have to focus on the texts that Lyotard wrote for *Les Immatériaux*, from the *Esquisse* (1983) to the texts for the *Inventaire* and *Épreuves d'écriture* catalogues, taking into account the explicitly distributed authorship of some of these texts. It would have to look at them in relation to Lyotard's writings before, during, and after the work on *Les Immatériaux*, from *Discours, figure* (first published in 1971), *La Condition postmoderne* (1979), and *Le Différend* (1983), to the essays collected in the volumes *Le Postmoderne expliqué aux enfants* (1986) and *L'Inhumain* (1988).²⁶

The degree to which the exhibition project became part of Lyotard's philosophy, and a resonance chamber for it, can be gleaned from the exhibits that were particularly precious to Lyotard and whose composition he most actively participated in. These were the bas-relief in the *Vestibule d'entrée*; the

26 Part of this work has been done by Birnbaum and Wallenstein (2019) (especially with regard to *Discours, figure*) and Moss (2019) (for the contemporaneous essays); both, however, ignore Lyotard's writings for *Les Immatériaux*. For Lyotard's identification of the postmodern as a complication or loss of the notion of mastery associated with modernity, see also chapter 3 below, the section entitled "Lyotard's Critique of the 'Technoscience of Domination.'"

question of the body articulated in the *Théâtre du non-corps* and staged more drastically in *Nu vain*, where the difficult issues raised in *Le Différend* seem to resonate; and the aesthetic reflections associated with the paintings by Jacques Monory in the site *Peintre sans corps*.

Such a perspective on *Les Immatériaux* that focuses on Lyotard could be called—borrowing the subtitle of Antonia Wunderlich’s study—“the *Immatériaux* of Jean-François Lyotard.” But when looking at it from this angle, we have to keep in mind that this was not the only way to view the exhibition. There were also, for instance, “the *Immatériaux* of Thierry Chaput” (see chapter 2) and “the *Immatériaux* of Alain Guiheux” (see chapter 6), and many others.

When Lyotard was asked, around 1989, whether he would consider organizing another exhibition, he affirmed that the *Immatériaux* exhibition had only been possible as a collaboration between Chaput and him, and that there was no meaningful way for Lyotard to even think about making such an exhibition without Chaput. In an homage written on the occasion of Chaput’s premature death in April 1990, Lyotard hinted at how they had worked together in 1983–1984:

And I thought: if I did this [i.e., an exhibition considered for the Deichtorhallen in Hamburg], in any case, I’d do it with Thierry. He would like the space, and he would like my idea. The idea for the exhibition was called *résistance*. I would have passed him the word, we would have discussed it, associated freely, and he would have conjured up lots of sites from the poor word (Lyotard, May 1990).²⁷

This latter remark suggests that in their collaboration, it was primarily Chaput’s role, not Lyotard’s, to think of possible exhibits and thematic sites for the exhibition.²⁸ The idea that Lyotard might be the “author” of the exhibition is thus a misunderstanding that has confused the reception of *Les Immatériaux* from the beginning. The misunderstanding seemed to be affirmed through the more than 20 interviews in which Lyotard was asked to speak about the exhibition, so that for the public, in this important part of the discourse about *Les Immatériaux*, Chaput and the multiple co-curators and contributors were not heard. Instead, in the context of *Les Immatériaux*, “Lyotard” is only the unduly abbreviated name of the many-headed, many-handed curatorial subject, just as “Thierry Chaput” is here also only a synecdoche for the team at the CCI and the extended network and constellation of people and institutions which manifested in their various guises during the extended preparation period (fig. 20). Lyotard was well aware that this constellation had already

27 For the idea of a “second exhibition,” see also chapter 9.

28 This explains why the members of the CCI team remember so explicitly Lyotard’s emphasis on the sites *Nu vain* and *Peintre sans corps*: because for most other sites, he was happy to be guided by his collaborators’ proposals.

begun to take shape before his arrival, and that Chaput—with the institutional setting of the CCI, and in the Centre Pompidou—was part of a system through which he, Lyotard, was articulated with the artists, scientists, and various specialists whose connective formation, as hinted at in the August 1984 chart, provides a more complex, more adequate answer to the question, “who was the curator of *Les Immatériaux*?”

Book and Chapter Summary

The present study focuses on the preparation and conceptual elaboration of *Les Immatériaux* in the years 1983 and 1984. It is based on extensive research in the Centre Pompidou Archive, where the papers of the CCI team members are preserved, and in the photographic archives held by the Bibliothèque Kandinsky.²⁹ Additional research has been done on Lyotard’s papers preserved in the Bibliothèque littéraire Jacques Doucet, as well as through multiple conversations with contributors to the historical project.

These archival paths had already been walked by some researchers working two decades earlier, each with a different set of questions: Antony Hudek (2001, 2015), looked in particular at the aesthetics of the exhibition and at how it articulated Lyotard’s conceptions of modern and contemporary art, while Francesca Gallo (2008) took a more art historical approach to the curatorial program, focusing not least on the contributions by women artists to *Les Immatériaux*. And Antonia Wunderlich (2008) studied both the scenographic and philosophical conception, and provided a most detailed description and interpretation of the individual sites in the exhibition.

Since the publication of the studies by Gallo and Wunderlich in 2008, much of the research has focused on Lyotard and on the ways *Les Immatériaux* articulated aspects of his thinking. This is particularly the case in a book by Daniel Birnbaum and Sven-Olov Wallenstein (2019) which offers a broad contextualization of *Les Immatériaux* in Lyotard’s philosophical œuvre.³⁰ What is lacking from these treatments, however, is a perspective that takes the collaborative dimension of *Les Immatériaux* and the contributions by all those people other than Jean-François Lyotard into view.

The following chapters therefore seek to offer a number of detailed analyses of how *Les Immatériaux* was predicated not only on Lyotard’s thinking but also

29 Much of this archival material is available online through the website of the Bibliothèque Kandinsky (2023). Additionally, the Centre Pompidou has recently developed a virtual 3D reconstruction of *Les Immatériaux* which offers both an abstracted spatial impression of the exhibition and access to many of the archival documents and photos; see *Virtual Exhibition of Les Immatériaux* (2023).

30 See also the contributions in Hui and Broeckmann (2015), and texts by Bamford (2017), Rajchman (1991), Moss (2019), and Woodward (2016, 2021). For a comprehensive bibliography, see *Les Immatériaux Research* website (n.d.).

on a host of other interests, areas of expertise, and desires which converged into the manifestation of “im-materials” on display at the Centre Pompidou in the spring of 1985.

The second chapter takes a step back in time and gives a detailed account of the prehistory of the project that Lyotard joined in the summer of 1983. The chapter narrates the origins, from 1979 and 1981, of the exhibition project that would become *Les Immatériaux*. Based on strategic, political, and institutional considerations, the project was intended to foster design research and to help build the cultural basis for the nascent digital media culture, complementing what was hoped to become an independent French computer industry. The chapter provides an account of the research on “new materials and creation” that Chaput and his team did from 1981 to 1983, and describes the thematic and methodological trajectories they followed, leading to the first comprehensive concept issued in April 1983, *La matière dans tous ses états*. This account makes it possible to evaluate critically to what degree the final outcome of the *Immatériaux* exhibition was predetermined by Chaput’s original project, and how this pre-project changed through the interventions by Lyotard and others in the following two years.

Chapters 3 through 6 deal with particular aspects of the preparatory research for the exhibition in the fields of science, network media, visual arts, and architecture. These chapters elucidate how *Les Immatériaux* was not “masterminded” by Lyotard, but was rather a collaborative effort to which many individuals contributed from their respective fields of expertise and passion.

The first of these four chapters focuses on the work done with a group of scientific advisors, including the chemist and science theoretician Paul Caro, the astrophysicist Michel Cassé, the computer scientist Mario Borillo, the mathematician Pierre Rosenstiehl, and the microbiologist Jean-Pierre Raynaud. In a series of seminal meetings, Lyotard and Chaput sought to ascertain the state of debates about different aspects of materiality in different scientific disciplines. Not only did these debates and transdisciplinary perspectives help to grow a more thorough understanding about what Lyotard had described, in 1979, in a rather cursory fashion as the *postmodern condition*, but these consultations also elicited concrete proposals for specific exhibits. Notably, Paul Caro and Michel Cassé can be identified as the authors of certain exhibition sites that were realized in a dialogue between the scientists and the project managers in Chaput’s team. Later consultations also included the philosopher and life science theorist Michel Tibon-Cornillot. Even though his input left few immediately discernible traces in the exhibition itself, Tibon-Cornillot’s thinking had a traceable impact on how Lyotard henceforth framed his discourse on the relation between matter and life.

Chapter 4 recounts the conceptualization and realization of the collaborative writing project, *Épreuves d'écriture*, which would lead to the production of the first, conceptual volume of the exhibition catalogue. Between October and December 1984, 26 authors—philosophers, scientists, artists, writers—were each equipped with a desktop computer, networked through a telephone modem to a central server, and asked to write short texts about a set of 50 preselected keywords. These texts were used for both the catalogue and an edited hypertext version of the text material which could additionally be consulted on Minitel terminals in the exhibition. The chapter offers a detailed analysis of the contributions by the different authors and their interactions. It evaluates the specific significance of *Épreuves d'écriture* by providing a contextualization of the project with regard to other such early examples of network-based and collaborative writing experiments. It describes the gradual elaboration of the concept, which evolved in close conjunction with the project's technical realization. Whereas the sparse secondary literature existing so far generally qualifies the *Épreuves* project as unsuccessful, this close analysis shows that the contributions and exchanges of some of the authors testify to the emergence of a mentality of "being online," which makes *Épreuves d'écriture* a veritable, early "social media" experiment.

The *Immatériaux* exhibition was made up of 60 sites, of which seven sites were occasionally labeled in preparatory documents as "visual arts" (*arts plastiques*). The composition of these seven sites was the result of a collaboration between Jean-François Lyotard and Bernard Blistène, who, at the time, worked as a curator for the Musée National d'Art Moderne (MNAM) at the Centre Pompidou. The "visual arts sites" comprised historical as well as modern and contemporary artworks. It has generally been known that Blistène had a role as an advisor to Lyotard for the selection of artworks. However, the extent of the collaboration between Blistène and Lyotard is here fully acknowledged and analyzed for the first time. The fifth chapter commences with an account of the institutional and organizational context in which Lyotard and Blistène's collaboration evolved. Its second part then looks more closely at the selection of artworks and offers detailed insights into the curatorial process.

A smaller set of three exhibition sites was dedicated to architecture. While for the visual arts sites we have ample archival documents that testify to the dialogue and collaboration between Blistène and Lyotard, the architecture curator of the CCI, Alain Guiheux, appears to have worked much more independently. He too was in a close dialogue with Lyotard, but the latter seems to have more or less accepted Guiheux's proposals. In order to understand the conceptual framework in which the curatorial program for these three sites was developed, chapter 6 looks closely at Guiheux's own discourse on the question of materiality and immateriality in modern and postmodern architecture. This chapter ends the sequence of treatments of the different

types of curatorial collaborations that marked the preparatory work for *Les Immatériaux*—from the distributed cooperation with the scientific advisors, through the dialogical process between Lyotard and Blistène, to the more monological curating of Guiheux.

Chapter 7 then deals with a number of projects and items that were planned or discussed at some point during the preparations of the *Immatériaux* exhibition, but were eventually not shown. Some of these exhibits were outright rejected, while others just did not make it into the final selection or were replaced by more suitable items; yet others proved to be unrealizable for technical, financial, or practical reasons. Together, these *projets pas-choisis*, these unselected projects, form a sort of “shadow zone” which provides an interesting, *ex negativo* view of what finally became *Les Immatériaux*. On a methodological level, these *projets pas-choisis* invite reflections on the significance of items which were, for a certain time during the preparation process, considered and imagined as part of the future exhibition. As such, they contributed to the overall preconcept of an exhibition in which they would, eventually, not be presented.

Consequently, chapter 8 develops a theoretical discourse about the epistemological status of the different types of exhibits. It is introduced through an analysis of the concept of “exhibiting,” and through a thing-theoretical characterization of the exhibits in *Les Immatériaux* as “quasi-objects,” a concept proposed by Michel Serres. These exhibits comprised a wide variety of types of things: artworks, scientific samples, architectural models, but also everyday objects and scenographic displays. Each of these types of exhibits—and the media in which they were conveyed—constructed a different type of knowledge, through the variety of relationships between the contexts from which they were taken, and the ways—more or less contextual—in which they were presented in the exhibition. This hybridity challenged not only the status of artworks as autonomous objects but also the epistemological status of the scientific exhibits, scenographically framed in the neighborhood of artistic speculation, playful interaction, or conceptual obscurity.

Chapter 9 discusses the place of *Les Immatériaux* in the history of exhibitions. It takes off from the hypothesis that the exhibition marks a pivotal point in the history of exhibitions because it gave important impulses for the future organization, design, and structuring of content in interdisciplinary exhibitions. The chapter compares different genealogies that have been proposed for *Les Immatériaux* (e.g., by Antony Hudek, Daniel Birnbaum and Sven-Olof Wallenstein, John Rajchman) and offers an analysis of Lyotard’s own conception of exhibitions, before and after his work on *Les Immatériaux*. The chapter also addresses the more general methodological question of the comparability of historical exhibitions, and makes conceptual suggestions toward the criteria of their description, analysis, and comparison.

The tenth and final chapter of the book offers a speculative discourse about the *Immatériaux* exhibition as a dreamscape. The phenomenon of dreaming crops up in many parts of Lyotard's writings from the 1970s through to the 1990s, and it is possible to connect a whole host of observations in the exhibits, themes, and scenography of the exhibition to the form of dreaming as it has been approached by cultural theorists. The chapter suggests that the concept of the "dream form" (*Traumform*) proposed by the German literary scholar Elisabeth Lenk proves particularly fruitful for comprehending the unique effect that *Les Immatériaux* had on its visitors.³¹

31 The emphasis in chapters 7 through 10 on Lyotard—rather than on the more diverse, collective working structure described in the earlier chapters—demands an explanation. It is an effect of the material base of the analysis in which Lyotard's published and unpublished writings offer ample opportunities for reflection and interpretation, while other participants in the same working contexts—epitomized perhaps by Chaput and Toutcheff, both of whom passed away prematurely in the 1990s—are much harder to trace, so that their contributions and perspectives remain more opaque. This is a historiographical problem that can at this moment only be flagged but not alleviated. This book does, though, make an effort to highlight wherever possible the voices of people other than Lyotard, and the collaborative and polylogical structure that he was working in.

[2]

The Pre-History of *Les Immatériaux*, and Chaput's Exhibition Project 1981–1983

Backtracking to 1981

The exhibition that opened to the public on 28 March 1985 at the Centre Georges Pompidou in Paris, under the title *Les Immatériaux*, was the outcome of more than three years of research across an extended network of artistic and scientific contacts initiated by the Centre de Création Industrielle (CCI), the design department of the Centre Pompidou. More immediately, the show resulted from multiple decisions on the selection, design, and presentation of specific exhibits, taken in the 18 months before the opening by the curatorial team around Jean-François Lyotard and Thierry Chaput. This work was preceded by preparations undertaken by Chaput and his team at the CCI before the arrival of Lyotard in June 1983. The first part of this chapter presents the political context, discussions, and preparations which gave rise to the plan for such an exhibition in the first place and which resulted, in the summer of 1981, in the formulation of a first concept for the “manifestation” that would eventually become *Les Immatériaux*. In its second part, it outlines the research done by Chaput and his team at the CCI during 1982, leading up to the exhibition concept *La matière dans tous ses états* (Matter in all kinds of states), presented in April 1983.

In May 1983, the philosopher Jean-François Lyotard was invited to become the chief curator of an exhibition project about “new materials” and “creativity.” At that time, a team of researchers around the design curator and theoretician Thierry Chaput had already been working on this project for around 18 months. When Lyotard was first contacted by then CCI director Paul Blanquart, there existed a rather detailed exhibition concept that Chaput had prepared

together with his team. Initially, these were Martine Moinot, Sabine Vigoureux, and Nicole Toutcheff, later joined by Catherine Testanière and Chantal Noël, who worked as documentalists, as researchers, project managers, and editors. The document entitled *La matière dans tous ses états* was dated 14 April 1983 and contains multiple suggestions for more or less concrete exhibits, organized in a series of thematic chapters.¹ After some weeks of initial discussions between Lyotard and the working group at the CCI, Lyotard wrote a concept sketch, *Esquisse*, dated 10 August 1983, where the neologism of “les immatériaux” (the “im-materials”), was first proposed as a title for the planned exhibition. This document was later updated by Lyotard and Chaput to become conceptual summaries of the project. The first of these was completed for the president of the Centre Pompidou in October 1983, and then was developed further in a “second” and a “third state of the *Immatériaux*,” prepared in April 1984, in French and English and in a specially type-set form, as a preliminary concept for circulation among potential cooperation partners (occasionally referred to as *Présentation*).²

Even though a number of artistic and other projects slated for inclusion in the exhibition had already been commissioned earlier and were well underway, it is around this time, at the beginning of 1984, that the concrete curatorial work of shaping and selecting exhibits for *Les Immatériaux* began. While the process ensuing from this point and its final, manifest result are relatively well known, the research leading up to Chaput’s concept of April 1983, as well as the initiation of his research in the autumn of 1981, are presented here for the first time. The two parts of this story highlight the pivotal role of a concept written by the CCI’s design curator, Raymond Guidot, drafted in the summer of 1981 under a generic title that translates as “Reflections on the project of an interdisciplinary manifestation at the Centre Georges Pompidou.”³ The theme envisaged for this exhibition project was “creation and new materials” (*Création et matériaux nouveaux*), with a definitive title yet “to be determined.” The written concept scheduled the event rather vaguely for “1983 or 1984.”

- 1 See CPA 1994033W232_001. In the archive, next to this final version (23 pages, size A3 in horizontal orientation), there is also a slightly earlier version of this concept on regular A4, vertical orientation (CPA 1994033W669_002), as well as a handwritten list of the circa 20 recipients of either of these two versions (CPA 1994033W667_002). The final name on this list is “Lyotard.”
- 2 Important elements of this “third state” concept were first developed by Lyotard in an oral discourse, known by the initial phrase in the typescript, “Après six mois de travail,” which was recorded in private in March 1984 and which was published only posthumously as “After Six Months of Work” (Lyotard 2015).
- 3 All of the following quotations are taken from a copy of the document, CPA 1977001W049_001. The period covered here is more or less skipped in Guidot’s own account of the history of the CCI (Guidot 2007); it is also absent from the otherwise excellent, elucidating treatment of the history of the Centre Pompidou and the CCI in Mackay (2015), esp. 222–227. A rare reference to Guidot’s text can be found in Gallo (2008), 40n4.

Copies of the eight-page typed document were circulated internally within the Centre Pompidou by Blanquart's predecessor as the CCI's director, Jacques Mullender, with a cover letter dated 31 August 1981.

Guidot drafted the document in July and August 1981 based on conversations he held with different colleagues at the Centre Pompidou. Although the typescript itself bears no author's name, it will here be referred to as Guidot's. Nevertheless, we must keep in mind that it was the result of a collaborative effort and discussion, digested into the form of this text by Guidot.

“Création et matériaux nouveaux”

Guidot's text starts with an affirmation that the very concept of materiality has to be interrogated and that it extends beyond physical objects and bodies, encompassing also conceptual and processual aspects of the physical world. The text calls this an “immaterialist perspective” (*perspective “immatérialiste”*) (Guidot 1981, 1), and uses as an analogy the distinction between computer hardware and software, a distinction which, as it claims, no longer holds: “The material [in the sense of support] is no longer material (Hard). The immaterial (Soft) becomes the privileged material [support]” (2). The text suggests that the screen-based electronic image is a primary example of a representation that is neither a symbolical object nor an individual or collective mental construct, but a technically produced given (*donnée*) that is as tangible and as immediately legible as reality itself (2).

The text lists four types of such “new materials” as examples that the proposed exhibition might deal with: “materials that effectively did not exist in any form before their recent discovery (synthetic materials, electronic sounds, laser rays, holograms, etc.)” (4); traditional materials which are now “technically transformed,” like cellulose or wood, used, for instance, in architecture; and traditional materials either “used in new contexts” like the arts and ecological technologies, or “composited” materials, such as, for instance, mixes of the human voice with recorded noises, instrumental and electronic sounds (5). Technical components like transistors, integrated circuits, and computers, “these contemporary stones or bricks, at the end of the day, appear as mere avatars of intentions, programs, services, whose materialization has only practical meaning, the final concept always being situated beyond the present realization” (5).

The exhibition ought to reflect the social and ideological implications of such research on new materialities, implications which are most obvious in the domain of military research on high-performance materials, but also in the field of consumer markets and cheap mass production (7). However, according to Guidot's text, the main subject of the proposed project is to investigate the impact that this transformed materiality has on “creators” of various

disciplines (1). These creators—artists, designers, architects, engineers, etc.—are identified as a hinge in the transformative encounter of industrial production and creativity (2). The exhibition is thus expected to be dedicated not only to the new materials themselves, but also to the tools through which they are researched, developed, and manipulated (3, 7). Creativity, the text claims, is no longer a matter of an individual's inspiration or genius, but becomes the result of purposeful, systematic, and collaborative research in dedicated institutions (6).⁴

The text programmatically concludes that

the present exhibition, focusing on all the implications of new materials in today's creation, while basing itself in a relevant way on a few historical examples, will have the opportunity to propose to a certain number of creators, in the fields for which we are responsible, to imagine and present in the form of projects, models, prototypes, works, certain future applications of materials whose recent discovery has not yet resulted in everyday applications. (8)

The Institutional Context of the CCI

The cover letter that accompanied this text introduced the cast of individuals chiefly involved at this moment: the letter is signed by the CCI's director Jacques Mullender, and it is addressed to the president of the Centre Georges Pompidou (Jean-Claude Greshens at that time). Furthermore, it describes a working process in which, after a meeting of the directors' council of the Centre Pompidou on 25 June 1981, Raymond Guidot drafted this text based on additional conversations with Mullender, Dominique Bozo (leading curator and designated director of the Musée national d'art moderne, MNAM), Pierre Boulez (director of IRCAM), and "some other collaborators of the CCI."⁵

Raymond Guidot (1934–2021), an engineer and historian of design, was a teacher at ENSAD, the École Nationale Supérieure des Arts Décoratifs in Paris, and had worked for the CCI as an advisor and curator since 1969. Guidot had previously worked with the French industrial designer Roger Tallon at the Technès industrial design agency, from 1961 to 1969. During more than three decades, Guidot contributed to many projects of the CCI and the Centre Pompidou, even after his official departure in 2001. These projects included the CCI's exhibition *Matériau, technologie, forme* (Briand-Le Bot et al. 1974), which was in some ways a conceptual predecessor to the project that would

4 With reference to the example of architectural elements, the text claims that the introduction of new materials results in a renewed awareness of, and return to, now obsolete functions (3)—an argument that seems to gesture toward discourses on postmodernism.

5 See CPA 1977001W049_002.

later become *Les Immatériaux*,⁶ and *Paris–Paris, Créations en France, 1937–1957* (1981), one of the major interdisciplinary exhibition projects initiated by Pontus Hultén as MNAM director. The latter exhibition was on display in the Grande Galerie of the fifth floor of the Centre Pompidou during the summer of 1981 when, four floors down, there were conversations taking place about a project on “creation and new materials” ...

The Centre de Création Industrielle had been founded in 1969 and became part of the Centre National d'Art et de Culture Georges Pompidou (CNAC Georges Pompidou) in 1972, five years before the actual opening of the Centre Pompidou. At the end of 1976, after the sudden departure of the first “general secretary” and institutional architect of the CCI, François Barré, and a short interregnum during which the CCI was directed by CP president Robert Bordaz, Jacques Mullender became the CCI's new director.⁷

Mullender (1925–2009) was a former colonial administrator who had worked in sub-Saharan Africa in the early 1960s, and then as the head of the public facilities department of the Paris region from 1966 until 1974. There Mullender had worked with a team of other “colos,” former colonial officers who had known each other since the end of the Second World War. In an interview recorded in 2004, Mullender speaks about this experience, which sheds an interesting light on the character of this person working at the head of the CCI during the inception period of what would become *Les Immatériaux* (2005). From 1962 to 1966, Mullender recounts, “I was in charge of shuttling between four countries, Madagascar, Rwanda, Burundi, and Zaire, and I was at that time at the Ministry of Cooperation.” It is here that “the principle of integrated equipment” was developed, a management strategy which Mullender's group later also applied in the banlieues. But what was perhaps an even more important lesson to learn for his future assignments, “It was learning how to get by. All we did in Africa was that. We made roads under incredible conditions in the Ivory Coast. That taught you not to ask all the time. First you do and then you say, is this what you wanted? It still exists” (2005, 108).⁸

- 6 Judging by the catalogue and the photo documentation, *Matériau, technologie, forme* as an exhibition resembles a modernist elder sibling of *Les Immatériaux*; it was a study of materials, objects, tools, and apparatuses, all from a historical and modernist perspective, and was thus what *Les Immatériaux* would try very hard *not* to be.—Guidot also authored the first book on the MNAM/CCI design collection; see Guidot (1994, 2013).
- 7 For the work and history of the CCI, and the political scandal that led to the departure of Barré, see Dufrêne (2007), esp. “Le CCI, du Musée des arts décoratifs à Beaubourg,” interview with François Barré (86–91), and “Exposer le design au Centre Pompidou,” interview with Raymond Guidot (248–250). The CCI was fused with the Musée national d'art moderne in 1992 under the CGP presidency of Dominique Bozo who, two years earlier, in September 1990, had been made the director of both MNAM and CCI, following François Burkhardt at the CCI (*Journal officiel* 1990).
- 8 Mullender refers to Clauzel (2003), an 800-page publication in which he was involved and which gives an impression of this “spirit.”

We can only speculate whether it was this attitude that got Mullender the job of director of the CCI in November 1976. Mullender took a topical interest in the CCI's programs related to architecture, urban development, and product design, and it may well have been his carefree and enterprising attitude that fostered the pioneering spirit for which the early CCI was famed.⁹

Interaction with the Delegation of Innovation and Technology at the Ministry of Industry

A person who was not mentioned in the August 1981 document, yet who had been seminal for arriving at this point, was Thierry Gaudin (1940–2020), an engineer and expert in industrial development, research, and innovation, who worked for the French Ministry of Industry from 1971 to 1981 in the Délégation à l'Innovation et la Technologie, where he was responsible for implementing a “politics of innovation.” Gaudin's portfolio included the knowledge and technology transfer between research institutions and industry, the fostering of what would later be called “start-up culture,” and the development of the design sector, among other ways through support for exchange platforms like the INOVA industrial fair and the improvement of design education in art and engineering schools (Gaudin n.d.).¹⁰

The Centre Pompidou Archives document an intensive collaboration between Thierry Gaudin and Jacques Mullender in the years 1979 to 1981. In April 1979, Mullender wrote to the Minister for Industry, André Giraud, thanking him for his visit to the CCI's stand at the INOVA 79 fair, and for supporting an exhibition, organized by the CCI, about the measurement of time (*La mesure du temps*, 1979), financed through the Délégation à l'Innovation et la Technologie.¹¹ Mullender also announced to the minister a forthcoming proposal from the Délégation in May concerning the integration of design education into schools of engineering and of senior leadership (“*cadres supérieurs*”), a plan that, as Mullender suggests, could be added to a broader “programme national de design.”¹²

9 Mullender presented a project on the transformation of the human habitat and of society, studied through the case of African cities, at the CGP's interdepartmental Comité de Recherche in January 1979 (see CPA 1977001W020), and contributed to a publication of the CCI, *L'objet industriel, empreinte ou reflet de la société?* (1980). It is as yet unclear whether there were political reasons both for Mullender's appointment and for his deposition, in February 1982, eight months after François Mitterand took office as president of the French Republic. From 1983 to 1985, Mullender was director of the Louvre museum in Paris. See also the retrospective homage paid to Mullender by Guidot, in Guidot (2007), 248.

10 See Liu (2013).

11 Incidentally, it was Thierry Chaput who curated for the CCI this exhibition about the measurement of time.

12 CPA 1977001W049-d-1.

Especially this latter hint indicates that there was a close working contact between Mullender and Gaudin, dating back before 1979. Due to the CCI's commitment to industrial design, the Délégation had a keen interest in the CCI, which the Ministry of Industry had supported from its inception and which Thierry Gaudin identified as an important instrument for accomplishing the mission of the Delegation of Innovation and Technology. Jacques Mullender, on his part, was looking for additional funding sources for the activities of the CCI. During an internal meeting at the CCI in March 1980, Mullender talked about the financial limitations of the CCI for 1981, and about the necessity—and the difficulties—of finding external funding.¹³ Mullender reported on various appointments that he had at the Ministries of the Environment, of Culture, and of Economy, to foster the visibility and political relations of the CCI, its work, and objectives. In this context Mullender also mentioned a meeting at the Ministry of Industry in which, among others, Gaudin's superior, Claude Pierre, delegate for innovation and technology, participated.

During the same meeting with his colleagues of the CCI at the beginning of March 1980, Mullender reported on his first official encounter with the newly arrived president of the Centre Pompidou, Jean-Claude Groshens (1926–2010), a high-level academic functionary of the political right.¹⁴ With the various ministerial encounters in mind, Mullender suggested to Groshens that a series of public events for professionals in culture and industry should be organized by the CCI in its "Salle de Documentation," preferably starting as early as October of the same year. Marc Girard, who was the CCI's "chef de service de design de produits" with a penchant for new technologies, was asked by Mullender to propose a series of topics that would make it possible to attract people from industry to the CCI.¹⁵

In a parallel development, a discussion was initiated between the different departments of the Centre Pompidou, including the Bibliothèque publique d'information (BPI), IRCAM, MNAM, and the CCI, to formulate an

13 CPA 1977001W015.

14 CPA 1977001W015. Groshen's regular three-year term (1980–1983) at the head of the Centre Pompidou was not extended by the Mitterrand/Lang government and he was followed by Jean Maheu (1931–2022), who served two terms (1983–1989).

15 See CPA 1977001W015. Documents archived in Mullender's files at the CPA testify that Mullender and Gaudin had also crossed paths, if not cooperated, in February 1980, when Gaudin spoke about "Design and Industry" at a conference at the Technical University of Compiègne, under the patronage of the Ministry for Industry and dedicated to the relations between design, industry, and technological innovation. Mullender participated in the same event, speaking on another panel together with Gaudin's colleague from the Délégation, C. Elbaz (CPA 1977001W061-d-6). A few weeks later, in March 1980, at the conference "Innover ou disparaître" of the ISF (Société des Ingénieurs et Scientifiques en France), on a panel introduced by Claude Pierre, Délégué à l'Innovation et la Technologie in the Ministry of Industry, Thierry Gaudin (listed as "Adjoint au Délégué") spoke about "Mutations scientifiques, techniques, technologiques" (CPA 1977001W061-d-6).

interdepartmental project. During several meetings in 1978 and 1979, the Centre's Comité de Recherche (Research Committee), debated the possibility of such a joint research project.¹⁶ At the meeting on 30 May 1979, Eliséo Véron (EHESS) and Eric Fouquier (SORGEM/EHESS) were presented as "chargés de l'orientation du projet commun de recherche" (charged with the orientation of the joint research project). They would conduct a sociological and discourse-analytical research project about current discourses of "the creators" (specified as painters, musicians, writers, and "créateurs œuvrant sur des volumes"), their professional self-conceptions, and their understanding of their works and audiences.¹⁷ It is interesting in our current context to highlight that a focus was put on the practitioners working in the arts and in what we would today refer to as the "creative industries," rather than on the audience or on society in general, and that this sociological interest in the artists' reflections on their working conditions was shared by the different departments of the Centre Pompidou.

For the overall chronology of the preparations for what would become *Les Immatériaux*, it is also noteworthy that when Mullender, in March 1980, talked to his colleagues at the CCI and sketched the plans for exhibitions in the Grande Galerie on the fifth floor for the period from 1983 until 1986, there was no mention of a project on materiality and new technologies. Mullender did, however, talk about the CCI's participation in an interdepartmental exhibition project that, we can surmise, was expected to result from the aforementioned joint research project which the CCI was co-financing, under the working title *La Création contemporaine* and envisaged for summer 1982.¹⁸ While such an exhibition was never realized, there are reasons to believe that its conceptual basis was in part appropriated for a project initiated by Gaudin and Mullender in the following months of the spring and the summer of 1980, which would lead to the exhibition concept sketched out in Guidot's text of summer 1981.

- 16 The various minutes suggest such consecutive conversations about a "projet commun de recherche" during the committee meetings on 27 October 1978, 30 January 1979, 30 May 1979, and 6 November 1979. The project is addressed in the meeting minutes of 30 January 1979 as something that everyone seems to be aware of, but that has no clear shape yet, which is why at this point only a modest sum of 50,000 francs was allocated to its preparation. Mullender was a member of this committee, Marc Girard was represented by Barbier-Bouvet at the meeting on 30 January 1979; see CPA 1977001W020.
- 17 See CPA 1977001W020, and the reports by Véron and Fouquier from May 1979 and April 1980 in CPA 1977001W021-d-1. In October 1984, Véron contributed to the symposium about the information age, organized by Weissberg and others at the CCI; see Véron (1985), 211–220.
- 18 See the minutes of a program meeting of the CCI on 20 March 1980, CPA 1977001W015.

The Decision of the Council of Ministers on 23 July 1980 on a Program to Promote Industrial Creation

In July 1980, the French Council of Ministers, under the presidency of Valéry Giscard d'Estaing, discussed and decided upon a package of activities that had been prepared by the Delegation of Innovation and Technology and that seems to have been drafted by Thierry Gaudin, who referred to it as “a comprehensive policy for the promotion and design of industrial products.”¹⁹ According to a preliminary financial overview dated 24 June 1980, the various activities would be funded, in different constellations, by the Ministries of Industry, of Culture, of Education, and of the Economy. The four sections of the proposal included the establishment and improvement of design education in engineering schools as well as in art and architecture schools (10 million francs),²⁰ fostering of the commercial market for design products (15 million francs), and support for measures to encourage cooperation between designers and industry.

The first of these four sections was dedicated to “promotion and technical culture” and seemed geared especially at the CCI. It stated:

- I. Promotion and technical culture—additional cost about 10 MF/year
 - Emphasize the role of the CCI Beaubourg in design promotion, particularly with regard to the interaction of design and society, and public awareness, in liaison with the Ministry of Industry. A letter will be sent by the two Ministers [Industry, Culture] to the President of the Centre Georges Pompidou.
 - Organize a series of events for the [professional] industrial public presenting the work and proposals of designers. An international prize for product design, to be awarded at an event of global scale, to be held in 1983.
 - Study the feasibility of a French “design center,” along the lines of those existing abroad (cost of the study: 0,3 MF, estimated cost of the Design Center: 5 MF/year).

The aspects of the ministerial decision that directly concerned the CCI were excerpted again by Gaudin, a few weeks later:

an international event [manifestation] on industrial design will be organized in 1983, where a product design prize will be awarded. From 1980 onward, research grants, managed by the CCI–Georges Pompidou,

19 See the dossier CPA 1977001W049-d-1, also for the following description and quotations.

20 In this section on education, special emphasis was placed on the Technical University of Compiègne where, in February 1980, Gaudin and Mullender had participated in a conference; see above fn. 15.

will be awarded to teams of young designers to develop proposals for new products to be presented at this event.

It is not exactly clear how or over which period this proposal to the Council of Ministers was prepared, but we can presume that Gaudin developed the plan in close collaboration with Mullender, at least with regard to the aspects that directly concerned the CCI. When Gaudin sent Mullender the text of the inter-ministerial decision, two weeks after they had been discussed by the Council on 21 July and finalized on 23 July 1980, Gaudin wrote in the covering letter: "I would like to take this opportunity to thank you for the contribution you have kindly made to the constitution of this dossier, whose implementation, which has only just begun, has now been officially approved." And in a handwritten note to Raymond Guidot, Gaudin told Guidot that Groshens, Mullender, and Gaudin himself thought that Guidot should be the coordinator of the project—implying that the three men had explicitly discussed the implementation of the activities at the CCI.²¹

On 9 July 1980, prior to the final decision of the Council of Ministers, Mullender had commented critically on a draft proposal of 30 June. He emphasized that the CCI was already fulfilling the assigned role of design promotion and that some of the propositions issued here by the Délégation were in fact adopting suggestions that had been formulated a year earlier by the CCI in documents addressed to the Ministries of Industry and of Culture, "on 3 May and 27 July 1979." Mullender urged that the notion of design should be understood in a broader perspective, not limiting it to industrial and product design, and he cautioned against the issuing of an international award and research grants—anticipating the administrative complications that these projects would in fact provoke in the following months.²²

Regarding the conceptualization of a "manifestation," Mullender wrote that instead of a general exhibition on industrial design products,

it seems preferable to show in an event aimed at the general public how closely industrial design must be linked to other aspects of the living environment, such as town planning, exterior and interior architecture, visual communication (graphic design). Any object is situated in a relational context and participates in a way of life of which it is only one aspect, albeit an important one, but which it does not seem advisable to

21 CPA 1977001W049-d-1, receipt stamped at the CCI on 16 July 1980. It is not clear whether Gaudin and Guidot knew each other, and if so, how, though it is conceivable that they had crossed paths numerable times, given their respective interest in industrial and product design.

22 For examples of the design research projects funded by the Ministry for Industry and hosted by the CCI, see the CCI's annual report for 1982 (CPA 1977001W130).

isolate when one wants to go beyond the framework of an assembly of specialists.²³

These remarks by Mullender about a broad and socially integrated approach to design provide a first trace of concrete conceptual considerations originating from the CCI about the project that will, almost five years later, take shape as *Les Immatériaux*. It is unlikely that these ideas from 1980 directly informed the exhibition of 1985. But if we try to understand what led to Guidot's concept of 1981 and to Chaput's research in 1982–1983, from which the curatorial process conducted by Lyotard and Chaput in 1983–1984 then departed, this connection between Mullender and Gaudin is an important early point of reference.²⁴

Toward Implementation

In the autumn of 1980, the attempts to implement the activities described in the policy program for design promotion were off to a slow start. On 30 September 1980, Gaudin sent a draft contract for the program of research grants to the Centre Pompidou. He urged that, in order for the money (3 million francs) to become available from the Ministry of Industry's 1980 budget, and for the program to start in 1981, the contract would have to be signed "before November."²⁵ Yet, apparently an agreement between the ministry and the Centre Pompidou was still under discussion half a year later. In another development, Gaudin invited Mullender on 5 November 1980 to join a new committee for education in the field of product design, to be called "Comité National de l'Enseignement de la Conception des Produits." Gaudin wrote that the first, preliminary meeting of this committee was due to take place at the CCI on 17 November, which suggests that the letter itself was a formality, since the venue for the committee meeting would have had to be

- 23 CPA 1977001W049-d-1. Taking up some of the arguments from Mullender's note of 9 July, though in a more conciliatory tone, Centre Pompidou president Groshens responded to the ministerial decisions on 3 September, offering some precise details, for example with regard to the purpose of the grants, commenting positively on the idea of setting up a French design center, and applauding the planned educational activities, not least with the CCI's cooperation partner, the Technical University of Compiègne. In comparison with these various details, Groshens's letter is obtrusively vague on the question of an "international manifestation" (CPA 1977001W049-d-1).
- 24 It is also necessary to acknowledge the fact that the term "manifestation," which Lyotard later used so insistently in order to distinguish *Les Immatériaux* from a regular "exhibition," was already used by Guidot in 1981, and even earlier by Gaudin in July 1980 in the concept that secured the initial funding for what would become Lyotard's curatorial assignment.
- 25 See CPA 1977001W049-d-1. It is not clear at the time of this book's writing (August 2024) whether these grants were used in 1982–1983 for commissioning projects toward the exhibition in preparation by Chaput and his team.

agreed upon with Mullender beforehand.²⁶ However, a month later, Mullender reported to his colleagues at the CCI that

[regarding the] exhibition on industrial design (discussed for 1983 in the Council of Ministers) ... no discussion has yet taken place with the Ministry of Industry on this subject. Th. Gaudin would prepare a scenario for this exhibition, which he would like to curate and present on the 5th floor of the Centre. F. Jollant reported that Roger Tallon is proposing a counter-project for presentation at the Palais des Congrès, and possibly in other venues throughout Paris.²⁷

Another four months later, the situation still appears unchanged: in a correspondence with Gaudin, Groshens affirms that Mullender will represent Groshens at a meeting at the Ministry of Industry, planned for 8 April 1981, “about the organization in 1983 of a manifestation of international dimension about industrial creation.” Gaudin had arranged that this meeting would be joined by a delegation from the Comité Colbert, an association of French luxury brand producers, envisaged here as potential sponsors of the 1983 event. But Groshens cautioned against holding such a discussion before there was an agreement between the ministries involved (i.e., those of Industry and Culture) “about the general orientation of this exhibition”—suggesting continuing complications, indecision, and possibly background wrangling.²⁸

After all that effort, the end of the project’s blockage coincided with the change to the socialist government of François Mitterand in May 1981. It is a matter of speculation whether there are causal relations between the two events, but the minutes of the meeting of the Centre Georges Pompidou’s

26 See CPA 1977001W049-d-1.

27 Minutes of a meeting on 10 December, CPA 1977001W015. (Françoise Jollant was the head of the CCI’s documentation service.) This remark by Mullender contains the only known suggestion that Gaudin might in fact have wished to curate the proposed exhibition himself, but would be competing with Guidot’s former boss, the designer Roger Tallon. Considering the efforts that Gaudin had made to secure the funding, this seems a possibility—and might, in combination with Mullender’s skepticism about the first idea for the exhibition voiced in his note of 9 July, also explain the delay during these months of inactivity.

28 CPA 1977001W049-d-1. The report by Marc Girard, who finally represented the CGP instead of Mullender, about this meeting on 8 April is full of suggestive hints, but extremely cautious regarding any results. The assembly, which comprised several people from the Ministry of Industry, including Gaudin, as well as representatives of the Comité Colbert, the designer Roger Tallon, and André Hatala and Marc Girard from the CCI, discussed various possible formats, but according to Girard’s report, in the end arrived at no more than a general affirmation that the “manifestation” should aim at “the sensibilization of the public toward the promotion of industrial creation” (CPA 1977001W049-d-1).

directors' council of 25 June 1981 document the beginning of a new dynamic which would lead to Guidot's concept and the initiation of Chaput's research.²⁹

The meeting was chaired by CGP president Groshens, and among the 15 attendants from the different departments were Mullender, Boulez, and Bozo.³⁰ Also participating, as government representative, was André Larquié, who had just joined the staff of the new Minister of Culture and Communication, Jack Lang, for whom Larquié worked as a project manager and foreign affairs advisor from May 1981 to September 1983.³¹

After having been introduced and welcomed by Groshens, Larquié made a programmatic statement that reflected the opinion that the ministry under Lang's new leadership held about the Centre Pompidou. Larquié asked the Centre Pompidou to enhance the collaboration between the departments, to strengthen its efforts in the field of artistic production, to develop a more intercultural perspective with a special view to the "North–South axis" and Latin cultures, and to "mobilize contemporary artists around the Centre which is conceived as a forum of political and cultural ideas."

The question of interdepartmental cooperation had been a point of concern at the Centre Pompidou for years. In his response to Larquié, Groshens mentioned, as three possible joint-focus themes for the program in 1983 and 1984, a major exhibition about Viennese culture, the cultural exchange with Africa,³² and an exhibition on the rapport between art and science. Remarkably, Groshens here did not mention the "manifestation on industrial design" under discussion with the Ministry of Industry, possibly because it was at that moment still conceived as a project which only concerned the CCI and not the other departments of the Centre Pompidou.

In the ensuing discussion, Mullender signaled that the CCI held an interest in all three topics. For the present context, it is noteworthy that the minutes of the meeting record the first instance of the "manifestation on industrial design" being connected to the notion of materiality: "With regard to the project on the relationship between art and science, Mr. Mullender reported on research currently being carried out by the CCI on the prospects for

29 For the following description and quotations, see the minutes of meeting on 25 June, dated 4 August 1981, CPA 1977001W015.

30 Bozo was there as a guest because he was designated to follow Pontus Hultén as director of the MNAM at the beginning of September.

31 Larquié had worked at the Ministry of Culture since 1975 as an assistant to the director of music, opera, and dance. In the liaison role between the ministry and the CGP, Larquié replaced Michel Delaborde, who had worked at the Ministry of Culture with Jean-Philippe Lecat, an advisor to Mitterand's right-wing predecessor, Valéry Giscard d'Estaigne, against whom Mitterand had won in the second round of presidential elections on 10 May 1981, taking over power from Giscard on 21 May.

32 Possibly an early mention of the project that would eventually become the exhibition *Magiciens de la Terre*, held in 1989.

industrial design. The aim this time would be to examine the future of new industrial materials and to confront the public directly with them.³³ IRCAM director Pierre Boulez affirmed that he was “in favor of the project on art and science from the point of view of the evolution of the artist in relation to the material,” reiterating an interest in the focus on artistic practice that had already been prominent, two years earlier, in the discussions on research about the “discourses of the creators” conducted by Véron and Fouquier.

Two months after this meeting, Mullender presented the concept drafted by Raymond Guidot for an “interdisciplinary manifestation” about “creation and new materials.” He delivered it to Groshens for distribution to the other department directors, and offered it for further discussion in the directors’ council toward the end of September.³⁴ With this concept, Mullender made a proposition that served several purposes at the same time: namely, it finally substantiated a project for the funds secured a year before by Gaudin from the Ministries of Industry and Culture for the CCI, and it simultaneously proposed a project spearheaded by the CCI and an interdepartmental project for the CGP of the type that the Ministry of Culture and Communication had urgently requested.

In the available archival materials at the Centre Pompidou, the name of Thierry Gaudin, who left the Ministry of Industry in 1981, then disappears from the project’s horizon altogether. He is also not mentioned anywhere in the later documentation of *Les Immatériaux*. The exhibition’s catalogue acknowledges “the help of the Department of Cultural Development, Ministry of Culture” (*Épreuves*, 3), but the original initiative of the Ministry of Industry and its Délégation à l’Innovation et la Technologie appears to have been forgotten in the intervening years. Instead, it may well have been the meeting on 25 June 1981 that lay the foundation of the Ministry of Culture and Communication’s vital interest in the project that would eventually become *Les Immatériaux*.³⁵

33 See also Hudek’s reference to an article from *Le Monde* in 1981 (Cyrot-Lackmann and Desre 1981), found in one of the archive boxes associated with *Les Immatériaux*, as an early sign of the thematic focus on materials; see Hudek (2015), 72n6.

34 CPA 1977001W049_002.

35 The Ministry for Culture doubled its contribution to the budget of the CCI in 1983, from 9 to 18 million francs (document dated 13 May 1983, IMEC / MC1 LNG11 106P13; information conveyed by Adrien Le Calvé). This increase was part of a general policy of the ministry toward the CCI, and was decided before Lyotard joined the project. Lyotard himself had close government contacts. According to his personal calendar for 1984, there were two meetings on 14 December 1984, first, at 12:45 hrs., with Laurent Fabius who had at that point been Prime Minister since July 1984 (and previously, since 1983, Minister for Industry and Research), and then, at 13:00 hrs., with Jack Lang, Minister for Culture and Communication, and the French filmmaker Gérald Calderon (see *Chronology*, and Bibl. Doucet, JFL 538). There are indications that Lyotard had been in touch with Lang in the preceding weeks about organizational problems of the exhibition. It is not clear whether

An Assignment for Thierry Chaput

The ensuing discussions on Guidot's concept must have been sufficiently positive for the CCI to start up a research process about "creation and new materials," or, as the project would be dubbed in a summary preview for 1983/1984, "matériaux et création."³⁶ This research was not conducted by Guidot himself, as he had two major exhibition projects coming up for 1983 (*Eureka*, opening in July, and *Architecture et industrie*, starting in October 1983), which prevented him from taking on additional tasks.³⁷ Moreover, Guidot was generally more interested in "material" design objects than in the electronic media and digital technologies that had become the focus of the proposed project.³⁸

These were, rather, the field of expertise of Guidot's younger colleague, Thierry Chaput (1949–1990), who had studied with him at ENSAD, where Chaput had received a diploma in product design in 1973. Another ENSAD professor also associated with the CCI, Michel Millot, had helped Chaput to gain his first commission from the CCI, namely to develop a system of automation for the documentation of products, called SIP (Système d'information sur les produits), which Chaput worked on from 1975 to 1978. After this, Chaput stayed at the CCI, working with Marc Girard in the CCI's "service de design de produits."³⁹ Chaput realized a variety of exhibitions, including, in the year of particular interest here, 1981, *Langage papier crayon* (March until May) and *Différence indifférence. Handicaps et vie quotidienne* (March until June 1981).⁴⁰ In the autumn of 1981, Chaput was preparing an exhibition about pinball machines,

the meeting with Fabius was also related to *Les Immatériaux*, or even to the old attachment of the Ministry of Industry to the project.

36 CPA 1977001W130.

37 Other major exhibition projects that Guidot was involved in included *Vienne, Naissance d'un siècle, 1880-1938*, an interdepartmental project of MNAM, CCI, BPI, and IRCAM, curated by G. Régnier, C. Béret, and R. Guidot (spring 1986), and *Japon des Avantgardes*, curated by Guidot and others (winter 1986-87). For the exhibition titles and dates, see Biteaud et al. (1997).

38 Martine Moinot, personal correspondence, 8 October 2018.

39 Marc Girard had studied humanities at the Sciences Po and joined the CCI in 1973 (like Sabine Vigoureux), when it was still housed at the Musée des Arts Décoratifs. He was in charge of product design until a reorganization of the CCI in 1983, through which he became head of the "service d'études et recherches design technologies nouvelles, innovation sociale" (see Dufréne 2007, 644). Girard was not directly involved with the project for *Les Immatériaux* and would leave the CGP in 1987 for the Cité des sciences et de l'industrie, which had opened in the Parc de la Villette in Paris in 1986.

40 Remarkably, the proposal of this latter exhibition on design for the handicapped had been mentioned in the CCI program meeting on 20 March 1980, though at that point, less than a year before the opening, there was no responsible curator and team designated yet for the project. It would eventually be realized by Chaput and two colleagues, suggesting a practice at the CCI whereby Chaput was assigned projects "on call" (CPA 1977001W015).

Billes en tête: l'imagerie du Flipper, which opened in October, leaving Chaput free for new projects by the end of October.⁴¹

It is not clear whether Chaput was among the “other collaborators of the CCI,” who, according to Mullender’s cover letter, had contributed to Guidot’s consultations in the summer of 1981. In retrospect, Marc Girard has confirmed that Chaput and Guidot had a friendly and respectful relationship, despite their difference in age: “Guidot would have gone directly to Chaput to speak about the project; the contact between them was very friendly at the time, and Chaput was the obvious person to work on this particular project” (Girard, pers. comm., 26 September 2019).

The Research by Chaput, Moinot, Vigoureux, and Others, 1981 to 1983

At some point in September or October 1981, Mullender and Guidot asked Thierry Chaput to start research on the project outlined in Guidot’s text.⁴² In the following months, he would be joined by Martine Moinot, Sabine Vigoureux, and Nicole Toutcheff, all three research assistants on the payroll of the CCI.

A preliminary document that was drafted in May 1982 specifies the thematic trajectories of the research that Chaput and his group undertook. They ranged from the development of new materials and their use in design and production, to theoretical considerations of the concepts of materiality and dematerialization, and the impact of an increasing transition from hardware to software. Topical areas where these themes were explored comprised robotics, informatics, electronic imaging and video, as well as genetic engineering, biology, physics, and chemistry.⁴³

41 Martine Moinot, who had been at the CCI since 1977 and who became one of the key members of the team that worked with Chaput on the realization of the project from January 1982 onward, remembers Chaput saying in the summer of 1981 that he would work on the “création/matériaux” exhibition, and asking her to work with him on this project. Since Guidot’s concept was dated at the end of August, this conversation may have taken place after the summer recess, in September 1981. Moinot does not remember any gossip about “Chaput taking the project away from Guidot,” or the like; to the contrary, there seems to have been no competition between Chaput and Guidot on this matter (Martine Moinot, pers. comm., Paris, 3 October 2018 and 28 March 2019).

42 According to a receipt in the archive, Chaput’s research appears to have started no later than November 1981 (receipt dated 17 November 1981, CPA 1994033W667_001).

43 See CPA 1994033W669_009. It is not clear whether Mullender’s departure in February 1982 and the arrival of Paul Blanquart as the new director of the CCI directly impacted Chaput’s research, or whether the reorientation away from a professional perspective on design that was championed by Gaudin, and that was still present in Guidot’s concept, toward a perspective that was more audience-oriented, and that looked more at the societal impact of new technologies, took place more gradually. As Marc Girard comments: “From the inside of CCI and through their political network, some colleagues

Chaput and his team had appointments with representatives of industrial and state research institutions, including the raw materials group ELF Aquitaine, chemical industry groups Pechiney and Rhône-Poulenc, construction materials group Saint-Gobain, automobile and aviation group MATRA, the computer company IBM, the national institute of audiovisual media INA, and the French national research institute CNRS.⁴⁴ At the CNRS, Chaput and Moinot first met the scientist Paul Caro, who would play an important role as a scientific advisor to the *Immatériaux* project in 1984.⁴⁵

At least some of these contacts were based on the CCI's established network of industry partners. In November 1982, Chaput participated in the annual meeting of CESTA, the Centre d'étude des systèmes et des technologies avancées, a technology innovation think tank with which Thierry Gaudin was also associated. During the same year, Chaput was in contact with the prolific sociologist and theoretician of technology and innovation, Yves Stourdzé (1947–1986), who became the director of CESTA in 1983. Notably, Stourdzé had studied with Lyotard at the University of Paris X in Nanterre in the late 1960s, and in 1981 Thierry Gaudin mentioned him as a scientific advisor (Chamak 1997, 2015–16).⁴⁶

In this initial phase, besides these wide-ranging external contacts, Chaput's team also sought to develop collaborations with the other departments of the Centre Pompidou, including the MNAM (especially video curator Christine Van Assche), the Children's Studio (Atelier des enfants, contact person Gaëlle Bernard), IRCAM (Brigitte Marger), the Service audiovisuel (Pierre Tailhardat), and the BPI (Philippe Arbezard, who was succeeded as contact person by Catherine Counot in early 1983).

Research on holography played an important role in this phase. Chaput met the artists and experimental filmmakers Claudine Eizykman and Guy Fihman, who would eventually participate in the *Immatériaux* exhibition with

promoted clearly the choice of Blanquart as the CCI's director: their aim was a CCI more dedicated to the 'social studies' field and less to design and industry promotion" (Girard, email to author, 6 March 2020). For indications of such a political conflict between Mullender and Vicent Grimaud, who worked for the CCI's "service de recherche," see documents drafted by Grimaud in April and June 1980 (CPA 1977001W020-d-5).

44 See lists of research contacts dated 21 September 1982, CPA 1994033W234_016.

45 See *Chronology*, appointment at CNRS Meudon, Jean-Pierre Dalbera and Paul Caro, 27 May 1982. In May 1982 Nicole Toutcheff also met François Recanati, a linguist and semi-otician who, like Caro, would become one of the most active authors of the *Épreuves d'écriture* writing experiment in 1984.

46 See also "Yves Stourdzé" in the French Wikipedia. The reading list of the *Inventaire* catalogue includes the proceedings of the *Premier colloque image* (Stourdzé et al. 1984). In March 1980, at the conference "Innover ou disparaître" of the ISF (Société des Ingénieurs et Scientifiques en France), Gaudin chaired a session entitled "De la nécessité à l'idée de l'innovation," which Pierre Quétard spoke on, "directeur des activités civiles du group Matra" (CPA 1977001W061-d-6).

a holographic film apparatus, and he established contact with Anne-Marie Christakis of the Paris-based Musée de l'Holographie, founded in 1980. As an iconic feature for the entrance of the exhibition, Chaput considered the production of a large, spectacular holographic installation which would "illustrate a notion fundamental to the understanding of the manifestation: the duality of physical materials and immaterial materials."⁴⁷

The research activities of the first months led to a concept sketch dated 18 June 1982, still under the working title of "Matériaux nouveaux et création." The seven-page document outlines the overall theme of the planned exhibition. It highlights different topical areas and makes some first, preliminary suggestions for how they could be represented in the exhibition. Importantly, this text would still form the basis, 10 months later, of the exhibition concept *La matière dans tous ses états*, which contains many passages taken directly from the document of June 1982.⁴⁸ And its formulations will also still resonate in Lyotard's *Esquisse*, whose suggestion for the exhibition title, "Les Immatériaux," is derived by transforming the singular form in Chaput's formulation: "les matériaux 'immatériels,' sinon l'immatériel"—"the immaterial"—into the plural of "the immaterials:"

"Immaterial" materials, if not the immaterial, now dominate the flow of exchanges, whether as objects of transformation or investment, if only because the passage through the abstract is now obligatory, including for the production of "hard" materials.

For example, any synthetic material can be constructed by computer, and we know all its properties, even if it doesn't exist or doesn't yet exist.

Prisoners of the materialism of the industrial revolution, immaterial materials suffer from their invisibility.

Yet there is no difference in nature between material and immaterial materials (except perhaps for a lawyer).

For a physicist, the wood of a table is nothing but a void and a few atoms, just like a block of concrete!

Their characteristics differ only in that they transform energy flows differently.

47 See the draft contract for a cooperation envisaged with the Association Française d'Holographie, CPA 1994033W241_011.

48 There are many practical ideas and proposals for exhibits, variations of which will be shown in the exhibition; maybe it is on this basis that Boissier said in 2014, slightly exaggerating, that many of the exhibits were already decided when Lyotard joined (Boissier 2015, 93, 96).

The “mix” of material/immaterial becomes even more homogenous when we consider the components in which the software is micro-programmed, “enclosed.”

The next level of intimacy is reached with the use of interactive techniques, when, within a single product, relationships are forged between container (material)/content (non-material)/actor (user).

Who does what?⁴⁹

There are themes here which Lyotard would later take up in his own discourse on *Les Immatériaux*—such as the observation that materials can now be technically conceived according to the requirements of a certain project, and that the new condition of “the immaterial” crucially affects the question of authorship. We can also imagine how the idea that “the wood of a table is nothing but a void and a few atoms” gets translated by Lyotard and Caro, two years later, into the concept of the site *Surface introuvable* (Elusive surface). And even the kernel of Lyotard's understanding of the *immatériaux* as things that are decidedly *not without* any material basis, but that are intermediate and transformative states of waves and energies, is already formulated in this early text by Chaput and the team. A few months later they will put this more succinctly, again using the term “mix” (*mélange*), in a passage on “the new living materials” (*les nouveaux matériaux vivants*):

Although in the previous chapters the result is always the product of software and hardware, there are areas, fields of activity, where the “mix” is much more important. The closeness may be such that it becomes difficult to attribute the characters of “material” or “immaterial,” respectively.⁵⁰

An aspect that the June 1982 concept adopts from Guidot's text is the exemplary status of electronic image and text, and of simulation. The research into this field took on a new dynamic through the encounter with Jean-Louis Boissier, who put Chaput and his team in contact with the Art and Technology Centre of the University Paris VIII where Boissier worked together with colleagues like Edmond Couchot and Frank Popper. Chaput and his team had not previously considered the artistic experimentations with new technologies for the exhibition. Boissier first introduced him to the work that was being done by artist researchers at Paris VIII, and Chaput then went on to personally encounter the fledgling media art scene of the 1980s at film and video festivals in Bourges, Albi, and Pau (December 1982), at the Forum International des

49 CPA 1994033W669_001, 2 (version 1982), 12 and 21 (version 1983) See also the copy of the same document from 1982, CPA 1994033W234_019, which contains handwritten annotations by Martine Moinot.

50 CPA 1994033W232_001, 21.

Nouvelles Images in Monte Carlo (February 1983), and the Computer/Culture festival in Chartreuse de Villeneuve-lez-Avignon (July 1983).⁵¹

By the end of 1982, the pressure was rising on Chaput and his team to deliver a concrete proposal for an exhibition which, at that point, was still planned to be shown in 1984, just over a year away, in the Grande Galerie of the Centre Pompidou. In a flurry of meetings during the first months of 1983, the team tried to find exhibits and establish collaborations which would substantiate the ambitious project. Sabine Vigoureux, for instance, collected dozens of suggestions from the design theoretician and art director Daniel Rozensztroch, who was commissioned to offer his advice. Rozensztroch provided ideas and contacts for innovations in such diverse areas as material research, electronics, kitchenware, lighting, wall paint, furniture, clothes, bags, architecture, marketing, and business communication, suggestions which were followed up by Vigoureux in a long series of meetings.⁵²

The result of these and other activities was the exhibition proposal presented by Chaput in April 1983 under the working title of *La matière dans tous ses états* (Matter in all kinds of states). The document includes a suggestion for the overall scenography and then groups a great variety of objects and project proposals in a number of chapters related to topics such as architecture, clothes, food, design products, technical apparatuses, electronic images and texts, music and sound, and bio-materials. Each of these chapters has a brief

- 51 An institutional cooperation between the Centre Arts et Technologies of Paris VIII and the CCI was first discussed on 29 October 1982 in a meeting with Frank Popper, Edmond Couchot, and Jean-Louis Boissier, and was formalized in 1984. In December 1983, Chaput visited, together with his team of project managers, the opening of the exhibition *Electra* at the Musée d'Art Moderne de la Ville de Paris. Many of the contemporary artists who showed work in *Les Immatériaux* had previously contributed to *Electra*, but this exhibition's art-historical approach to the impact of electricity on 20th-century art, curated by Frank Popper, made it a countermodel—both to the exhibition that Chaput conceived prior to June 1983, and to the one he then went on to curate with Lyotard (Popper 1983). For a retrospective comparison of *Electra* and *Les Immatériaux*, see Popper (1988).
- 52 See CPA 1994033W226_002, 80–87, and CPA 1994033W237_015. See the various notes and materials in archive box CPA 1994033W226_004, collected by Sabine Vigoureux during conversations with Alain Domingo and François Scali of NEMO (10 March 1983); M. Plisson of Thomson (29 March 1983); Gaetano Pesce (26 April 1983); H. Bodenez of Gerland/Gerflex (26 April 1983); Patrick Rubin and Daniel Rubin, of CANAL (3 May 1983); M. Orlando of Tollens (6 May 1983); M. Gaudineau of Gauthier (6 May 1983); J. F. Bentz of Sopha architecture and design agency (11 May 1983); Siméon Colin and René Ashe, Arts décoratifs (“jeudi 24”); M. Manger of Brandt (about “cuisine”) (27 May 1983); Philippe Starck (28 May 1983); M. Trouis of LITA (1 June 1983); Denys Santachiara (3 June 1983); M. Lopelo, at Havas, (about “le non-meuble”) (27 June 1983), and a “soirée, défilé de mode” (20 March [1983]). Chaput writes in June 1983 that on the topic of fashion, a contact has been established with the artist and textile designer Elisabeth de Senneville (see CPA 1994033W233_008, 14).

conceptual text and an explanation of each exhibit, together with information on the form of presentation and respective collaborating partners.⁵³

The proposal had some obvious flaws. The distribution of exhibits across the different chapters is very uneven and some chapters are much more elaborate than others. As an extreme example, no suggestions were made for the section on living materials, *matériaux vivants*. There is also a striking number of projects associated with the University Paris VIII, making parts of the envisaged show look like a showcase of its Centre Art et Technologie. And the classification proposed by the different chapters is logically inconsistent, at times foregrounding a scientific or artistic discipline, and at others a technoscientific concept, or a certain type of object.

It is also noticeable that there is little development conceptually between the document issued in June 1982 and this April 1983 version. The latter only offers a larger number of topical fields and translates the diverse and sometimes tentative ideas on the status of the emerging “immaterial materials” into specific, more or less “advanced” technoscientific exhibits. In fact, when compared with *La matière dans tous ses états*, the 1982 document gives the impression of a greater freedom of conceptual thinking. The translation of these ideas into concrete proposals appears to have curtailed the complexity of thinking, making *La matière* more straightforward and pragmatic, and strengthening the technocultural aspects over a more general approach to the emergent immaterialization.

The Crisis of Spring 1983

The proposal of *La matière dans tous ses états* was met with strong skepticism from Jean Maheu, the president of the Centre Pompidou, and he seems to have made it clear in May 1983 that the exhibition project would not go ahead under the given premises.⁵⁴ The exact reasons for this skepticism are not documented, but one can imagine how the described concept would not have convinced Maheu and the council of directors that this could become an inter-departmental flagship exhibition for the Centre Pompidou.

With its focus on technical and material innovation, on computers and screens, Chaput's 1983 proposal—despite its underlying diagnosis of the relevance of new materials—shifted the envisioned experience rather far in the direction of an emergent technoculture, detaching it from the ways in which new materials were impacting everyday aspects of culture and society. Moreover, rather than selecting specific projects, the organizational strategy was to work with partners who would bring in a bulk of projects at a

53 See CPA 1994033W232_001.

54 See Blanquart's letter to Maheu, April/May 1983, CPA 1994033W669_054.

time, packages which would fill the exhibition. This made the overall project vulnerable to the idiosyncrasies of collaborators and potentially weakened or drained the exhibition's conceptual core.⁵⁵

After meetings with the BPI and IRCAM on 4 May 1983, Blanquart and Maheu decided on 10 May to try to find an external curator who would be able to provide a stronger conceptual framework for the project. In a letter dated 25 May, Blanquart contacted Jean-François Lyotard, who responded favorably and made himself available for initial meetings with Blanquart and Chaput at the beginning of June.

It is not clear who proposed asking Jean-François Lyotard to join the project. But there was more than one reason his name would have been suggested in conversations at the Centre Pompidou that spring. Chaput had been in conversation with the filmmakers Claudine Eizykman and Guy Fihman since 1982, and the couple had been first students, then close collaborators and friends of Lyotard since the mid-1960s. Also, through Chaput's contact with the artist and teacher Jean-Louis Boissier, there was a continuous relation with the University of Paris VIII where Lyotard had been teaching since 1970. And Lyotard's book *The Postmodern Condition* (1984) had made him internationally known as a philosopher who was thinking about the societal impact of the new technologies. It is therefore likely that Lyotard's name would have been mentioned not only once, but several times, and by several different people, before Blanquart picked up the phone to call him.

In chapter 1, we learned how the work of Lyotard, Chaput, and the CCI team picked up from here. The retrospective question of the relationship between the project laid out in *La matière dans tous ses états* and the actual exhibition, *Les Immatériaux*, is complex and can be asked in two directions—namely, on the one hand, which aspects of the projects and exhibits proposed in 1983 would make it into the final exhibition? And on the other hand, how much of *Les Immatériaux* is already projected in *La matière dans tous ses états*?

At the beginning of May 1983, Chaput and his team were at a dead end. The sparse notes that Sabine Vigoureux took during a team meeting on 6 May 1983, presumably slated for a discussion of the exhibition scenography, symbolize the lack of inspiration that must have stymied the group at that moment. Even though they continued their research and preparatory meetings, the prospect of an imminent cancellation of the project, after one and a half years of work, must have been daunting.⁵⁶ But the hectic activities of these weeks also indicate how unformed the plans had become

55 In fact, the meeting notes in CPA 1994033W226_004 document that the companies and institutions were routinely asked how an exhibition at the CCI could be interesting for them, and what they themselves would propose to show there.

56 See CPA 1994033W232_002. See also the appointments registered in the *Chronology* and Sabine Vigoureux's list of possible exhibits (*objets*), derived from various

and how little conceptual structure there was. The somewhat excessive research activities appear to have confused rather than clarified and sharpened the project for the team. What Chaput, Vigoureux, and the others were researching would soon, with the arrival of Lyotard, be placed into a totally different matrix where the individual items took on a new spin, and at times a different meaning. In this new conceptual framework, they could become the basis of sites like *Corps éclaté* (Exploded body), *Matériau dématérialisé* (Dematerialized material), *Toutes les peaux* (All kinds of skins), *Ration alimentaire* (Food ration), or *Habitacle* (Compartment).

Whereas the industry contacts established in 1982 with companies like ELF Aquitaine and MATRA would facilitate the production of the visual material for the site *Matériau dématérialisé*, in other cases the semantic transformation of preliminary ideas into exhibits was more drastic. Vigoureux's conversations with design advisor Rozensztroch about different types of paint with various properties and purposes, found a diffracted echo in the exhibition sites of *Lumière dérobée* ("Stolen light"; about the avant-garde concept of painting the phenomenon of light) and *Peintre sans corps* ("Bodiless painter"; as a demonstration of photosensitive paint which enabled the photomechanical reproduction of paintings). And of the conversations about new types of household gadgets and "intelligent kitchens," only the scenographically sparse displays of *Ration alimentaire* and *Précuisiné-Préparlé* remained.⁵⁷

Lyotard's Perspective on the Preparatory Work and Concepts

None of this, however, was decided yet when Lyotard began his conversations with the team at the CCI in June 1983 and was introduced to their previous research. There was no "zero hour" from which everything would have started anew. But in the summer of 1983, everything was rethought and put up for disposal—from the conceptual foundations to concrete objects.

One of the first initiatives that Lyotard took was to re-establish the collaboration with the other departments of the Centre Pompidou, which not only changed the institutional character of the project, but also toned down the technoscientific innovation and the design-oriented agenda of the previous proposals. This shift resulted in a striking number of nontechnical exhibits which, combined with the futuristic feel of the exhibition's scenography, certainly contributed to the uncanniness of *Les Immatériaux*. Here was a

meetings with designers and other people she met during these spring months (CPA 1994033W226_003_a, and CPA 1994033W226_004).

57 Perhaps even the prevalent formulation "All kinds of..." used for several site titles (*Toutes les copies*, *Toutes les peaux*, *Tous les bruits*, *Tous les auteurs*), was derived from Chaput's working title for the exhibition, "La matière dans tous ses états."

“futuristic” scenario that prioritized the banalities of postmodern food, clothes, and media over high-tech innovations and technological utopias.

This shift away from the programmatic focus of the CCI was a deliberate move that Chaput could not have taken without Lyotard. The exhibitions of the CCI in 1983, like Guidot’s *Architecture et industrie* and *Eureka 83*, were distinctly “modernist” in their approach to the raw materials used in architecture and design. *Eureka 83* was conceived around a collection of patents held by French companies and affirmed the Ministère de l’Industrie’s agenda for promoting French innovation and production. Guidot’s exhibition a few years earlier, *Matériau, technologie, forme* (1974), was a study of materials, objects, tools, and apparatuses, all from a historical and modernist perspective (Briand-Le Bot et al., 1974). These shows represented what Lyotard did not want for *Les Immatériaux*. Chaput’s exhibition proposal of April 1983 had been unable to free itself from such a modernist perspective, even though the concept drafted a year earlier, in June 1982, had indicated the potential of taking the project elsewhere.

It became a principle of Lyotard’s involvement that he would not so much decide and censor certain proposals, but that his task was one of framing and interpreting the exhibits. Therefore, some of the projects by artists associated with the University Paris VIII were continued for the sites *Toutes les copies* (“All kinds of copies”; Liliane Terrier), *Images calculées* (“Calculated images”; Edmond Couchot), and *Visites simulées* (“Simulated visits”; Jean-Louis Boissier), but the conceptual fitting was adapted to Lyotard’s broader notion of the “im-materials.”⁵⁸ Lyotard also supported the existent idea of a “theatrical” beginning for the exhibition, even though the original plan of an animated, scenographic image to be realized by the Taller Amsterdam theatre group was eventually abandoned in favor of the dioramas of the *Théâtre du non-corps* (Theatre of the non-body).

From the beginning of his involvement, we thus see Lyotard not as an authorial manager and executioner of his own curatorial ideas, but as someone who enters into a dialogue with others, whether it is Thierry Chaput for the exhibition as a whole, or Bernard Blistène for the visual arts sites, or Alain Guiheux for the architecture sites, or Dolorès Rogozinski for the texts of the soundtrack.

Lyotard’s own initial conceptual sketch, *Esquisse*, comes across—in its style, topics, and structure—as a response to the two earlier concepts, Guidot’s draft in August 1981 and Chaput’s concept of June 1982. In his response, Lyotard critically acknowledged the research framework and the specific

58 By the same token, a sociologically oriented research project about “new images,” already commissioned from the media consultants Xavier Thibert and Laurent Charreyron, was abandoned; see CPA 1994033W229_001.

projects which Chaput and his team had collected in *La matière dans tous ses états* and which they presented to Lyotard in their first joint working sessions at the CCI, in June through August 1983.⁵⁹ But in the *Esquisse*, Lyotard clearly sought to steer clear of the sociological agenda of the CCI and of “the technoscientific aspect within the general framework of an STS [Science and Technology Studies] history.” Instead, he writes, “the conception will be philosophical” (1983, 2), by which he means that the matrix or framework which will structure the exhibition must be conceptual and must surpass functionalist and technological selection criteria.

Nevertheless, it is important to acknowledge that, in this dialogue with what Lyotard found when he arrived, it may have been Guidot's text that laid the foundations for what would become the *Mât* system by means of which, starting in the *Esquisse*, Lyotard heuristically structured the exhibition. Guidot had written about the differences between *matériau*, *matériel*, and *matière*,⁶⁰ to which Lyotard added the terms *matrice* and *maternité*—an associative thread that did not feature in Chaput's proposals, but one that could easily be inferred from Guidot's text.

In this dialogical setting, Lyotard's conceptual framing of the exhibition project emanated from his critique of the key concepts of “the material,” “newness,” and “creation,” terms which were also mentioned in Blanquart's first letter of invitation in May 1983. Lyotard professedly wanted to question the project's foundational notions through the entire make-up of *Les Immatériaux*.⁶¹ Whereas Chaput's concept of April 1983 had only gestured toward these terms in the subtitle (“Manifestation ... sur le thème des matériaux nouveaux et de la création”), it was again Guidot's 1981 text which prominently and critically discussed the transformation of materiality, the factor of newness, and the role of creation and authorship. Guidot's text may therefore have constituted an important starting point for Lyotard's own approach to the challenge offered to him by the CCI.

However, it may have been Chaput's 1982 concept which gave Lyotard the idea for the title of the exhibition. It is not certain how he found this neologism, but one possible way to arrive there was to take Chaput's remark, “les matériaux ‘immatériels,’ sinon l'immatériel,” and transpose the singular “l'immatériel” into the plural form, “les immatériaux.” This shift was not trivial: what in Chaput's formulation remains an abstract and general concept, “the

59 In the interview with Daniel Soutif, conducted in 1985, Lyotard refers to the exhibition concept from which he started as “Matériaux nouveaux et création” (Lyotard 2024, 70); this is almost exactly the title of Guidot's 1981 text (“Création et matériaux nouveaux”).

60 CPA 1977001W049_001, 1, 3.

61 Lyotard's critique of this triad is first documented in the *Présentation* document of April 1984, and will from then on be employed by Lyotard regularly; see, for instance, the conversation with Bernard Blistène, early in 1985 (Lyotard 2024, 23–46).

immaterial" (singular), is conceived by Lyotard's phrase as a plurality of "immaterials," as actual things and varying states of matter. This plurality is already there in Chaput's formulation, "les matériaux 'immatériels,'" but these are still materials with a quality, rather than the new type of things that Lyotard denominated as "the immaterials." Chaput, in April 1983, still conceives of this new condition of matter as a dualistic *mélange*, a mix in which it is difficult to distinguish between "material" and "immaterial."⁶² It is the achievement of Lyotard's suggestion, "les immatériaux," to claim a state of matter that transcends this dualism.

The Committee of Scientific Advisors

An Update on Contemporary Scientific Knowledge

On 20 November 1983, while Jean-François Lyotard was still in the United States for his fall teaching assignment, his co-curator Thierry Chaput sent him a handwritten fax message reporting on the latest progress in preparations for an informational brochure that would announce the planned exhibition. Chaput also informed Lyotard about a meeting envisaged for 19 December, after his return to Paris, with some distinguished scientific advisors (“tous nos conseillers”).¹ This meeting would be the first in a sequence of six such encounters which took place in the course of the following six months. The invited scientists were the chemist and science theoretician Paul Caro, the astrophysicist Michel Cassé, the mathematician Pierre Rosenstiehl, the microbiologist Jean-Pierre Raynaud, and the computer scientist Mario Borillo.²

In an interview conducted a year later, shortly before the exhibition opening, Lyotard would explain that these consultations were carried out for the preparation of the exhibition “with a whole scientific committee with whom I tried to get myself up to date with the constituted body of knowledge” (2024,

- 1 CPA 1994033W667_009. The mentioned brochure would eventually be ready for distribution in April 1984. Lyotard’s teaching at the University of California in San Diego in the fall 1983 semester included courses on the notion of the sublime and on the French 19th-century historian Jules Michelet and appears not to have been related to the exhibition project (Bibl. Doucet, JFL 342/343, JFL 348).
- 2 Only Borillo was not mentioned in Chaput’s fax message of 20 November, which had announced the computer scientist Jean-Louis Laurière as a prospective participant; however, for unknown reasons, he never participated. Laurière (1945–2005) was a pioneer of artificial intelligence and expert systems, based at the Université Pierre-et-Marie-Curie in Paris until 1987.

36). The present status of knowledge across the human, social, and natural sciences had been the key question of a report that Lyotard had published in 1979, under the title of *La condition postmoderne* (*The Postmodern Condition*, English edition, 1984). The claim formulated there of the end of the modernist “grand narratives” of enlightenment and emancipation sparked an international debate about the pertinence of the hypothesis of the “postmodern condition” Lyotard had diagnosed.³

This influential text was one of the reasons Lyotard was invited by the Centre Pompidou to help conceptualize and curate the exhibition that would open as *Les Immatériaux* in the spring of 1985. The question of knowledge thus formed part of the foundation of the project that Lyotard and Chaput ventured into in the summer of 1983, and it accorded the discussions with the scientific advisors a particularly important position in the complex of preparatory measures conducted throughout 1984. In fact, these meetings confirmed for Lyotard what had only been a suspicion in 1979. In the interview passage quoted earlier, he added: “what strikes me [on the question of] the constituted body of knowledge, [is that] it turns out that there actually is no constituted body of knowledge” (2024, 36). Instead, Lyotard took from those discussions the impression that contemporary scientists were consciously and self-critically dealing with the various degrees of uncertainty and non-knowledge, through elaborate methodologies of experimentation, speculation, and fabulation.

Besides such theoretical insights, the work with the advisors led to a series of concrete proposals of exhibits, many of which were realized in the exhibition. Of the 60 exhibition sites in *Les Immatériaux*, around 13 sites—that is, more than a fifth—can be more or less directly connected to conversations with the scientific advisors or proposals they made. We will review these sites in greater detail after taking a more general look at the proceedings of the scientific committee.⁴

3 For an example of the ensuing discussion, see Docherty (1993).

4 The main archival sources for the following analysis are the minutes of the meetings of the advisory committee, as well as the archived proposals that the scientists drafted in preparation for the meetings. Additional information is taken from the *Inventaire* exhibition catalogue, which gives indications of how the respective sites were realized, and from handwritten notes taken by the project managers on Chaput’s team, especially Martine Moinot and Sabine Vigoureux.

The Meetings of the Scientific Committee and their Participants

The six meetings with the scientific advisors took place on a monthly rhythm, from December 1983 to May 1984.⁵ The five protagonists—Mario Borillo (1934–2013), Paul Caro (1934–2016), Michel Cassé (born 1943), Jean-Pierre Raynaud (dates unknown), and Pierre Rosenstiehl (1933–2020)—were all men aged between 40 and 50. They worked at Paris-based academic and research institutions and were all known not only for engaging in their scientific specializations but also holding an interest in the theory of science and the role of science in society. They actively engaged in the committee’s proceedings during the first half of 1984—if to varying degrees, as we shall see shortly—and they also joined the collaborative writing experiment of *Épreuves d’écriture* that Chaput, Lyotard, and their team conducted during the autumn months of 1984, making these scientists co-authors of the conceptual volume in the three-part exhibition catalogue.⁶

The committee meetings were joined not only by Lyotard and Chaput, but also by their team of project managers (Martine Moinot, Catherine Testanière, Nicole Toutcheff, and Sabine Vigoureux), the catalogue editor Chantal Noël, and audiovisual producer Martine Castro, the number of participants growing from nine in the December meeting to 13 in May. According to the minutes, the contributions came predominantly from Lyotard and the scientists, putting the team members in the position of listeners who were learning, like Lyotard, about the epistemological context within which the *Immatériaux* project was taking shape.

At the beginning of the first meeting, Lyotard formulated the dual assignment for the scientific dimension of the exhibition, and thus also for the work of the scientific committee. He called the planned exhibition, first,

a site of confrontation where properly scientific *dispositifs* rub shoulders with others, technological, artistic, etc.

and second,

5 The meetings took place on 19 December 1983, 24 January 1984, 24 February, 20 March, 24 April, and 14 May. Whether another meeting took place on 19 July 1984 could not be ascertained. There are minutes for all of the other meetings. The minutes of the meeting on 24 January were not preserved in the archive, but were published in the *Album*, 13–14 (as were the minutes of the meeting on 24 February 1984, *Album*, 28–29). In contrast, there is so far no evidence of the meeting on 19 July, other than the announcement in the minutes of the 14 May meeting, and an entry in Moinot’s calendar (“conseil scientifique”). Given the circumstances, it may well be that this final meeting was canceled.

6 Only Jean-Pierre Raynaud did not participate in the *Épreuves* project. See chapter 4.

a site of anamnesis where science would compare itself to itself in order to underline the evolution of fundamental concepts, of the nature of hypotheses, of the use of devices, and thus to highlight the change of paradigms.⁷

We already see at this early stage of the conceptual exploration the two sides of the approach taken by Lyotard and Chaput throughout the exhibition: on the one hand, a more affirmative approach that seeks to expose and confront recent technical, scientific, and artistic phenomena, and on the other hand an approach that is reflective and critical, even confrontational.

The following two meetings served the joint orientation in the broad discursive field that Lyotard hoped to address, moving from a general discussion in January of possible topics and keywords that were of concern in the different scientific disciplines, to the scientists' presentation of initial proposals for exhibits, put forward four weeks later at the February meeting.⁸

The meeting of the scientific advisory committee on 20 March 1984 stands out—as far as one can tell from the summary in the minutes—in that it combined theoretical considerations with a debate about how to translate these into exhibition sites that would make the sometimes elusive idea of the theory of science understandable for a lay audience. The subsequent meetings in April and May were primarily dedicated to the state of planning of the overall exhibition and to discussions of practical matters regarding the realization of the proposed sites, which were then pursued further in individual meetings with the advisors.⁹

Yet, it seems the scientific committee accomplished its mission most comprehensively at the meeting on 20 March, by bringing together different scientific and methodological perspectives in an interdisciplinary dialogue with the aim of configuring contributions to a public exhibition. Sparked by a review of site proposals submitted by Caro and Cassé, a discussion of different conceptions of time ensued, an episode that pinpointed the interdisciplinary momentum of this conversation between scientists and philosopher.¹⁰ Similarly, and immediately following this discussion on time, the astrophysicist Cassé

7 CPA 1994033W666_001, 2.

8 At the end of the December meeting, Lyotard requested that the scientists formulate for the next meeting 10 keywords or phrases that they regarded as important starting points (CPA 1994033W666_001, 3). See the lists of keywords and preparatory notes by Borillo (dated 20 January 1984, CPA 1994033W666_008), Caro (n.d., CPA 1994033W666_006), Cassé (dated 23 January 1984, CPA 1994033W666_005), and Raynaud (dated 23 January 1984, CPA 1994033W666_007), and the report made on 24 February about the proposals, CPA 1994033W666_002.

9 See the minutes of the meeting on 24 April, CPA 1994033W666_012, and 14 May, CPA 1994033W666_013; see also Sabine Vigoureux's handwritten notes, CPA 1994033W232_002_f.

10 See CPA 1994033W666_009, 3.

introduced a proposal for a site which would deal with the magnetic field of stars and the forces of matter and anti-matter, upon which the microbiologist Raynaud made the observation “that a parallel could be made with the NMR [nuclear magnetic resonance] imaging of the cellular space. From the core of the star to the core of the cell, visual implementation of the excitation of magnetic fields of matter.”¹¹ Such a juxtaposition of macro and micro phenomena highlighted the common epistemological framework within which contemporary sciences were operating, emphasizing relational forces and energy flows over particularities of material or scale.

Only a few moments later, the conversation moved to the theme of visibility and invisibility, first introduced by Michel Cassé, who spoke about how knowledge is determined by perception, and how a technically assisted and augmented scientific gaze broadens the range of what could be perceived and known. The minutes report that “Lyotard thinks ... that [such a site] can be interesting as a concrete illustration of a site of the capture of the message.”¹² Lyotard here translated the scientific question of knowledge and visibility into the field of communication theory which was so crucial for the epistemology of *Les Immatériaux*: namely, that the only messages that enter the field of sensing and reasoning are those that have legible codes and that can be registered within a matrix of knowledge. By technical means, the range of such registration and legibility can be extended beyond the boundaries of a given perceptual apparatus.

Lyotard contests such positivist thinking throughout his philosophical writings, emphasizing sensation as that which is unrepresentable. But it must have been in moments like these that conversations with the scientific advisors were most fruitful for Lyotard and Chaput, because they manifested how theory, science, technology, and art were conceptually entangled, and how this entanglement could be articulated—or at least gestured toward—in the presentation of specific phenomena and items in the exhibition.

The scientific committee did not convene again after the summer 1984, but there were other occasions where the intellectual exchange continued during the following months. The first was a conference on the societal challenges of computerization, organized at the Centre Pompidou by the Centre d’Information et d’Initiative sur l’Informatisation and a group of editors of the journal *Terminal 19/84*. The conference took its cue from George Orwell’s novel *1984* and ran under the title *1984 et les présents de l’univers informationnel* (1984 and the presents of the computational universe); the proceedings were later published as Weissberg (1985). The participants mostly came from sociological and informatics contexts, but they also included Lyotard, the computer

11 CPA 1994033W666_009, 3.

12 CPA 1994033W666_009, 3.

scientist Mario Borillo, the philosopher of cybernetics Pierre Lévy, the artist and theoretician Edmond Couchot, media economist Marc Guillaume, and the philosopher Michel Tibon-Cornillot who studied the epistemological impact of biogenetics and who became an important advisor to Lyotard and Chaput in the second half of 1984.

Immediately after this conference, the active phase of the online writing experiment, *Épreuves d'écriture* (1985), began. In addition to the mentioned scientific advisors, many other theorists, artists, and scientists contributed, including Marc Guillaume, Michel Tibon-Cornillot, Bruno Latour, and Isabelle Stengers. The definitions, commentaries, and responses that the 26 authors gave on such keywords as *code*, *interaction*, *metamorphosis*, *nature*, *simulation*, etc., were hugely diverse and rarely turned into a real dialogue. But sometimes the contributions appeared to be continuations of exchanges in the scientific committee, for instance when Michel Cassé wrote about the articulation of time and light in astrophysics,¹³ or about material transformations in the cosmos—adding the remark that human visual perception and the physiology of the human eye were shaped by the light of the stars.¹⁴ Similarly, Paul Caro's comments on mathematical permutations and optical mirrors continued arguments he had made in the spring meetings.¹⁵ And Tibon-Cornillot's pieces about genetic code and his critical discussion of anthropocentrism and the threat of annihilation of both the human species and the biosphere were no doubt in tune with what he talked about during the meetings with the curatorial team at the Centre de Création Industrielle (CCI) during the autumn.¹⁶

The interdisciplinary discourse in preparation of *Les Immatériaux* was further extended in a book publication that was ready for the exhibition opening in March 1985, *Modernes, et après?* (Théofilakis 1985). Lyotard and Chaput met the editor, Élie Théofilakis, on several occasions during the second half of 1984, seeking to align the book's content with the main themes of the exhibition. Besides interviews with Lyotard, the CCI team, and scenographer Philippe Délis, the book also contains essays by Michel Cassé, Paul Caro, and Mario Borillo, an essay about Jean-Pierre Raynaud, and texts by various other advisors, including Jean-Louis Boissier and Edmond Couchot on electronic images and interactivity, Hubert Astier on intellectual property, Marie-Ange

13 *Épreuves* (1985), 119–122 (CASS. 072, 10 NOV.). Note: For citations from *Épreuves d'écriture* (1985), I include the code from the print publication, indicating the first four letters of the author name, the sequence number, and the date on which the submission was logged in the system.

14 *Épreuves* (1985), 146–148 (CASS. 069, 8 NOV.).

15 *Épreuves* (1985), 160–162 (CARO. 046, 26 OCT.). Caro's comments on permutations and mirrors appear to relate directly to the site *Indiscernables*. On mirrors, see also 164–165 (CARO. 054, 09 NOV.).

16 *Épreuves* (1985), "Code," 28–31 (TIBO. 186/187, 16. DEC.), and "Nature," 249–253 (TIBO. 15 DEC.).

Grenier on transsexuality, and Paul Virilio on the dematerialization of warfare.¹⁷

Site Proposals by Paul Caro

The contributions and proposals made by the various scientific advisors during the committee meetings differed significantly (fig. 21). Borillo, Caro, and Cassé participated in all six meetings, while Raynaud and Rosenstiehl missed several of them. In the minutes, too, the names of Caro and Cassé are mentioned rather frequently, while the others appear to have engaged in the discussions much less. While we have only vague hints at the concrete suggestions Borillo and Rosenstiehl made, and some general keywords suggested by Raynaud, the proposals by Caro and Cassé were discussed at length during several meetings.¹⁸ In fact, Paul Caro was the only one to prepare typed documents for four of the six meetings, offering both conceptual considerations and scenographic ideas. Caro thus flagged a heightened interest and pressed for discussions of his suggestions and their technical realization.

We will first turn to Caro's proposals, not least because they offer further insights into how the suggestions were taken up by the curatorial team and then developed into concrete plans for specific exhibition sites. These more general findings will then be complemented with regard to the proposals made by the other scientific advisors.

Paul Caro studied chemistry and became a specialist in rare earth elements in the 1950s (Caro 1964, 2002). He went on to research, first in the United States and later back in France, the chemical and physical properties of rare

- 17 See in Théofilakis (1985): Michel Cassé, "Cosmos et cosmétique: l'univers comme ordre et parure" (58–67); Paul Caro, "Science Fiction" (112–120); Mario Borillo, "Au sein des sciences de l'homme et de la société, l'informatique..." (130–137). About Jean-Pierre Raynaud, see Monchicourt and Baud (1985, 214–222). A public book presentation took place on 15 April 1985 in the form of a *revue parlée* event, with Théofilakis and Lyotard as well as the authors J.-J. Beneix, P. Caro, M. Cassé, E. Couchot, C. Descamps, P.-A. Jaffrenou, M.-O. Monchicourt, M. Naillon, J.-P. Raynaud, and P. Virilio (audio recording in the Centre Pompidou audiovisual archives at RP_Apres_modernite_15-04-1985_M5050_DDC_R8534_E). After the opening of the exhibition, this discourse continued in the context of the series of seminars organized by Christian Descamps (*Architecture, Science, Philosophie*) in April 1985, and in interviews made in June 1985 with Lyotard, Cassé, Tibon-Cornillot, and others for the film about the exhibition, *Octave au pays des Immatériaux* (1985). On the broader context of public debates at the Centre Pompidou during the 1970s and 1980s, see Benveniste and Roman (1990).
- 18 This imbalance is partly an effect of the uneven archival situation; for instance, there are additional handwritten notes by Vigoureux about a separate meeting with Cassé on 19 April 1984 (CPA 1994033W232_002_b), but none about a similar meeting with Raynaud, presumably on 5 March, where proposals for several sites and additional advisors appear to have been made (see below). The uneven coverage in the minutes could, at least in theory, also be based on a certain bias on the part of the minute takers.



[Figure 22] Site *Indiscernables* (Indiscernibles), surgeon's and policeman's uniforms. In the background, far left, mirror reflection of profile map in *Surface introuvable* (Elusive surface), and far right, mirror reflection of *dérouleur* (loop projector) scrolling text projection. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0278]

earth elements using a broad range of experimental tools, including electron microscopy, high-resolution spectrography, and theoretical methods derived from quantum atomic spectroscopy. In addition to this interest in scientific instruments and methods, Caro developed an expertise in science education, which later led him to participate in research and communication activities of the European Community, as well as to serve as an advisor for the science center of the Cité des Sciences et de l'Industrie at La Villette in Paris.¹⁹

The proposals that Paul Caro made for *Les Immatériaux* were all intended to illustrate a number of basic principles of physics and mathematics that articulated the epistemological shift implied in Lyotard's concept of the "im-materials."²⁰ Several of these proposals were first put forward in the form of a conceptual sketch for the February meeting, and then refined in the documents which Caro prepared for the subsequent sessions. Thus, the first proposal for what would eventually become the site *Indiscernables*

19 Caro's first question, at the first meeting of the scientific advisory board in December 1983, was about how the audience would be addressed; he suggested that the visitors should not feel manipulated (CPA 1994033W666_001, 2).

20 See Caro's introduction to the set of proposals submitted on 20 March 1984, CPA 1994033W666_010, 1. The other two key documents are his proposals of 24 February (CPA 1994033W666_003) and 24 April (CPA 1994033W666_013).

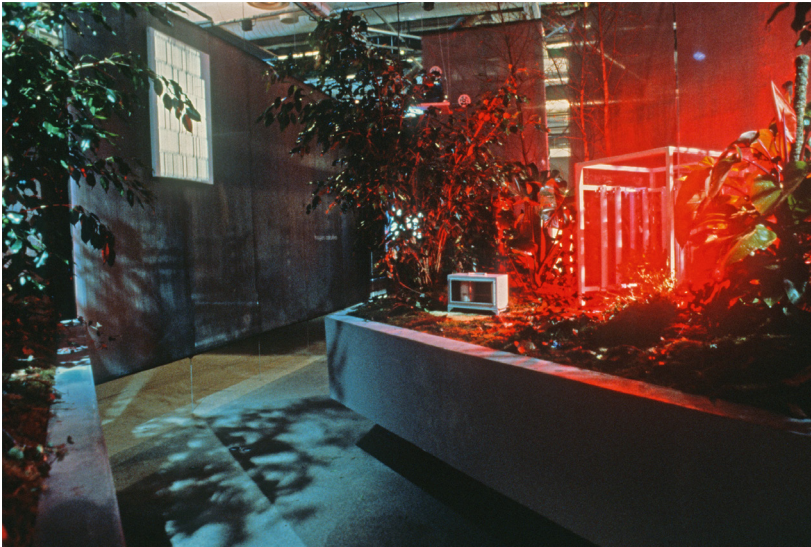
(Indiscernibles) was formulated in February as a short explication of the mathematical principle of permutation, under the title of *Les permutations*. Then for the March meeting, a revision of this explanation was supplemented by a total of seven suggestions for alternative ways to represent the principle in the exhibition, one of which included the suggestion of working with various uniforms of police officers, nurses, and other professions. This idea would get taken up and developed for the site in which, a year later, the outfits of a police officer, a surgeon, and a chef were suspended in adjacent niches formed by large mirrors, with overhead spotlights that were switched on and off, to indicate changing constellations (permutations) between the three social actors (fig. 22).

A similar path led to the conception of the site *Jeu d'échecs* (Chess game), a room-size installation with a large checkerboard floor on which the visitors could move around, being illuminated and thus "made visible" whenever their position coincided with the position of a figure in a virtual game of chess played by a chess computer which controlled the switching of the overhead spotlights (fig. 23). In February, Caro proposed that one of the sites should deal with "the mathematical matrix" (*la matrice mathématique*), and in March he refined this, in a text entitled *La matrice*, into an idea coming close to what would become the eventual realization of *Jeu d'échecs*. During the committee discussion, Borillo demurred that the rules of chess might be too complicated and that the procedural model should rather be that of the game of draughts (*jeu de dames*)—an intervention which led to the site being called "*jeu de dames*" in the comprehensive overview document that Chaput and Lyotard prepared for the Centre Pompidou president in April 1984. In Caro's explanatory document prepared for the meeting on 24 April, however, he insistently calls it *Site de "l'échiquier,"* a formulation that would be modified to *Jeu d'échecs* later in the preparation process.

Another proposal by Caro stands out for the elaborate production it elicited; this proposal led to the site called as *Irreprésentable* (Unrepresentable) (fig. 24). It consisted of a small forest of plants, placed in a large tub and representing the complexity of a natural living system. Positioned within this environment was an apparatus in the form of an open structure just under a cubic meter in size, with specific red neon lights turned toward its interior. Here a potted plant was thus growing under optimal light conditions that differed from the light in the rest of the exhibition environment. This "phytotron," an engine of plant growth, was complemented with a hydrometer taking measurements, and a text display about the complexity of systems that cannot be represented or explained within the limited dimensions available to human comprehension. This latter argument had first been put forward by Paul Caro in February under the heading of "complexity" (*La complexité*), which by April took on a more refined conceptual framing, pinpointing what



[Figure 23] Visitors in the site *Jeu d'échecs* (Chess game). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0425]



[Figure 24] Site *Irreprésentable* (Unrepresentable) with *dérouleur* (loop projector) scrolling text projection (left) and *phytotron* plant growth device (right). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0333]

cannot be represented adequately as “irrepresentables (ou complexité, ou dimensionnalité).”

An archival dossier of 15 pages, collected by project manager Martine Moinot, holds the documents and notes related to the realization of this site. These documents show how Moinot, in the period from June 1984 until January 1985, gradually put together the elements that would make up the installation.²¹ There are lists of names and phone numbers which were presumably assembled in meetings with Caro and others, indicating a trail of conversations and references from one contact person to another. On a page dated at the end of August, the name Pavlides appears; this would be Dimitri Pavlides, a researcher working for the national research institute CNRS at the Phytotron in Gif-sur-Yvette, who provided crucial information on how to construct the phytotron for the exhibition. In a letter sent to Moinot at the beginning of November, Pavlides gave a technical description, including a drawing with precise measurements, which Moinot could pass on to the exhibition architect and the technical service of the Centre Pompidou. The dossier also contains a letter by Pavlides’ superior, dated in January 1985, instructing Chaput and Moinot where and at what price to buy the materials required both to fill the planting tub and to keep the plants alive during the exhibition period.²²

The case of *Irreprésentable* shows how the conceptualization of a particular exhibition site resulted from research trajectories about which Lyotard and Chaput would have been informed by Caro and Moinot, without the curators taking decisions at every step. Rather, the research ran its course and received its impulses from a variety of actors, only some of whom would later be credited by name. For reasons that we can only speculate about, Pavlides, in his letter to Moinot, explicitly specified that he did not want to be mentioned as the author of the “simulator”; he wanted the device to be presented “without mentioning the origin” of the design (“sans indication d’origine, s.v.p.”).

In the exhibition, five of the seven sites proposed by Caro were clustered together in a central area of the gallery: *Surface introuvable* (Elusive surface), *Indiscernables*, *Matricule* (Registration), *Variables cachées* (Hidden variables), and *Irreprésentable*, whereas his other two sites, *Petits invisibles* (Little invisibles) and *Espace réciproque* (Reciprocal space), were presented elsewhere

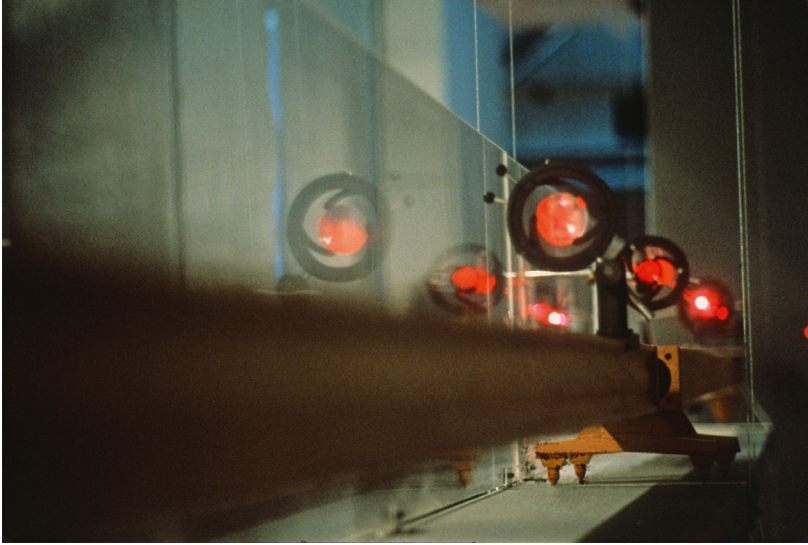
21 See CPA 1994033W223_023.

22 For the Phytotron in Gif-sur-Yvette, see the film documentation *Le Phytotron* (1969). The Argentinian biologist and cyberneticist Luis Bénédict constructed an artificial habitat for bees in the 1960s which he presented first under the title of *Biotron* (1970), and then as *Phytotron*, at the Museum of Modern Art, New York, in 1972, and at the contemporary art center CAYC in Buenos Aires, in 1973–1975. (I’m grateful to Lena Trüper for pointing out this historical precedent of which, possibly, neither Caro nor Pavlides were aware. An analysis of Caro’s relation with cybernetics, both in his scientific work and in the proposals he made for *Les Immatériaux*, is pending.)

in the show. Two of the clustered set, *Variables cachées* (whose first version was introduced in February as “a psychological experiment,” *Une expérience psychologique*) and *Matricule* (first conceptualized with respect to the mathematical principle of partitions, *Les Partitions*, and then running under the working title of *Jackpot* for several months), explicated the dialectics between individual and society, between numbers that identify (*Matricule*) and numbers that become meaningful as part of large statistical data sets (*Variables cachées*).²³

Caro brought three new proposals for sites to the meeting on 24 April 1984, namely for the sites that would become *Petits invisibles*, *Espace réciproque*, and *Surface introuvable*.²⁴ Caro made these proposals after several discussions of the advisory committee, and after weeks of reflection, which indicates either that these are ideas that only came to him later or that they emerged more directly from the committee proceedings in the previous months.²⁵ The proposal for *Espace réciproque* (initially called “La Transformation”) was based on the phenomenon of the Fourier transform, which can serve to show the internal atomic structure of a material by means of a laser (fig. 25). The presentation of this site in the exhibition is badly documented and appears to have been rather enigmatic. In contrast, Caro’s suggestion for *Surface introuvable*—first entitled “La Surface (support du message)” —led to one of the clearest renditions in the entire show of the concept of the “im-materials” as a general state of uncertainty that affected the visitors in their encounters with materials and things in the everyday world. A standard map of France was displayed next to a sheet of paper of the same size, juxtaposed with a relief map of the same French metropolitan territory on one side, and with several microscopic photographs showing unusually detailed aspects of the same paper material on the other (fig. 9). The site illustrated that a “surface” could not be taken for granted and that the perception of a certain material depends crucially on the scale at which it is observed.

- 23 Admittedly, Caro’s proposals didn’t always succeed at elucidating such theoretical principles. In a scathing critique of the exhibition (in *Le Monde*, 2 April 1985), critic Michel Cournot summarized that one need only look at the exhausted and confused visitors leaving the Centre Pompidou after failing in their attempt to navigate from “the elusive to the indiscernible, from the dematerialized to the irrepresentable.” Three of these four incriminated sites had been suggested by Caro.
- 24 See CPA 1994033W666_013, *Petits invisibles*, “Site de la ‘lumière,’” 5; *Espace réciproque*, “La Transformation,” 7; *Surface introuvable*, “La Surface,” 8.
- 25 The proposal for “Site de la ‘lumière’ / Toutes les couleurs / Petits invisibles” and the updated version of “Site de ‘l’échiquier’ / Jeu d’échec” are typed with a different typewriter than the one otherwise used by Caro, and both include unusually precise technical drawings, suggesting that Caro perhaps developed these versions with another person.



[Figure 25] Site *Espace réciproque* (Reciprocal space), laser installation for Fourier transform experiment. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0325]

These were ideas that had been aired during the committee meetings and were then turned into a concrete proposal. This was also the case for a site Caro initially called “Site of ‘Light’” (*Site de la “lumière”*), which was also discussed under the title of “All the Colors (or Little Invisibles)” (*Toutes les couleurs [ou petits invisibles]*), eventually presented as *Petits invisibles*. Caro’s proposal was based on an idea that Lyotard had put to Cassé in February, as part of a list of themes for which Lyotard requested proposals from Cassé. Cassé had first introduced the theme of visibility and invisibility to the conversation in February, but it was Caro who responded to Lyotard with a general observation,²⁶ and he developed the idea further during the meeting in March. According to the minutes: “Monsieur Caro, taking up the theme of the visual spectrum, proposes to present a piece that, according to the light which would illuminate it (wide or narrow monochromatic band), would allow [viewers] to see different things.”²⁷ Consequently, Caro brought a written concept for the site to the meeting in April and further elaborated on it at the next meeting, three weeks later: “in this site ... the visitor would experience different types of light (infrared, ultraviolet, white light), and therefore [different types] of perception.”²⁸

26 See CPA 1994033W666_002, 3.

27 CPA 1994033W666_009.

28 CPA 1994033W666_013, 3.

We recognize in Paul Caro a member of the scientific advisory committee who not only contributed his knowledge and theoretical reflections, but also actively engaged with the challenges and opportunities offered by the format of the public exhibition. He demonstrated an attitude that pushed his own fields of expertise forward, but that also integrated other ideas and thus fueled the overall project.²⁹

Michel Cassé

Like Paul Caro, who actively participated in the proceedings of the advisory committee and who can be regarded as the main author of seven exhibition sites, the astrophysicist Michel Cassé was similarly vocal during these meetings and was clearly discernible in the publications and archival documents as having had a decisive impact on the way Lyotard conceptualized the “im-materials.” Yet, of his various proposals, only the site *Creusets stellaires* (Stellar crucibles) was realized in the exhibition. The installation combined projected images of galaxies and stars with a text by Cassé that narrated the development of the universe since the Big Bang in the style of a myth of origin.

Other ideas for sites that Cassé put forward proved technically impossible to realize, or they did not get beyond the draft stage. His suggestion for a dual site called *Grands invisibles* that would have dealt with the visibility of the universe and of the Earth—both to be represented by live satellite images—formed part of the curatorial discussions throughout 1984 and defined important conceptual points of reference during this preparatory phase, even if it was not realized in the end.³⁰

Michel Cassé is a French astrophysicist with a particular interest in cosmic radiation, supernovae, and the origin and evolution of elements and stars in the universe. His books deal with the invisible, the void, and eternity. He worked at the Institute of Nuclear Energy, CEA, and the Institute of Astrophysics in Paris. In 1983, Cassé had contributed to the catalogue of an exhibition about space organized by the CCI at the Centre Pompidou, and in the same year he had published longer articles about astronomy in the popular science magazine *Ciel et Espace* and in the daily newspaper *Le Monde*.³¹

- 29 Another proposal that Caro put forward in February and extended in March, under the working title *La Commutativité (ou les Incommutables)*, was not realized; however, the proposed discourse on time and sequence formed part of a broader discussion of recurring themes and perhaps found an echo in sites like *Temps différé* and *Vite-habillé*.
- 30 The twin sites *Grands invisibles, soleil* and *Grands invisibles, terre* were mentioned in a summary document in April 1984. They also appear in a draft exhibition plan by the scenographer Philippe Délis in September (CPA 2009012W006), and an entry for *Grands invisibles* is present in Lyotard’s drafts for the catalogue texts, written in December 1984 (CPA 1994033W666_033). See also chapter 7.
- 31 The scientific concept of *Creusets stellaires* was developed by Cassé in cooperation with the astrophysicist Jean-Pierre Bibring. Both Bibring (1983) and Cassé (1983c) had

The minutes of the various meetings give an impression of how, again and again, Cassé effortlessly connected general scientific topics with the most visionary ideas about the birth of the universe and cosmic events on the grandest possible scale, in both space and time. During the February meeting of the scientific advisory committee, Lyotard gave Cassé a list of themes upon which to develop proposals for exhibition sites. At a moment when his fellow advisor Paul Caro was already making quite concrete suggestions, Cassé still needed to be nudged by Lyotard. Lyotard suggested that he conceptualize:

- a site about the visible (on the rapport between the human eye and the eye of astronomy);
- a site about observable matter, which is only a tiny part of the visible;³²
- a site about matter and code with regard to the theory of relativity and quantum theory;
- a site about the theory of the Big Bang as a narrative of origin and creation;
- a site about the notion of proof and how it relates to power and truth;
- a site about the life of stars and the propagation of cosmic materials.³³

This list probably shows, more than anything else, how inspiring Cassé's discourse was for Lyotard at that moment. In the February meeting, Cassé himself appears to have responded only to the last suggestion, which he commented on, according to the minutes, with a remark about the notion of a "sociology of stars," which he had been promoting for some time.

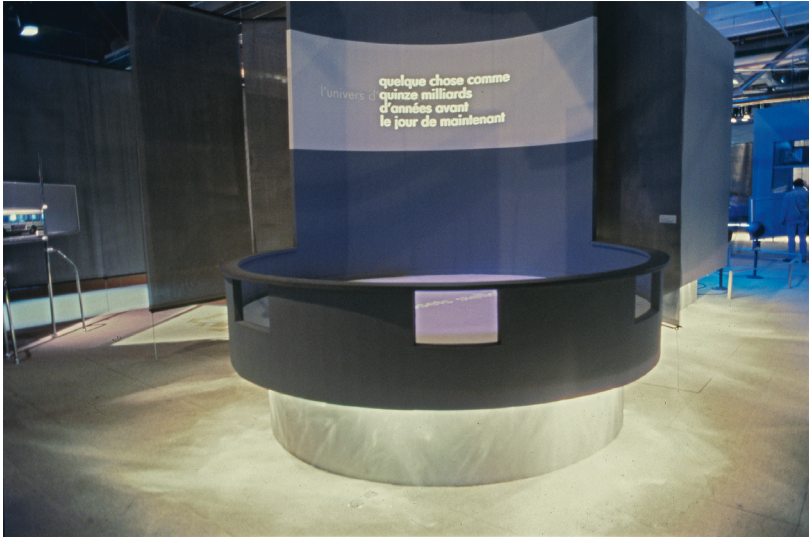
For the March meeting, Cassé brought back ideas for three sites, namely about the "discourses on origins," on the "astronomy of the invisible," and on the "life and work of the stars."³⁴ But it seems that in the following weeks neither Cassé nor Lyotard and Chaput and their team were able to translate these ideas into concrete, manageable proposals. The project of a live-transmission of satellite images for *Grands invisibles* proved technically and financially impossible, the plan of a film project about space-time and the deformation of space under the influence of matter was mentioned only in the May meeting, and the other two proposals Cassé made in March, which included ideas about the registration of visitors' emotions or presenting a piece of a star to illustrate the principles of matter and anti-matter—all of these proposals also stalled, leaving in the end only the audiovisual display

contributed texts to the exhibition catalogue Pigeat (1983). Excerpts of texts by Cassé about the void and about anti-matter were collected during the preparation of the *Immatériaux* exhibiton in a dossier, CPA 1994033W666_011, which included Cassé (1983a, 1983b, 2014), and Audouze, Carrière, and Cassé (1988).

32 This is where Caro jumped in and spoke about the differentiated visibility of colors and how certain phenomena could be made visible by new technologies; a related site dealing with the "color codes of an invisible world made perceivable" (CPA 1994033W666_002, 4), would be proposed by Caro in April and would eventually be realized as *Petits invisibles*.

33 CPA 1994033W666_002, 3–4.

34 CPA 1994033W666_009, 3.



[Figure 26] Site *Creusets stellaires* (Stellar crucibles), text projection. Site *Visites simulées* (left), *Labyrinthe du langage* (right). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0380]

and narrative of *Creusets stellaires* as Cassé's practical contribution to the exhibition (fig. 26).³⁵

Cassé's role was less that of a curatorial advisor than a source of inspiration for considering the themes of *Les Immatériaux* in a broad perspective. Cassé did not aim for pragmatic propositions, but rather enjoyed advancing adventurous speculations—for example, when, in the meeting on 24 April, Cassé asked: "how does one address the sky?"³⁶ In the interview conducted for the documentary film about *Les Immatériaux* in June 1985, Cassé speaks about the relation between matter, energy, and light in a narrative that he could very well also have told a year earlier. Cassé said that the stars shine because they decompose, because they are destroyed, consumed (Zajdermann/Soutif 1985, 26:50 min) (fig. 27). This understanding of light, not as a primarily visual phenomenon but as a transformative and material process, may well have influenced Lyotard's thinking about the place of light in the exhibition, as in the visual arts sites *Peinture luminescente* (Luminescent painting) and *Lumière dérobée* (Stolen light), which he was discussing with Bernard Blistène around the same time and in which light played such a prominent role. Cassé's

35 See Sabine Vigoureux's handwritten notes of a meeting with Cassé and the curatorial team on 19 April 1984 (CPA 1994033W232_002_b), and Cassé's intermediate report about the progress on his projects on 14 May (CPA 1994033W666_013, 2). The concept of the site was co-authored by Cassé with the astrophysicist Jean-Pierre Bibring.

36 Handwritten notes by Vigoureux, CPA 1994033W232_002_c.



[Figure 27] Michel Cassé, interviewed in the film by Paule Zajdermann and Daniel Soutif, *Octave au pays des Immatériaux* (1985): “Every atom of this hand has previously been composed by a star.” Filmstill (min. 26:34). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

influence on *Les Immatériaux* thus extended far beyond the site of *Creusets stellaires* and lay, more than anything, in his ability to articulate the cosmic dimension of the “im-materials.”

Mario Borillo

By comparison, the traces that the three other scientific advisors—Mario Borillo, Pierre Rosenstiehl, and Jean-Pierre Raynaud—left in the *Immatériaux* exhibition are less obvious than those of Caro and Cassé.

Mario Borillo was a computer scientist strongly interested in cognitive sciences and in the relation between informatics and the humanities; he was also a founding member of the Oulipo-associated group ALAMO dedicated to computer-based literature. Borillo appears to have made a proposal for only one site, in which a dialogue between visitors and a computer would have been enabled on one screen, while simultaneously a second screen would have visualized the data processing and calculations made by the computer to produce the answers.³⁷ On several occasions, Borillo had raised the question

37 See CPA 1994033W666_012, 2. See also Borillo (1984), a publication he references in a contribution to *Épreuves d'écriture*, 10 December 1984, 234–235 (submitted offline and published as an appendix); and Borillo (1985c).

of how far certain exhibits might be understandable for a general audience. This audience-centered approach may have motivated the proposal for an exhibit that would have augmented the visitors' encounter with an "intelligent" computer system by including a second screen that would have given them insight into the mathematical and computational basis of the human-computer dialogue.

Borillo made this proposal in April and reported during the May meeting that there were still uncertainties about the technical feasibility of the project.³⁸ It seems that the project was eventually abandoned. There are a number of projects in the exhibition that are related to Borillo's research themes of informatics and artificial intelligence—especially the *Préparlé* part of *Précuisiné-Préparlé* (Precooked-Prespoken) and *Logiques artificielles* (Artificial logics)—but there is no indication in the archive that Borillo had an active role in the preparation of these sites.

The other project of *Les Immatériaux* that Borillo participated in was the collaborative writing project, *Épreuves d'écriture* (1985), that served to produce the content for the eponymous conceptual volume of the exhibition catalogue. Borillo, like most of the 26 authors, mainly contributed a series of short texts, commentaries on about 20 of the 50 keywords that had been selected to structure the online conversation.³⁹ However, toward the end of the project, in December 1984, Borillo submitted three texts which were published in the appendix of the catalogue, including a short reflection about the essence of science (under the combined keywords of *désir / souffle*), one about the emergent role of informatics (*dématérialisation / matériau*), and an unusually long contribution about how writing was changed by the use of computers (*écriture / langage*) (*Épreuves*, 238–242). This latter text, whose title translates as "Some too preemptory and surely utopian hypotheses on the role of computer science in textual creation," forms a structured response to some of the questions that *Les Immatériaux* raised, and that were discussed throughout *Épreuves d'écriture*, including the questions of authorship, hypertextuality, and artificial intelligence.

Borillo also participated in the 1984 conference on computerization, and he contributed to the *Modernes, et après?* volume edited by Théofilakis, actively engaging Lyotard's questions about the relationship between the technologies and philosophy:

As far as computer science is concerned, the expansion of the computer's field of intervention, the new materials of human-machine

38 See CPA 1994033W666_013, 2–3.

39 Borillo's entries were all logged on 5 October 1984, suggesting that he did not return for the following online discussion. For a detailed analysis of *Épreuves d'écriture*, see chapter 4.

communication, the growing complexity of computer systems, the difficulty of mastering them, or rather their im-mastery, trace an inexorable path: we are obliged to question the very notion of inference and, more generally, the formal analysis of reasoning. (Borillo 1985b, 137)

Pierre Rosenstiehl

It is even harder to grasp the impact that mathematician Pierre Rosenstiehl may have had on the overall project. Rosenstiehl participated least frequently in the meetings, and he appears to have made only one proposal for a site that remained unrealized.

On the face of it, this seems surprising because Rosenstiehl had a well-documented inclination to the arts and philosophy. His specialization in mathematics was in graph theory, on which he worked at the Centre d'Analyse et de Mathématique Sociales (CAMS) of the École des Hautes Études en Sciences Sociales (EHESS). Rosenstiehl was actively engaged in building bridges between the sciences and the humanities. He had, for instance, participated in two of the last seminars organized by the philosopher and semiotician Roland Barthes, one of which took place in 1979 in connection with a major exhibition project coordinated by the Centre de Création Industrielle at the Centre Pompidou, *Cartes et figures de la terre* (Rosenstiehl 1980).⁴⁰ And Rosenstiehl's contribution to Barthes' final seminar, "The 'Dodécadédale,' or in Praise of Heuristics," appeared in the prestigious American art and theory journal *October* in 1983 (Rosenstiehl 1983).

Despite these obvious transdisciplinary affinities, Rosenstiehl's participation in the preparations for *Les Immatériaux* was less fruitful. In one of the first meetings of the scientific advisors, in February 1984, Rosenstiehl proposed a site about the relations of language, rules, and code, illustrated by the example of masks (*masques*) which are used in the production of integrated circuits.⁴¹ This suggestion resonated with the theme of the "matrix" (*matrice*) that Caro and Lyotard discussed on several occasions, and the proposal was taken seriously enough for it to be included in the long list of sites assembled in April 1984, under the title of *Généalogie du circuit intégré* (Genealogy of the integrated circuit). However, by May, no one appeared to have followed up on the idea. Rosenstiehl indicated that he was planning a meeting in June with someone who might help him to work out a plan, but there is no further mention of this, and after the summer the project just disappeared from the

40 See also Compton (2007). In 1992, Pierre Rosenstiehl became a member of the experimental literary collective Oulipo.

41 See CPA 1994033W666_002, 4.

documents.⁴² There are no further meetings with Rosenstiehl recorded in the *Chronology*.

We can only speculate about the reasons for this course of events. In the second half of the year 1984, Rosenstiehl was one of those participants in the *Épreuves* writing project who made only minimal contributions, submitting 15 short texts that were all logged on the same day in the first weeks of the process.⁴³ And Rosenstiehl stands out as the only one of the five scientific advisors who did not contribute to the volume of essays, *Modernes, et après?*, edited by Élie Théofilakis. The selection of 30 texts in this book represented the range of scientific and societal debates to which *Les Immatériaux* sought to relate. Given the participation of the other four scientific advisors, the absence of Rosenstiehl in this volume appears symptomatic of his distance from the overall *Immatériaux* project.

Jean-Pierre Raynaud

In contrast, the microbiologist Jean-Pierre Raynaud probably joined the first meeting of the advisory committee in December 1983 better prepared than any of his scientific colleagues. He had already been consulted by Thierry Chaput and his team as an expert on “living materials” in the spring of 1983, and then again in November, at a moment when Lyotard was still in the United States.⁴⁴ Raynaud’s technological comparison of genetics and semiotics struck a chord with the curators even at the first committee meeting:

Mr. Jean-Pierre Raynaud develops the analogy of genetics with codes, signs of language: programmable, artificial genes, manufacturing of cells, biological computer. It is not the sixth generation [of computers] but a

42 See CPA 1994033W666_013, 3. In the same meeting on 14 May 1984, Rosenstiehl also made an informal proposal for a site on the “dematerialization of war” (*dématérialisation de la guerre*, CPA 1994033W666_013, 4).

43 There is an entry in Rosenstiehl’s bibliography for his contribution to *Épreuves*, specified as “‘Désir, écriture, geste, méandre, monnaie, preuve, réseau,’ *Épreuves d’écriture pour l’exposition Les Immatériaux*, Paris, éditions du Centre Georges Pompidou, 1985.” The short list in the title does not mention Rosenstiehl’s other entries for the keywords *auteur*, *code*, *dématérialisation*, *habiter*, *image*, *matériel*, *mémoire*, or *ordre*; moreover, in the actual catalogue, Rosenstiehl’s entry for *désir* is only a place-holder referencing the entry on the keyword *monnaie*; this suggests that the bibliographic entry for *désir* was made for rather symbolic reasons.

44 In the *Chronology*, there is an entry for a meeting with Raynaud on 2 May 1983, 10:00 “les matériaux vivants”; and another one on 17 November 1983, 9:00 “TC, MM, Jean Pierre Raynaud” (both in the calendar of M. Moinot). Jean-Pierre Raynaud (dates unknown) the microbiologist, who later joined the Sorbonne, Pierre and Marie Curie University, Paris VI, should not be confused with the contemporary artist of the same name, born in 1939.

change in the nature of the computer (storage of knowledge in a density of presence).⁴⁵

In the mid-1980s, Raynaud worked for the French pharmaceuticals company Roussel UCLAF, where he did research in the field of andrology and clinical chemistry about the mechanisms of hormone action, and about steroid hormones and anti-hormones. He brought to the scientific committee an in-depth knowledge about recent developments in genetics.

The archival records of Raynaud's contributions are incomplete. There are indications of two individual meetings with him in 1984, besides the committee meetings, during which practical matters of sites related to his topics would have been discussed.⁴⁶ There are no notes for the meetings with Chaput in 1983. The scattered documents provide merely a filiation of themes and preliminary titles which can retrospectively be ascribed to Raynaud, but which in the exhibition diffused into the anonymous layers of a collaborative effort.

The April 1984 overview document which listed all sites under consideration at that moment, includes six projected sites that are otherwise undocumented and were related to Raynaud's field of expertise:

- Champs excités [Excited fields]
- Métamorphoses lactées [Milky metamorphoses]
- Sonde cancéreuse [Cancer probe]
- Ordinateur vivant [Living computer]
- Aliment fixé [Fixed food]
- Génie bio-alimentaire [Bio-food engineering].

A related set of topics is listed under Raynaud's name in Vigoureux's hand-written notes, made a month later, during the committee meeting in May 1984:

Bio time (Gautray)
 milk (Houdebine)
 cellular fusion (Cazenave)
 code. reading . writing bio-computer
 machine for producing life
 that will soon be transformed into computers
 reduction of time.⁴⁷

45 Meeting minutes, 19 December 1983, CPA 1994033W666_001, 3. For a short survey of the mostly unrealized projects related to biological and biogenetic issues, see chapter 9.

46 The minutes of the committee meeting on 20 March 1984 indicate that there was a meeting with Raynaud on 5 March 1984, where he made a series of proposals, and on 10 May (CPA 1994033W666_009, 2). The *Chronology* also records meetings with Raynaud and Élie Théofilakis on 5 December and 6 December 1984, presumably for the volume *Modernes, et après?* (1985), which Théofilakis was editing at the time.

47 CPA 1994033W232_002_f, 3.

It is notable that in this latter list, reference is made to three scientists whom Raynaud must have recommended in March, and who were consulted by members of the CCI team. In the *Chronology* we find references to separate meetings at the end of March 1984 with Louis-Marie Houdebine, biologist of development and reproduction, with Pierre-André Cazenave of the Institut Pasteur, and with Jean-Pierre Gautray, encounters that, according to these records, were followed up only in Gautray's case by meetings in July and August.⁴⁸

It is not clear whether these meetings were in any way fruitful. Another name that crops up in relation to the topic of food is that of the food scientist Joseph Hossenlopp. However, whether he had any influence on the realization of the food-related parts of the exhibition, especially *Ration alimentaire* (Food ration), *Mangeur pressé* (Hurried eater), *Précuisiné-préparlé* (Pre-cooked-Pre-spoken), and *Arôme simulé* (Simulated aroma), is unclear.⁴⁹

The archival records testify, though, that the curatorial team continued to struggle with some of the sites related to the broader field of microbiology and genetics—among them, *Corps éclaté* (Exploded body), *Langue vivante* (Living language), and *Trois mères* (Three mothers)—well into the autumn and winter of 1984. In some of the sites associated with Raynaud and the question of “living matter” (e.g., *Ration alimentaire*, *Précuisiné*), the theme was eventually elaborated only quite weakly—gesturing toward a topic, rather than offering a sharp or even controversial interpretation. Others (e.g., *Corps éclaté*, *Langue vivante*) ended up being rather illustrative, their aesthetic impact resting on the medical and scientific imagery. In comparison, the conceptual complexity and scenographic differentiation of the sites proposed by Caro and Cassé is quite striking.

We don't know the reasons for these differences, but what we can diagnose are two distinct types of approaches, namely the “authorial” approach taken by Caro, who suggested and then refined specific concepts for exhibition sites, in contrast to the more “stimulating” approach taken by Raynaud, who pointed the curatorial team in the direction of certain themes and yet other experts, leading to a proliferation of contacts and ideas that, as it were, proved hard to turn into concrete scenographic proposals.

48 In Moinot's calendar, there is also reference to a panel discussion, “*table ronde: Houdebine, Cazenave, Gautray,*” on 25 April 1984. It is not clear whether this was an event held elsewhere in Paris or arranged specially at the Centre Pompidou.

49 In CPA 1995052W027_057, the site “Précuisiné” is ascribed to Joseph Hossenlopp. On an anonymously made sketch specifying a proposal for grouping the sites in audio zones (1994033W234_003, reprinted in *Album* 1985, 24–25), presumably prepared by a team member in August or September 1984, the only site for which Raynaud is mentioned as the author or conceiver is “Biokit (ordinateur vivant),” a project that was soon afterward abandoned. The same sketch ascribes the projected site *O.C.N.I. ou objet consommable non-identifié*—another unrealized project—to Hossenlopp.



[Figure 28] Site *Langue vivante* (Living language), two video monitors with images from films by Jean-Pierre Ozil. Filmstill, Zajdermann/Soutif, *Octave au pays des Immatériaux*, 1985 (min. 17:24). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

It may well be that, unlike Caro, Raynaud didn't see himself in the role of a co-curator, and there is, in fact, no reason why a gifted microbiologist should also be a dedicated exhibition curator. From the perspective of the exhibition visitor, though, and also in view of the relevance that these topics held in the conception put forward by Lyotard and Chaput, it was unfortunate that the themes of genetics and life, the DNA as code, or human reproduction and its rapport with the question of authorship, were ultimately represented only rather abstractly in the sites *Trois mères*, which in the April 1984 concept still ran under Raynaud's working title "*Génie génétique (ou hormonal)*," and *Langue vivante*, which even in September drafts was still termed "*Idiome du corps (ADN)*." The exhibits chosen for this latter site were two films by the biologist Jean-Pierre Ozil, who was solicited not by Raynaud but by one of the project managers at the CCI, Martine Moinot, who happened to be a personal friend of Ozil and suggested the films documenting his research on animal cloning for presentation in the exhibition (fig. 28). The comparison between Caro and Raynaud thus suggests that how certain themes were represented in the final exhibition was to some extent determined by the personality and attitude of the contributors who were invited by Lyotard and Chaput to become not only advisors but also co-curators, if they decided to accept that role.

Michel Tibon-Cornillot

Instead of Raynaud, the philosopher Michel Tibon-Cornillot (1936–2020) was consulted on the topic of biology and genetics in the second half of 1984. He was mentioned as a sixth scientific advisor on the credits page of the catalogue, without having participated in the meetings of the scientific advisory committee (*Épreuves*, 3).

Tibon-Cornillot was a philosopher with a strong interest in mathematics and chaos theory. While working at EHESS, Tibon-Cornillot started a four-year research period in 1979 at the Institut Pasteur for biological and medical research, convinced that the developments in the life sciences were having a major, yet widely unacknowledged impact on philosophy. In 1983/1984 he presented his ideas at the newly founded Collège International de Philosophie (CIPh), on invitation by Jacques Derrida but no doubt also noticed by CIPh co-founder Lyotard. In a seminar dedicated to the question of translatability between DNA and language, Tibon-Cornillot claimed that both of these codes shared an analogue, material basis, contradicting other philosophers, who insisted on their ontological difference.

The question also occupied Lyotard, and it seems consequential that he, together with other members of the *Immatériaux* team, met with Tibon-Cornillot around 10 times, starting on 10 July 1984 and then on multiple other occasions in September and October. These discussions were not only theoretical, but were also geared at developing concrete ideas for exhibition sites.⁵⁰ From a curatorial perspective, the outcome of those meetings was meager, and solutions for the exhibits in the sites under discussion had to be found elsewhere, even if Tibon-Cornillot's ideas supported the general approach of the curators. In one of his contributions to the *Épreuves d'écriture* writing project, he asked rhetorically:

Doesn't the artificial, taking over the living and succeeding in doing so, manifest its deep origin, its kinship or its continuity with the living? Has the artificial ever been artificial? (*Épreuves*, 12).⁵¹

50 For a meeting with Tibon-Cornillot on 17 September, Lyotard notes in his calendar the titles of sites originally suggested by Raynaud, "*Corps éclaté, Biokit, Langue vivante?*," and the name of Tibon-Cornillot is also mentioned in the handwritten notes of the scenographer Philippe Délis taken at the beginning of September in relation to the site *Langue vivante*; see CPA 1995052Wo27_021. See also the handwritten notes by Martine Moinot, CPA 1994033W230_010, presumably taken during a meeting with Tibon-Cornillot; the first page documents preliminary scenographic ideas for *Corps éclaté* and *Langue vivante*, and the following five pages contain notes about the scientific foundations of genetics, DNA, etc.—the curatorial consultation having turned into a lecture on biogenetics.

51 TIBO. 176, 10 OCT. See also Tibon-Cornillot's commentary on the notion of maternity, which appears to point toward the tabulation of various types of human reproduction,

Tibon-Cornillot's theoretical positions were both challenging and crucial for the questions that Lyotard and Chaput sought to raise in the sites related to the materiality and the producibility of life:

The apparent chaos that more and more realizations of molecular genetics allows—hybrids, transgenics, and so on—is linked to a cosmic dimension that is not only on the order of discursive representations or those of art (Hieronymus Bosch) but passes through concrete realizations. (Tibon-Cornillot 1985b, 97)

In this text, which appeared in English under the title of "Genetics and the Inhuman in Man" in 1985 and was presumably written in 1984, Tibon-Cornillot urges his colleagues to overcome the type of anthropomorphism of which he would have probably also accused Lyotard:

at the moment in which his stubborn anthropomorphism wavers and everywhere arises the 'ahuman' that he has discovered and installed within himself, a question comes up with regard to man: What does the irruption of the first attempts made by a species on genetic patrimonies that were formerly submitted to other laws mean to the biosphere? What this initiates seems more interesting than the partial findings we have so much difficulty in facing. (1985b, 99–100)⁵²

We can imagine how Lyotard would have been both fascinated and irritated by these ideas which he himself was struggling with, as documented in the talks he gave in 1985 and 1986, published in 1988 under the title that Tibon-Cornillot had also used, *L'Inhumain*. A figure of thought that Lyotard develops on several occasions, as in the lecture "Matter and Time" of April 1985, is that, in a typical double movement, the modernist drive toward transparency and control brings about the very technoscientific conditions which imply the inescapable deposition of the ideal of the modern human subject. In October 1984, Tibon-Cornillot had put it like this:

The transparency built on an absolute anthropocentrism comes up against such an astonishing success (the genetic code is an example) that little by little another type of intuition arises. At the very moment when men think they succeed in their effort to dematerialize matter, the instruments of this process, languages, codes, take root in matter, in the living, and are "materialized" to a degree never reached before. Perhaps

in the site *Trois mères* (*Épreuves*, 128, TIBO. 180, 10 OCT., see fig. 64), marking possibly the most immediate connection between Tibon-Cornillot's discourse and the exhibition

52 Some of the sections in this text appear verbatim (in French) in Tibon-Cornillot's submission for the appendix of *Épreuves d'écriture*, on the keyword of "Nature" (TIBO., 15 DEC., 249–253). For the ideological context in which Tibon-Cornillot framed these debates around the same time, though less explicitly in his contributions to *Les Immatériaux*, see also Tibon-Cornillot (1985a).

it is not the world, the living, the things, which are transparent to his conceptual control but man who is transparent to the world. (*Épreuves*, 130–131)⁵³

Tibon-Cornillot not only raised questions that affected the biological aspects of the exhibition, but pressed his point that the changes in the biosciences also had an impact on other areas of philosophical reflection, such as the concept of simulation. In his commentary for *Épreuves d'écriture*, Tibon-Cornillot writes:

Isn't simulation on the side of artifice, since a pre-existing model is needed to simulate? So we speak of machines simulating the living. Simulation presupposes an afterthought: first the model, then the simulation, first the living being, then the machines. Simulation also presupposes the existence of two separate spheres, the world of the simulator and the world of the simulated: for machines, the world of art, technology, and culture, and for the other, the world of the living, of nature.

The contemporary situation, with on the one hand the considerable progress made in the manufacture of machines that simulate the living, and on the other the rerouting of living organisms (especially single-cell organisms) into the circuits of industrial production activity, makes it increasingly problematic to maintain the concept of simulation in the question of the relationship between machines and living organisms. Can the separation between their orders be maintained any longer? To raise the question of the biological origin of technology is, in a sense, to reject the classic approach of machines simulating living organisms. (*Épreuves*, 207)⁵⁴

Given the intensity of their dialogue, it is surprising to find that, in retrospect, Tibon-Cornillot remembered the encounter with Lyotard as conflictual and mutually dissatisfactory (pers. comm., 22 September 2016).⁵⁵ Tibon-Cornillot had been invited by Lyotard, but—according to his recollections 30 years later—Lyotard was irritated by his opinions and wanted to speak about the issue of translatability and manipulability of the genetic code and of life only metaphorically, not scientifically. We can only speculate about the reason for this rather negative image in which Tibon-Cornillot remembered their discussions. It stands in stark contrast to the fact that there was such a high frequency of meetings in the autumn of 1984—of which Tibon-Cornillot also only remembered “one or two”—and is also contradicted by Lyotard's intellectual engagement with Tibon-Cornillot's propositions. In the

53 TIBO. 181, 10 OCT.

54 TIBO. 184, 10 OCT.

55 In this meeting, Tibon-Cornillot also relayed his impression that Lyotard “did not have the exhibition under control” (*pas de contrôle*), which is probably true, and Lyotard would have been the first not only to admit, but to affirm it.

end, Tibon-Cornillot was one of the few people interviewed for the documentary film *Octave au pays des Immatériaux* (1985), suggesting that his theoretical position was regarded as one of the conceptual cornerstones of the *Immatériaux* project.

Lyotard's Critique of the "Technoscience of Domination"

The work with the scientific advisors was important for providing both the conceptual foundation of *Les Immatériaux* and the academic context from which the proposals for almost a quarter of the exhibition sites were sourced. As indicated by Lyotard in the interview with Blistène quoted earlier, the meetings of the scientific committee were also a way for him to learn about current debates in the sciences, which he had gestured toward only rather superficially in *The Postmodern Condition*. But more than just updating his knowledge, Lyotard indicates that the *Immatériaux* project as a whole was a transformative experience. In one of the interviews conducted during the exhibition's opening days, Lyotard conspicuously connects the work on the exhibition with his diagnosis of a crisis of modernity. The necessity of change afforded by this crisis, he suggests, is not only something that was to be conveyed to the exhibition audience, but also something that was affecting him:

We have all been marked by this enterprise, this completely excessive adventure. ... I was very moved by this work. *The Postmodern Condition* was not dramatized enough, had too simple answers. ... Postmodern ... designates a change, but not a period. (2024, 80)⁵⁶

Lyotard associated this change with the demise of the modern human subject and its mastery over things, and over nature. The modern form of domination was associated with the political formation of the hegemonic state and the logic of capitalism: it objectifies nature, and by integrating everything into its economic calculus, capital interlaces scientific exploration, technical development, and economic exploitation. Modern "technoscience" is this entanglement of technological, scientific, and economic practices which become increasingly interdependent and whose logic and justification appear increasingly fused. As this modernist project unfolds, the scientific understanding of the dominion deepens: of the organic and the inorganic world, of the universe and the particle structures of all matter. In Lyotard's conception of the postmodern, this knowledge affords the realization that the human, as a part of nature, is not only the cognizant and ruling subject, but also one of the objects of these sciences. The domination that is enabled by technoscience, and that was once presumed to be a singular instrument of

⁵⁶ See also Boissier (2007), esp. 380.

the modern subject, turns out to be a force that dominates that very subject, treating it like an object similar to all other objects of the dominion.

Lyotard developed this critique during the time of collaboration with the CCI-based technology aficionado Thierry Chaput, and with scientists like Jean-Pierre Raynaud who—here paraphrased by Marie-Odile Monchicourt—embraced technoculture wholeheartedly:

If technology isolates us from nature, it also enables us to apprehend it, to correct it and to *give our existence cosmic horizons*. Technology enables us to become one with the immensity of the universes that open up to us and within us, the infinitely small as well as the infinitely large; perhaps it expands our senses like no other culture until now. (Monchicourt and Baud 1985, 222)

Lyotard responded to such technological optimism by coining the phrase “technoscience of domination” (*technoscience de la domination*). He used it in March 1984, during the weeks of meetings with the scientific advisors, and notably in his preparatory discourse for *Les Immatériaux*, “Après six mois de travail” (After Six Months of Work), where Lyotard speaks about the conceptual framework for the exhibition.⁵⁷ He starts with an important distinction, also implicit in the following passage, which is the linguistic difference between data and phrase; this distinction translates as the difference between “information” in the sense of information theory, and “meaning” in the sense of the use of words in natural human language. In modernity, Lyotard claims, phrase and meaning are increasingly absorbed into an information-theoretical model of data:

When modernity presupposes that everything speaks, this means that so long as we can connect to it, capture it, translate it and interpret it, there is no fundamental difference between data and a phrase; there is no fundamental difference between a phenomenon of displacement in an electromagnetic spectrum and a logical proposition, and given this fact, in this face-to-face relation to a universe that is his to dominate—a heroic relation, I would say—in order to make himself the master of it, man must become something else entirely: the human subject becomes no longer a subject but, I would say, one case among others, albeit a case which retains this privilege You see that, from this “immaterials” point of view, we have emphasized—and this is a part of the work of mourning—a kind of counter-figure that takes shape within the figure of modernity, a counter-figure within which man does not play the role of the master. One

57 For Lyotard’s usage of the term “technoscience,” see Simons (2022). Lyotard presumably first uses the concept of technoscience in Lyotard (1981a). It is not clear where he found this formulation “of domination,” expressed in March 1984. Throughout Lyotard’s discussions of the concept, *technoscience* is associated with a sense of modern mastery, but nowhere else do we find this particular formulation, *technoscience de la domination*.

might call this figure postmodern, insofar as it has always been present in modernity, but it might be the very completion of the technoscientific project of modernity. ... There was a metaphysics corresponding to the technoscience of domination, which was the metaphysics of the subject, the metaphysics of Descartes and of all thinking of the subject up to and including the twentieth century; but ... we are not sure what kind of metaphysics could be appropriate to the technoscience of interaction. ... It falls to us to find a thought and a practice within the framework of the technoscience of interaction—one which, in short, would break from the thought and the practice of science, of technology, and of domination. (2015, 33–34)⁵⁸

Lyotard developed the tropes associated with the “technoscience of domination” on several occasions, starting with *The Postmodern Condition* and its elaborate renunciation of the notion of technological “performance,” and the repeated critique of an information-theoretical understanding of “communication.” In April 1985, at a symposium at the Centre Pompidou during the *Immatériaux* exhibition, Lyotard picks up on the same themes. Under the title of “Matter and Time,” he speaks about the conflation of mind and matter in the medium of modern physics, and about the fact that technological complexity is a product not of the human mind but of matter itself:

An immaterialist materialism, if it is true that matter is energy and mind is contained vibration.

One of the implications of this current of thinking is that it ought to deal another blow to what I shall call human narcissism. Freud already listed three famous ones: man is not the centre of the cosmos (Copernicus), is not the first living creature (Darwin), is not the master of meaning (Freud himself). Through contemporary techno-science, s/he learns that s/he does not have the monopoly of mind, that is of complexification, but that complexification is not inscribed as a destiny in matter, but as possible, and that it takes place, at random, but intelligibly, well before him/herself. S/he learns in particular that his/her own science is in its turn a complexification of matter, in which, so to speak, energy itself comes to be reflected, without humans necessarily getting any benefit from this. And that thus s/he must not consider him/herself as an origin or as a result, but as a transformer ensuring, through technoscience, arts, economic development, cultures and the new memorization they involve, a supplement of complexity in the universe. (Lyotard 1991, 45)

58 The same set of ideas (technoscience, immaterials, questioning human, against modern mastery) also comes up in the second preparatory concept text for the exhibition, issued in April 1984, yet without using the formulation “technoscience of domination”; see CPA 1977001W130_009.

The claim that the human subject does not dominate, control, and master the world but is itself an aspect or one of the forces in this field of forces translates the notion of “domination” into its opposite, the human as “supplement.” The notion of a *modern* “technoscience of domination” is thus retorted by the diagnosis of *postmodern* nonmastery. A couple of years later, Lyotard summarizes the philosophical horizon of his argument:

What Heidegger calls *Gestell* [enframing], what Habermas calls *technoscience*, what I myself have attempted, in the name of provocation, to call the *postmodern*, is the realization of metaphysics in everyday life. Metaphysics is a general physics, where one thinks everything in terms of the harnessing of energy, of total mobilization, of the setting-to-work of energies, be they physical, cosmological, human... (2013b, 217)

Statements like these point beyond the *Immatériaux* project, but we can see how Lyotard’s critique of technoscience became more acute in the debates with the scientific advisors and in the face of the curatorial challenges posed by Chaput. It seems likely that Lyotard was thinking of “modernist” scientists like Caro and Raynaud when, in the 1988 introduction to *The Inhuman*, he referred to the discourse “maintained about their researches by the scientists, the technologists and their accredited philosophers to legitimate, scientifically and technologically, the possibility of their development. Inevitably, it is a discourse of general physics, with its dynamics, its economics, its cybernetics” (1991, 5).

As though to confirm this schema, Caro wrote in his contribution to *Modernes, et après?*:

As the matrix of an artificial neo-nature, technology restores priority to sensitive experience, to the excitement of the senses. A loop is closed, metaphysical concern is anaesthetized: a known “nature” is reincarnated, in forms that may still be incomprehensible to the uninitiated, but which are perfectly controlled by the technological elite and, in fact, accessible to all those willing to invest the necessary effort in this knowledge (working-class self-taught hi-fi, CB, TV, radio, car or motorcycle enthusiasts). (Caro 1985, 118)

But Lyotard also found accomplices, for unlike Raynaud and Caro, Mario Borillo seconded this critique of control, affirming, as we already heard above, “the growing complexity of computer systems, the difficulty of mastering them, or rather their im-mastery.”

Traces of the Science Thread: Cassé, Caro

The exchanges with the scientific advisors also resonate with other topics in Lyotard's writings from the time during and immediately after *Les Immatériaux*, especially *The Postmodern Explained to Children* (1992, orig. 1986) and *The Inhuman* (1991, orig. 1988). A remark like "matter is energy and mind is contained vibration," made in *The Inhuman* referring to the way both microphysics and astrophysics change the conception of matter, echoes notions proposed by Cassé and Raynaud; and Lyotard's comment on the relation of life, technics, and code, made with regard to the living cell, comes across as a response to Tibon-Cornillot's theoretical considerations (Lyotard 1991, 45 [on energy, lecture in April 1985], 52 [on the living cell, lecture in October 1986]).

Lyotard frequently returned to an image that Michel Cassé called up in his various contributions, and that seems to have haunted Lyotard, namely that of the finality of the sun and the solar system, and with it the finality of human thought, which became for him the ultimate challenge to modernity and its metaphysics of development and progress. This metaphysics, Lyotard writes in the introduction to *The Inhuman*, "has no end, but it does have a limit, the expectation of the life of the sun. The anticipated explosion of this star is the only challenge objectively posed to development" (1991, 7).

In a text first published in *Le Monde* in July 1984 and republished as the chapter "Dispatch Concerning the Confusion of Reasons" in *The Postmodern Explained to Children*, Lyotard directly refers to Cassé when he speaks about the uniqueness and unrepeatability of the first moments of the Big Bang, "if I have understood Michel Cassé correctly" (1992, 62).⁵⁹ And the narrative he offers elsewhere in the same book to explain the dramatic change which post-modern thinking has to accommodate is an adaptation of the story that Cassé told, for instance, in the script for *Creusets stellaires*. Lyotard replicates it as:

The cosmos is the result of an explosion; the debris is still spreading under the influence of the initial impact; the burning celestial bodies transform the elements; their days are numbered; those of the sun likewise. (1992, 86)⁶⁰

59 See also Lyotard's remark that "contemporary astrophysics likes to tell the story of the universe since the Big Bang," in the chapter "Apostille on Narratives" (Lyotard 1992, 20). Kiff Bamford (pers. comm., 5 January 2022) has pointed out that in the manuscript there is an indication to "Geoff Bennington 23/12/83" (Bibliothèque littéraire Jacques Doucet, JFL 43-1). This would have been four days after the first meeting with the scientific advisors.

60 According to Bamford (pers. comm., 5 January 2022), the manuscripts for this chapter, "Ticket for a New Stage," are dated 1 April 1985 (Bibl. Doucet, JFL 43-1) and 12 April 1985 (Bibl. Doucet, JFL 43-2).

While the transformation of the elements by the exploding and burning stars and the malleability of matter in the cosmic laboratory had been an important theme for *Les Immatériaux*, the other, philosophical lesson from this story was further elaborated by Lyotard in the text “A Postmodern Fable,” seven years later (1993). It narrates a speculative astrophysical, biological, and trans-humanist story about the evolution of the sun and the Earth, about their future demise, and about the possibility of an “exodus” of humans (or rather an exodus of their brains); a story that he qualifies as “postmodern,” and whose astrophysical part again repeats Cassé’s casually apocalyptic narrative.

The scientific framework of the fable that Lyotard sketches is that of *Les Immatériaux*. With hindsight, he interprets the research discussed there as having a technoscientific agenda that would enable, in the long term, a departure from the doomed planet:

At the time of the telling of the story, all the research currently in progress—logic, econometrics and monetary theory, computing, physics of conductivity, astrophysics and astronautics, biology and medicine, genetics and dietetics, catastrophe theory, chaos theory, strategies and ballistics, sports techniques, system theory, linguistics and experimental literature—all this research was devoted, *de facto*, either closely or remotely, to testing and remodeling the so-called human body, or to replacing it, in such a way that the brain be able to function with the aid of the only energy resources available in the cosmos. In this way, the final exodus far away from the negentropic system of the Earth was being prepared. (1993, 241)

The more general insight that Lyotard drew from the encounter with contemporary scientists—and not least with the engaging storyteller Michel Cassé—was the degree to which modernity relied on such narratives:

Realism accepts and even demands the presence of the imaginary within it, and that the latter, far from being foreign to reality, be a state of it, the nascent state. Science and technique themselves tell fables to no less an extent, are no less poetic than painting, literature or cinema. The only difference between them resides in the constraint of verification / falsification of the hypothesis. The fable is a hypothesis which is exempted from this constraint. (1993, 244)

Whereas in Lyotard’s later writings such resonances of the work with the scientific committee can be traced rather clearly, the reciprocal impact that this collaboration may have had on the scientists remains rather opaque. Seeing, though, how Raynaud departed from the scene early, and knowing that Borillo and Rosenstiehl were rather disengaged, it seems unlikely that their feedback would have been positive. In contrast, Cassé saw the production of the site *Creusets stellaires* to the end, and he participated both as

a slightly more active co-author of the *Épreuves d'écriture* project and as an expert interviewed in the *Octave* film documentary, though in both cases his contributions appear driven by the wish to communicate his own ideas more than by a particular interest in the *Immatériaux* project.⁶¹

Among the five advisors, it is again Paul Caro who forms the exception. In two reports that he wrote in the 1990s about the popularization of science, he mentioned *Les Immatériaux* and thus actively contributed to the legacy of the exhibition (fig. 33). The first of these reports is a text, published in 1990, about the challenges of the popularization of scientific knowledge, in which Caro describes the various forms of knowledge production and distribution, and discusses the problems and possibilities of conveying them to wider audiences. Here, Lyotard is one of only a very small number of contemporary authors explicitly named by Caro, and the only contemporary philosopher mentioned with respect to the postmodern discreditation of the grand narratives of liberation and emancipation (Caro 1990, 25). Caro speaks about different media of science communication, including academic journals, reports, and popular journals, and also about museums and exhibitions.⁶² *Les Immatériaux* is the only exhibition he mentions by its title, whereas otherwise he speaks about museums and exhibitions in only general terms.

In a passage where Caro deals with the challenges for scientists when engaging in the popularization of their specialized knowledge, and the dangers of simplification, he refers to *Les Immatériaux* as an exceptional example:

It should be noted here that while the mediator is perfectly identified when he signs an article, a book, or a film, this is not the case for an exhibition because of its character as a collective work, for if a mediator proposes a scenario, he knows that it will be transformed by the chain of material realization, and sometimes made unrecognizable. The only way to avoid this is to give the mediator absolute authority to intervene and correct, if necessary, at all levels. But such a procedure is unusual (it was, however, the case for Jean-François Lyotard on the occasion of the *Immatériaux* at Beaubourg in 1985). (1990, 30)⁶³

61 Michel Cassé, in a rather off-the-cuff remark made in 2021, said, "I learned nothing from *Les Immatériaux*" (pers. comm., 5 November 2021).

62 In this context, Caro mentions the classical model of communication theory (R. Jakobson) which Lyotard frequently used and which Caro here quotes from the *Album* part of the *Immatériaux* catalogue (Caro 1990, 30; quotation from the *Présentation* of April 1984, reprinted in *Album* 1985, 17); it is notable that Caro should use this obscure source (a preliminary concept for an exhibition), rather than employ a more standard bibliographic source.

63 See also Caro's comments about the use of popular science and journalistic sources in the preparation of exhibitions—comments, though, which may have been made with projects other than *Les Immatériaux* in mind (1990, 19–20).

Beyond the fact that his passage draws attention to the exceptionality of *Les Immatériaux*, it is remarkable for two reasons. First, it describes Lyotard's role as having "absolute authority to intervene and correct, if necessary, at all levels," a characterization that contradicts the notion that this was a collaborative project with multiple, networked decision-makers—including Caro himself and the rather idiosyncratic ideas which were realized in some of "his" sites. And secondly, it is remarkable how Caro affirms that someone in his own role as scientific advisor cannot expect to be recognized for every part of his or her contribution, given the collective nature of the work and the realization process during which an initial idea can get turned into something quite different.

Caro would have had good reasons to decry such a lack of recognition, even if he understood its systemic nature. He had written the initial concepts for seven of the exhibition sites without being mentioned as their author in the *Inventaire* catalogue.⁶⁴ And Caro would have noticed that Lyotard had also leaned on his advisors' writings when preparing the texts for the catalogue. On the *Inventaire* page for the site *Matricule*, for instance, the introductory sentence was taken almost verbatim from Caro's concept for the site.⁶⁵

But Caro understood that in a complex and collaborative process like this it was difficult to register individual authorship. In his own concepts, Caro occasionally referred to Lyotard's exposé for the exhibition, a fact that underscores his awareness of a dialogical process in which the "origin" of a certain idea was hard to pin down. After all, Caro's suggestion for what would become the site *Petits invisibles* was a response to a request that Lyotard had first put to Cassé.

These are lessons that Caro had learned during the work on *Les Immatériaux*, and that in 1990 he relayed to the readers of his report. The same thematic terrain was covered again in a longer report that Caro co-authored with Jean-Louis Funck-Brentano, where the question of the production, communication, and public perception of science is treated in a more extensive historical and international perspective.⁶⁶ Again, critical discussions of scientific language and the role of images and technical media in science communication feature prominently. In comparison with the earlier report, the section on the media

64 Caro shared this fate, among others, with the curator of contemporary art Bernard Blistène and the architecture curator Alain Guiheux. Only Michel Cassé and Jean-Pierre Bibring were credited in the *Inventaire* for the concept of the site *Creusets stellaires*, maybe because the site included an audiovisual production understood as a separate item, and because Bibring, an external contributor, played an important role that had to be acknowledged and that led to the consequential necessity of also crediting Cassé, Patrick Arnold, and Annyck Graton for the technical realization.

65 See the last couple of sentences in Caro's document dated 20 March 1984, CPA 1994033W666_010, 4.

66 In Caro and Funck-Brentano (1996, 28), the authors quote Jakobson's communication model from its proper source, Jakobson (1963).

of science communication is much more elaborate and includes recent developments in digital media, the internet, and databases (1996, 49–86). The chapter on the role of museums and exhibitions mentions several science centers and exemplary exhibitions (especially at the Cité des Sciences et de l'Industrie at La Villette in Paris). The authors refer to *Les Immatériaux* in a passage where they discuss the design and presentation of content in exhibitions which, Caro and Funck-Brentano claim, is often

very sophisticated, but not always easily readable on the ground. The exhibition architects have ideological principles and follow a plan. This is not always easy to understand. Especially when the designer has been inspired by the postmodern approach (following the great exhibition organized by Jean-François Lyotard at the Centre Pompidou in 1985 on the theme of “Immaterials”). The exhibition platforms are then presented with multiple entrances and the visitor is free to choose his path. The things are presented on an equally mosaic and exploded plan (like the juxtaposition of districts of different cultures in the modern cities). The possible paths are then numerous, and the effort required of the visitor can be quite considerable insofar as he/she is not guided by a thematic of the kind “room I,” “room II,” “room III,” etc. (1996, 91)

From the perspective of a history of exhibitions, this remark is noteworthy, first, because it posits *Les Immatériaux* as exemplary and as a turning point in the design and presentation of scientifically related content in exhibitions, highlighting several of its key scenographic features. And secondly, it is remarkable that this description was given in a report subsequently adopted by the Académie des Sciences and its Comité des Applications de l'Académie des Sciences (CADAS), as their sixth joint report. We can surmise that Caro's advocacy and this description of *Les Immatériaux*'s radical exhibition design helped to foster the reputation of the exhibition—at least among people concerned with science communication in France. Whether Lyotard—or anybody at the Centre Pompidou, where the CCI had been absorbed by the Musée national d'art moderne (MNAM) and all but disappeared in 1992—would have appreciated this recognition is another matter.

On *Épreuves d'écriture*, the Collaborative Writing Project of *Les Immatériaux*

The Idea for *Épreuves d'écriture*

When the exhibition *Les Immatériaux* opened at the Centre Pompidou in Paris in March 1985, the first volume of the three-part catalogue was entitled *Épreuves d'écriture*. This 260-page book, whose title translates as “printing proofs,” but also as “writing tests” or “the trials of writing,” was the result of a collaborative writing project that the curatorial team of the exhibition had organized in the summer and autumn of 1984, working from their offices at the Centre de Création Industrielle (CCI). The project was chiefly organized by the CCI project manager Nicole Toutcheff, the editor Chantal Noël, and the editorial assistant Élisabeth Gad, though the two chief curators of the *Immatériaux* exhibition, Jean-François Lyotard and Thierry Chaput, took a keen interest in the project and participated in the realization process.¹

Both Chaput and Lyotard regularly affirmed what was also explicitly stated in the credits in the exhibition catalogue, namely that *Épreuves d'écriture* was based on an idea of Thierry Chaput (*Épreuves*, 3). However, as we will

1 In a public talk held on 22 May 1985, Lyotard calls Noël and Toutcheff “the two collaborators who had all of this in their hands” (CPA 1977001W130_003, 19). The main treatment of the project in the earlier secondary literature can be found in the monographs about *Les Immatériaux* by Antonia Wunderlich and Francesca Gallo. Wunderlich provides a summary description of the overall project and an account of the evaluation by the editors in the “Post-scriptum”; see Wunderlich (2008, 58–63). Gallo takes a more topical approach and, after a general account of the project, offers a series of short text excerpts which reflect the impact that the new media technologies had on contemporary art and theory, here elucidated through quotations from different authors on the keywords “interaction,” “image,” “immateriality,” “interface,” and “simulation;” see Gallo (2008, 133–139).

see in a moment, this rather expansive and collaborative project involved dozens of people who contributed not only to its realization but also to its conceptualization.

Liotard later asserted that the project was already being discussed when he first joined the team at the CCI in June 1983.² Chaput's exhibition proposal of April 1983, *La matière dans tous ses états* (Matter in all kinds of states) mentioned writing as one of the areas of creative practice which were being impacted by the new technologies. The section in the proposal that deals with the planned catalogue includes a reference to the computer-based writing experiment undertaken by several authors, encapsulating the "idea" that the catalogue credits would later refer to:

The catalogue

This book will be the occasion for a certain number of experiments.

Computer-assisted writing experiments: we will ask some authors to put themselves in a situation of experimentation and analyze what, by replacing "pen" and "ink," has changed in their production.

Experience of maximum "chain-linking": with the complicity of specialists and service providers, the aim is to connect the different links in the publishing chain.

This experience can, in fact, be understood as an XAO experience.

Example: assisted writing + assisted composition + image synthesis + image bank + assisted page layout + etc. ...

The catalogue can also give rise to a distribution experience: on-site selection of relevant excerpts for the visitor by cross-referencing criteria on a computer.³

The three conceptual elements of the "writing experiment" mentioned here would recur in discussions throughout 1984: it was planned from the beginning as a way to generate text content for the exhibition catalogue; it was part of the experimental attempt to do as much as possible of the catalogue's editorial and technical production in an integrated, computer-based process; and it was seen in conjunction with the additional, computer-based distribution of catalogue content to the visitors in the exhibition.

- 2 Lyotard said this, for instance, in a radio conversation with Jacques Derrida on 27 October 1984; repr. in Lyotard (2020, 70). The distributed authorship of the project as a whole was also reflected upon in the "Post-scriptum," *Épreuves* (1985, 262).
- 3 CPA 1994033W232_001, 22 (repr. *Album* 1985, 11). "XAO" refers to a technical system for handling metadata; see Gomes and Sagot (2001).

In the chapter “La lettre, le mot, le récit” (The letter, the word, the narration), Chaput’s proposal further sketches the conceptual framework for the exhibition’s approach to writing:

with the use of the machine, the writing comes alive and acquires a dynamic. Which changes in thought patterns are we heading toward now that thought is no longer subservient to a linear tool of expression (literally and figuratively).

From word-processing machines to automated schematic lexicons, everything contributes to this new dynamic of writing.⁴

As partner institutions for this writing-related aspect of the exhibition, Chaput’s concept lists the Centre Pompidou’s own public library (the BPI) and the literature department of the University Paris VIII, implicitly hinting at the fact that these considerations directly resulted from a dialogue with Roger Laufer, professor of literature and information sciences at Paris VIII.⁵ The notion, used by Chaput, of an “animated writing” (*l’écriture s’anime*) directly refers to a concept that Laufer had previously developed theoretically as well as practically, in a project of a small animated text, *Deux mots*, which he realized together with the French media artist Michel Bret in 1981.

From the calendars of Martine Moinot, we know that in the winter and spring of 1982–83, Chaput had at least eight meetings with Roger Laufer.⁶ In the context of these meetings, in March 1983, Laufer drafted a document entitled “Écriture,” which lists a total of 15 project proposals in five sections (*la lettre, la littérature, l’automate critique, l’écriture animée, le livre animé*) whose realization would involve, besides Laufer himself, Juliette Raabe, Gérard Blanchard, Yves Lecerf, Michel Bret, and others, associated in a group called Paragraphe.⁷ One of the four projects in the *littérature* section was:

Experimentation of authors on word-processing machines—during the exhibition, public writing sessions (one per week) by these authors.⁸

4 CPA 1994033W232_001, 16.

5 For a biographical sketch about Roger Laufer, see the obituary by Birnberg (2013–2014). Laufer worked in the Department of Information Sciences and Communication, at the intersection of literature and informatics. In Laufer’s contribution to a symposium on literature and informatics in August 1985, he describes the research of the group he was involved in in the early 1980s; see Laufer (1991), sections 25–27. See also Laufer’s “Présentation” and “Le récit de fiction interactif” (1985), in Laufer (1987). On the broader context of computer-based literature, see Reither (2003).

6 The *Chronology* lists, for this period, meetings of Laufer and Chaput on 15 December 1982, 20 December 1982, 14 January 1983, 31 January 1983, 9 February 1983, 23 February 1983 (also with Juliette Raabe, Jean-Louis Boissier, Gérard Blanchard, Martine Moinot, Sabine Vigoureux), 23 March 1983, 11 May 1983.

7 CPA 1994033W233_002; this document is undated, but clearly identifiable as a revision of a document dated 7 March 1983 (CPA 1994033W224_001).

8 CPA 1994033W233_002.

This is not a description of what *Épreuves d'écriture* will be, but it gives an indication of the type of ideas that were being aired during those meetings, in the weeks when Chaput was preparing his exhibition concept, and from which then evolved the idea of a collaborative, computer-based writing project to generate the catalogue text.⁹

Laufer and his collaborators were departing from an analysis of how the computer would change the ways of writing and dealing with text. They sketched out their considerations in a meeting in February which also included the typographer Gérard Blanchard, who had an important impact on the conceptualization of screen-based text design during those years. The group proposed four scenarios for how these changes could feature in the exhibition—presented in the meeting by the writer Juliette Raabe. Strikingly, all of these four scenarios would, in some form or other, be realized for the actual exhibition, two years later:

- Collection of text fragments: the visitor can, according to criteria of his choice, have a set of fragments and have it printed out. [1]
- Writer and word processor: in the face the new tool, what are the changes in literary creativity? [2]
- Collective writing: other application, other modifications. [3]
- Interactive storytelling: dialogues, characters, descriptions can be added to the basic text. Discover the stereotype of the imaginary. [4]¹⁰

In the second and third scenario (2, 3), we can sense the considerations that would later lead to the collaborative writing experiment of *Épreuves d'écriture*. The interactive narratives (4) would be represented in the site *Labyrinthe du langage* (Labyrinth of language). And the first suggestion (1) was adopted by Chaput as the idea of allowing visitors, after their tour through the exhibition, to print their own particular version of the catalogue, depending on which sites they had visited. This plan was dropped only weeks before the exhibition's opening because the system of micro-cards necessary for recording the individual *parcours* could not be completed.¹¹ The loose, unbound sheets of the *Inventaire* catalogue are, however, an outcome of this idea for a "set of fragments."

9 There is an echo of this proposal by Laufer in a project planned for the *Labyrinthe du langage*, entitled *Écran du livre* (Book screen); it is, however, unclear in which form this project was actually realized.

10 CPA 1994033W669_107. It is important to note that these formulations are possibly those of Martine Moinot, who wrote the minutes of the meeting on 23 February 1983.

11 There is only scant archival evidence of this project for the "micro-cards." It is explicitly mentioned in a draft press release dated 1 December 1984 (3), but not anywhere else in the press pack presented at the press conference on 8 January 1985 (see CPA 2009012W006_009).

The audience orientation of this latter suggestion, as well as the brief reference in Laufer's concept to "*séances d'écriture publique*," gives a first hint why the *Épreuves* project later branched off from Laufer's program in favor of a more organized discourse among a select group of authors, protected by the relative privacy of a closed network. The handwritten notes by Chaput for the first informative meetings with Lyotard in the summer of 1983 refer not only to elements from his April proposal, *La matière dans tous ses états*—namely, that the catalogue should be realized only by computer—but add that the catalogue should contain a self-reflexive dimension which would relay the difficulties such a digital production might imply:

The experience of this catalogue would be presented in the exhibition (all the problems encountered during the experiment, and the changes in the writer's practice).¹²

In the same context, Chaput's notes also mention the projects proposed by Roger Laufer and his group of collaborators:

presentation of a work done on writing itself, on the design of the letter, i.e. "mobile writing" by [Roger Laufer]. The importance of the form of writing for reading, the writer and the reader, would have to become manifest in this experience.¹³

Lyotard's own first conceptual sketch from August 1983, *Esquisse*, includes no direct reference to the question of writing or to literature. Instead, there is a note in Lyotard's calendar, written at the end of the summer and shortly before his departure to California: "Project Laufer / Follow-up of the Laufer project / Contact with Braffort Project Paris VII ..."¹⁴

Lyotard's note from early September 1983 suggests that Laufer's proposals should henceforth be discussed in the context of the conversations with Paul Braffort of the Oulipo group of avant-garde writers who were slated to participate in several projects in the exhibition's *Labyrinthe du langage*. There followed only two further meetings with Laufer in November 1983. Of the group that Laufer worked with, only Michel Bret was still considered in 1984 as a contributor to *Les Immatériaux*, having realized a project together with art and media theoretician Edmond Couchot.¹⁵

12 CPA 1994033W233_008, 13. This is possibly an early indication of what will become the *Album* part of the catalogue, as well as a hint at the critical reflections in the "Post-scriptum" of the *Épreuves d'écriture* catalogue.

13 CPA 1994033W233_008, 13.

14 Lyotard, calendar for 1983 (7–8 September 1983), Bibliothèque littéraire Doucet.

15 This project, *La plume* (The Feather), was mentioned in the *Inventaire* but could not be presented in the exhibition due to technical problems. The final two meetings with Laufer were on 17 November and 25 November 1983.

It is not clear from the archival documents currently available why exactly the conversation about the role of writing in *Les Immatériaux* veered off so decisively from the projects proposed by Laufer and his group, toward what would become *Épreuves d'écriture*. It may well be that, on the one hand, the ambition for this project outgrew the conceptual framework provided by Laufer. Lyotard and Chaput discovered in the idea for the "writing experiment" a potential that went beyond the more singular proposals by Laufer. Instead of audience interaction, the emerging ideas for the *Épreuves* promised the possibility of engaging a group of prestigious writers in the overall project. And on the other hand, the comprehensive proposal that Laufer and his collaborators had presented in the spring may also have been experienced as somewhat overbearing in a situation where so much of the future exhibition was yet undecided.¹⁶ Nevertheless, it seems evident that some of the core considerations for what would become *Épreuves d'écriture* had already emerged from the conversations among Chaput, Laufer, and others in the months leading up to Chaput's April 1983 proposal.

The Historical Context

Before investigating the phase of conceptualizing and realizing the original idea for the writing experiment of *Épreuves d'écriture*, let us pause and take a look at the broader media-historical context in which the project evolved. The idea of an online discussion in a branching forum structure and with a set number of authors and keywords as discussion nodes appears somewhat banal today, in the age of ubiquitous social media platforms and collaborative online tools, 30 years after the invention of the World Wide Web, and over 20 years after the "Web 2.0" introduction of easy-to-use wikis and blogs. However, it is important to keep in mind that prior to the Web becoming publicly available in 1993, it was much harder to imagine the media structure for a distributed collaborative writing environment, both technically and conceptually. In our present context, it is therefore worth considering where someone like Thierry Chaput could have garnered the inspiration for a project like *Épreuves d'écriture*, after the initial conversations with the experimental writers and artists around Roger Laufer.

The early 1980s were the time of the first personal computers, the first public Bulletin Board Systems and chat servers, and the launch of word-processing

16 This impression is seconded by the reaction of Catherine Counot, curator at the BPI and responsible for the contributions of the BPI to *Les Immatériaux*, who used much of the meeting with Laufer on 23 March 1983 to backtrack and explain that his proposals could not be accepted integrally, but had to be looked at critically, project by project; see CPA 1994033W669_107. Jean-Louis Boissier has suggested that despite the fact that Laufer and Lyotard were both at Paris VIII, it may have been significant that as a professor in the Information Sciences, Laufer was in a different faculty than the artists and philosophers Lyotard, Couchot, and Boissier (Boissier, pers. comm., 10 June 2021).

software like Word Perfect and Microsoft Word. In France, the Minitel system was in its experimental phase, but as with many of the other developments in digital media that commenced around this time, it took years before it had an impact on a broader cultural scale.¹⁷

Thus, people like Chaput, thinking about and experimenting with the cultural impact of computers and network technologies, were not working in a void, but they were pioneers in what was mostly uncharted terrain. The exposé that CCI design curator Raymond Guidot had written in 1981 and that formed the initial brief for Chaput's research focused on the question of how the new technologies were impacting the work of artists and designers. Under the headline of "The 'creation' and the 'creators,'" Guidot wrote:

While in many cases the creative process still escapes rationalization and continues in certain fields of the plastic arts, architecture, literature, and music, which are the traditional compartments of the "creative" space, to remain the prerogative of inspired individuals whose work is put together at the whim of their genius, in other cases, which become more and more numerous, "creation" now passes through the channels of systematized or even programmed research. Escaping more and more from the grip of the solitary researcher, it tends to find in laboratories, "schools," colloquia, congresses, etc. ..., places of confrontation of related research, or even real production machines (aerospace laboratories, IRCAM, Visual Art Research Group [GRAV], the colloquium in Cérisy-la-Salle, ICSID Congress, etc.). (Guidot 1981, 5–6)

Departing from this diagnosis of a trend toward collaborative artistic research, where could Thierry Chaput go when looking for inspiration or models for a project involving online writing?

It has occasionally been suggested that *Épreuves d'écriture* was influenced by a project of the British network artist and cybernetician Roy Ascott, *La Plissure du texte* (The folding of the text).¹⁸ Ascott realized this project as part of the exhibition *Electra*, which opened at the Musée de l'Art Moderne in Paris in December 1983. *La Plissure du texte* comprised an international collaborative writing process in which seven networked computers, located at different places in North America, Australia, and Europe, were used to write

17 The Minitel system, introduced in 1978, started operating on a significant scale around 1983 to 1985, coinciding with the preparations for *Les Immatériaux*. For a comprehensive history of the Minitel system, see Mailland and Driscoll (2017), and the early account in Gonzalez and Jouve (2002, 84–89). In comparison, the Californian online community service The WELL was started in 1985, while the hypermedia program Hypercard and the hypertext program Storyspace were both launched in 1987. For a timeline that includes related artistic and technical dates, see Madej (2016). For a history of word-processing, see Kirschenbaum (2016).

18 See, for instance, Gallo (2008, 134).

contributions to a single text which grew as new paragraphs were added from any of the hubs. The narrative, which Ascott proposed should revolve around the characters and motifs of fairy tales, evolved freely, and the resulting text was a meandering, often incoherent collage of a wide variety of text types.¹⁹

La Plissure du texte resembled a project that the Vienna-based Canadian artist Robert Adrian had organized for the Ars Electronica festival in Linz, Austria, in September 1982. *The World in 24 Hours* connected a variety of international nodes at mainly small, media-savvy art institutions all over the world, which contributed images, sounds, video, and text, on a variety of media channels. The thrill of the project was in the immediacy and translocality of the transmissions, and as Robert Adrian later commented, “the content was in the contact” (cited in Gidney 1991, 149).

For Ascott, too, the sense of interconnectedness, the thrill of being online with others, and the generation of a “network consciousness” were a crucial aspect of his work at the time. He wrote, in a tone only slightly more visionary than Guidot’s in 1981, that

[telematic communication] replaces the bricks and mortar of institutions of culture and learning with an invisible college and a floating museum, the reach of which is always expanding to include new possibilities of mind and new intimations of reality. (Ascott 2003, 200)²⁰

Around the same time that Chaput was beginning his research and Ascott was preparing *La Plissure du texte*, in August 1983, a group of “literary workers” in the US state of Washington ventured into creating *Invisible Seattle: The Novel of Seattle, by Seattle*, a collaborative writing project to which inhabitants of the city of Seattle were invited to contribute stories to the “civic novel” by typing them into a database via publicly accessible computer terminals.²¹ The literary

19 The writing phase of the project *La Plissure du texte* ran from 8–23 December 1983. The version of the text captured in Toronto (by Norman White) is online at <https://www.normill.ca/Text/plissure.txt>; the project description at Ascott (1983). In 1985, Ascott would contribute a project called *Alice au pays des merveilles* to one of the sites in the *Immatériaux*’s *Labyrinthe du langage*, on invitation by Frédéric Develay and ORLAN, who coordinated the Minitel-based art magazine *Art-Accès*.

20 In his text, first published in 1984, Ascott references the report by Nora and Minc (1980), which was influential for the development of the French media-political strategy of the 1980s (see Ascott 2003, 188, 192). Ascott’s text was more generally informed by frequent working visits that Ascott had paid to France in the early 1980s, referencing a number of media political and industrial initiatives. Ascott’s contribution to the *Electra* catalogue (Popper 1983, 398) appears as a summary version of this longer text. In a text published in the autumn of 1985 about his own program of telematic art, Ascott makes explicit reference to *Les Immatériaux* and its conceptual program, but not to *Épreuves d’écriture*; see R. Ascott, “Concerning Nets and Spurs: Meaning, Mind, and Telematic Diffusion” (1985), reprinted in Ascott (2003), 201–211, quotation on 204.

21 See Wittig (1994). The text of *Invisible Seattle* was first compiled and presented at the Bumbershoot Arts Festival in September 1983. The “Invisibles” group consisted of Jean

artists of the “Invisibles” group soon founded, in the form of a BBS, an electronic literary magazine, *IN.S.OMNIA* (Invisible Seattle’s Omnia), and went on to create print and electronic publications, in collaboration with, among others, members of the French Oulipo group. They were motivated by a set of ideas that they shared with many other artists discovering electronic networks at the time. Rob Wittig, one of the “Invisibles,” later likened the new online platforms to “an electronic town square,”

[a] digital coffee house, a place of refuge where they can be their various selves. ... Every reader is a writer, and new forms appear, a new writing that is at once literature, graffiti, conversation, and word games. By its structure, *IN.S.OMNIA* calls into question fundamental constructs of late Romantic literature: the Author, the Work, the Reader. (Wittig 1994, 6)

It is hard to ascertain exactly how much Chaput and his colleagues knew about such projects at the time or whether these may have influenced the conceptualization of *Épreuves d'écriture*. Yet, projects like these must have featured regularly in the conversations that Chaput had with colleagues and advisors, not least Jean-Louis Boissier, with whom Chaput was in contact since October 1982. Their first encounter had happened only days before Chaput went to Cannes for the VIDCOM congress, an international industry meeting about the production and distribution of video, the Minitel, and online databases for media content.²² As a co-curator of the *Electra* exhibition, Boissier initiated a meeting between Chaput and *Electra* curator Frank Popper in November 1982. Boissier was also present at some of the initial meetings with Roger Laufer, a long-time colleague of his at Paris VIII, and with the Oulipo group, whose experimental, computer-inspired poetry, ruled by self-chosen creative constraints, had had a wide-ranging and international influence on experimental literary circles since the 1960s.²³

Some members of Oulipo with a particular interest in computers, among whom were Paul Fournel and Jacques Roubaud, had been involved in a project on writers and computers at the Centre Georges Pompidou in 1977,²⁴ and went on to found the Oulipo-satellite group ALAMO (*Atelier de Littérature Assistée par la Mathématique et les Ordinateurs*, Atelier for Literature Assisted by

Sherrard, Larry Stone, Rob Wittig, James Winchell, and Philip Wohlstetter. A reconstruction of *Invisible Seattle* was attempted by Dene Grigar and others in 2012; the website was accessible in February 2021 but has since become unavailable.

22 See CPA 1994033W240_003.

23 The membership of Oulipo (*ouvroir de littérature potentielle*, workshop for potential literature) included avant-garde writers like François Le Lionnais, Raymond Queneau, Georges Perec, and Italo Calvino.

24 This project was co-organized by Christian Cavadia of the ARTA initiative of the Centre Pompidou. See Fournel (1999, 298–302); for an English version and further texts by and about Oulipo, see Wardrip-Fruin and Montfort (2003, 147–189).

Mathematics and Computers) in 1981.²⁵ Among the founding members of ALAMO were Paul Braffort and Jean-Pierre Balpe, who would eventually curate the *Machines stylistiques* section of the *Labyrinthe du langage*, as well as Jacques Roubaud and Mario Borillo, both of whom would be among the authors contributing to *Épreuves d'écriture*.²⁶

In July 1983, Boissier and Chaput went together to Informatique/Culture, a festival on computer culture organized by the French organization CIRCA in Villeneuve-les-Avignon. This was a seminal meeting of the French and US-American art, technology, and science scene, with participants including Edmond Couchot, Vilém Flusser, Benoît Mandelbrot, Ted Nelson, Lilian Schwartz, and many of the younger artists experimenting with new media at the time. There were conference panels and workshops on computers and literature (with ALAMO members Balpe and Braffort, and Ted Nelson), artificial intelligence and language research (with Mario Borillo), and the collaboration of art and industry (in the presence of the French Minister for Culture Jack Lang, and with, as one of the panelists, future *Épreuves d'écriture* author Marc Guillaume).²⁷ The festival thus provided the first major opportunity for Thierry Chaput to fully immerse himself in these media art and culture circles.

Through their regular contacts with *Electra* co-curators Edmond Couchot and Jean-Louis Boissier, Chaput and his team were certainly aware of Roy Ascott's project *La Plissure du texte*. At the latest, this encounter would have occurred when they visited the *Electra* exhibition together in December 1983, where they would have paid special attention to the projects curated by Edmond Couchot in the *Electra-numérique* (Digital *Electra*) section. But Chaput had already formulated the first proposal for a collaborative writing project eight months earlier, and, as we shall see shortly, the first meetings about its technical realization had already taken place in the autumn of 1983. It seems safe to say—also in light of the specific technical design of the *Épreuves* project—that it was probably not directly influenced by any of the mentioned projects, and that it formed part of the same cultural context in which the creative potentials of computer-based writing, hypertext, and electronic networks were being explored.

The Concept and Its Technical Realization

The elaboration of the “writing experiment” that would become *Épreuves d'écriture* involved the entire team at the CCI, including Martine Moinot, Sabine

25 The founding members of ALAMO were Simone Balazard, Jean-Pierre Balpe, Marcel Benabou, Mario Borillo, Michel Bottin, Paul Braffort, Paul Fournel, Pierre Lusson, and Jacques Roubaud; see ALAMO (n.d.).

26 Another *Épreuves* author and member of the scientific advisory committee, the mathematician Pierre Rosenstiehl, became a member of Oulipo only in 1992.

27 See the program booklet, CIRCA (1983).

Vigoureux, and Catherine Testanière. Yet, in addition to Lyotard and Chaput—the latter directing the technical process—two of the team members, Chantal Noël and Nicole Toutcheff, took on leading roles in the *Épreuves* project. Noël focused on the writing process and the publications, while Toutcheff worked specifically on its technical realization and its presentation in the exhibition.²⁸

Conversations about the technical realization of the project began in November 1983 with the company SERPEA (Société d'édition et de réalisation de presse écrite, audio-visuelle et télématique), which today we would call a start-up for network and multimedia content-management systems, geared especially toward services for the emerging Minitel system. In 1984, SERPEA employed around 10 to 15 people and was directed by Marco Scotto and Alain Rey.²⁹ The contact with the CCI team had first been established through SERPEA's involvement in the technical realization of the *Electra* exhibition, and because some of the artists working on interactive novels, like Camille Philibert and Jacques-Élie Chabert, who were considered for participation in the *Immatériaux* exhibition, had a close working relation with the company.

According to the notes in Moinot's calendar, the first meeting took place on 10 November 1983 between Nicole Toutcheff, Catherine Counot of the BPI, and Camille Philibert for SERPEA; the second was held on 25 November, at which Nicole Toutcheff and Thierry Chaput met Alain Rey for the first time, and three further meetings followed in December and January. At the end of December, Alain Rey drafted an initial project sketch which contained the general concept, the different elements to be realized, and a financial estimate.³⁰ Here and in the minutes of the various meetings, we find traces of the gradual elaboration of the project, its elements, and its size in terms of the number of authors.

By the end of February 1984, the conceptual framework for the "writing experiment" had been established. Lyotard offered the following description on 24 February during a meeting with the scientific advisors. The minutes report that

28 Chantal Noël had first worked for the review *Traverses*, published by the CCI since 1975, and then joined the Editorial Service of the Centre Pompidou in 1977, contributing to the publications of the CCI. At some point in 1984, she started working only on the publications for *Les Immatériaux*, taking her office in the CCI, where she worked with her assistant, Élisabeth Gad, and only returning to the Editorial Service after the exhibition in the spring 1985. Additional technical support was given by Jackie Pouplard, who was otherwise responsible in the Editorial Service for the production of the print publications.

29 Not identical with the linguist of the same name. SERPEA went out of business in 1985 or 1986.

30 See CPA 1977001W130_005. This draft was dated 30 December 1983. The other meetings took place on 6 December (possibly also with Lyotard), 11 January, and 26 January.

Mr. Lyotard then explains the “catalogue” product, which is made up of two parts, the memoir catalogue [that is, the *Inventaire* and *Album*] and the experimental catalogue [*Épreuves d'écriture*]. The memoir catalogue records and reports on the development process of this event. The experimental catalogue is the result of a collective work of about thirty authors who, on the basis of about fifty given keywords, have to define, comment, discuss, and correspond, in an experimental context of word processing machines, network, connection, interactivity.³¹

For our overall understanding of the project, we should note that here it is not Chaput, but Lyotard who presents and then defends the project, and who responds to the probing questions of the advisors:

Mr. Rosenstiehl asks what the rules of the game are? Is it a multi-voice diary? What is its purpose? A combinatorial, aesthetic, literary product? Is it a finished product?

In the course of the discussion that takes place, elements of answers emerge without effacing all the questions.

- Will the catalogue cover the exhibition?

Not exactly, but Mr. Lyotard hopes that the exercise around these 50 words, which summarize the issues of the event, will be the best witness of the conception of the different sites.

- Is the catalogue product intended to be aesthetic?

Not important, the aim lies elsewhere.

- But does it have to be sold?

Yes, but as a traditional catalogue. It is the report of an experiment that seeks to analyze, through practical application, the new techniques of writing.

- Are the two aspects of memory/experience then brought together?

In principle, yes, but the question remains open.³²

31 CPA 1994033W666_002. The minutes of previous related meetings (on 12 January 1984 with Boulez of IRCAM, and Melot of the BPI, CPA 1994033W666_014, and on 3 February 1984 with the Italian design expert, Enzo Manzini, CPA 1994033W666_015) don't yet give the impression of a stabilized conception of the project.

32 CPA 1994033W666_002. Additional funding for the editorial project had been sought in October 1983 from the Ministry of Culture, Direction du Livre et de la Lecture, Bureau de l'Édition et de la Diffusion (CPA 1977001W130_006 and 1977001W130_007), which responded positively in May 1984: "*L'octroi de cette subvention fera l'objet d'une convention entre votre établissement et ma direction. En vue de la rédaction de cette convention, il conviendra que vous m'adressiez un projet de budget détaillé de la partie éditoriale de la manifestation, comprenant l'édition du catalogue et l'expérimentation des nouvelles technologies*

It is not clear what role Lyotard had played in the conceptualization of the *Épreuves* project up to this point. Rey's concept sketch of 30 December had been addressed "à TC/NT" (Chaput and Toutcheff), and the minutes of meetings with SERPEA on 26 January and 23 February indicate that Lyotard was not present, suggesting that Chaput and the other team members could do these negotiations about the technical concept of the writing experiment without Lyotard.³³ Since his return to Paris at the beginning of December, and despite the fact that the questions of writing had played no explicit role in his own first conceptual sketch of August 1983, the *Esquisse*, Lyotard now appears to have fully adopted the catalogue project cum writing experiment as part of his own vision of what the *Immatériaux* exhibition will become. But it seems that he really enters into the project only after important parameters regarding the technical and organizational framework had been set.

What were still open questions in February were formulated more affirmatively only a few weeks later, in a document which would form the basis of the April 1984 *Présentation*, the first comprehensive, if preliminary description of the *Immatériaux* project as a whole:

5. The paper catalogue will consist of a box containing the preparatory texts for the exhibition (working documents) [*Album*] and the description of the sites [*Inventaire*]. The latter will also be accessible via the Minitel network which will be installed in March 1985 in the city of Paris.

6. A writing experiment with several people (about thirty writers, artists, scientists, etc. ...) will take place on word-processing machines set up in a network. Its results will be accessible to the public in the exhibition; the public will be able to intervene.³⁴

The shape and the limits of the ensuing conceptualization were closely related to and in part determined by the discussions about the project's technical realization, which were taking place during those weeks. In this process, the

appliquées à l'édition" (1977001W130_008). There is a document entitled "Expérience d'édition du catalogue" (handwritten note added: "*annexe édition*") that outlines how the catalogue could be produced entirely by computer. It reflects the conceptual stage that does not yet include the idea of the 50 keywords and 30 authors; at least, it does not mention either of them. It does, however, mention the "*lexique informatisé*" which will also feature in the meeting with SERPEA on 23 February 1984. As regards the style of the document, it could have been an appendix of the funding application to the Ministry of Culture for the editorial project.

33 CPA 1994033W668_007, CPA 1994033W668_008. According to the *Chronology*, Lyotard did participate in other meetings on 23 February 1984.

34 "*Les Immatériaux*, deuxième état," CPA 1994033W666_030, 10–11. Following on from this document, the press releases published in April 1984 (CPA 1977001W130_009, *Présentation*, 11), December 1984, and January 1985 offered variations of the official version of the project description that Lyotard and Chaput also presented in their introduction to the *Épreuves d'écriture* catalogue.

technical conceptualization was predicated not only upon technical feasibility but also upon what the participants in those discussions could imagine to be possible. We can speak of an entanglement of people, technics, knowledge, and imagination.

The SERPEA team and their technical expertise played a crucial role in this process. We will briefly introduce some of the people involved in this team in order to indicate the broader media-technical and industrial context of this project, and of *Les Immatériaux* in general.

It was especially Jean-Paul Martin who coordinated the technical realization of projects.³⁵ As an artist, Martin worked in the field of graphics, cooperating with Philibert and Chabert on interactive novels like *L'objet perdu*, which would feature in the *Labyrinthe du langage*.

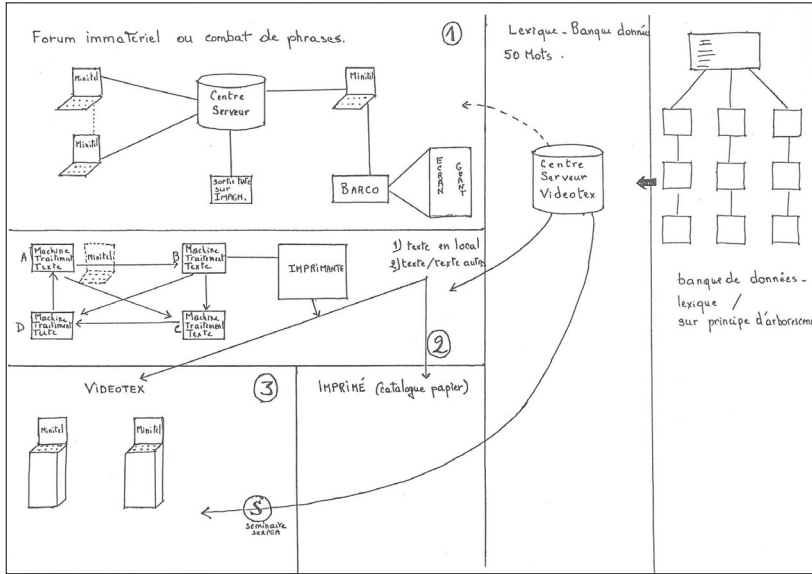
A frequent participant of the meetings with the CCI was Hadmut Holken, who as a German student in Paris had worked in 1982 for the DGT/France Telecom's Centre de Promotion de la Télématique, promoting the new Minitel system at commercial fairs. She met Alain Rey at the "Sommet de Versailles" in 1982 and started working for SERPEA in 1983 as the assistant to the director (Hadmut Holken, pers. comm., 27 March 2019).

At SERPEA, Pascale Deville was tasked with information management and the application and promotion of the Minitel system. Deville had studied law and developed her knowledge about the conceptualization of databases, the provision of screen-based information systems, and basic programming skills, when working for CIRA (Centre d'Information et de Renseignements Administratifs), offering juridical information to the broad public via telephone. She had worked for the PTT (later France Télécom) around 1980 to 1981, where she was involved in projects experimenting with info-screens in rural post offices—part of the preparations of what would become the Minitel system. For SERPEA, she also managed the presentation of the Minitel service at the Tsukuba World Fair in Japan in 1985. Deville later went on to work for various ministries, including the Ministry of Justice, coordinating their website and information systems.

Three topics intersected during the initial conversations, topics originally set by Chapat's proposals earlier in 1983: the idea for a collaborative writing experiment; the plan for an integrated, computer-based production of the catalogue; and the idea of recording the *parcours* of individual visitors through the exhibition by means of a "*carte mémoire*," a memory card, to allow for the printing of personalized catalogue excerpts when visitors exited the gallery.³⁶

35 For instance, Jean-Paul Martin participated in *Immatériaux*-related meetings like the one on 2 March 1984, marked in Moinot's calendar as "*SERPEA informatique*."

36 See the minutes by Martine Moinot for the meeting on 26 January (CPA 1994033W668_007) and 23 February 1984 (1994033W668_008). Another thread in these



[Figure 29] Operation diagram for the integrated production of the catalogue and the *Épreuves d'écriture* writing experiment. Sketch by Jean-Paul Martin/SERPEA. Reprint, *Album*, page 44. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

An important tool that supported these discussions were sketches and diagrams, like the diagram reprinted in the *Album* that proposed how the different aspects of the project might be technically and procedurally linked to each other (fig. 29).³⁷

The minutes of these meetings show how different aspects were weighed against each other: technical options and their practical and financial feasibility, the availability of computer hardware, the capacities of databases and computers, the cost of connectivity, and network transmission speeds. The participants from the CCI team and from SERPEA jointly evaluated how

conversations concerned a planned project called “*forum immatériel*”; it is not clear whether this working title referred to an unrealized, series of tele-conferences or to a writing workshop at SERPEA, planned with Chabert, Philibert, Martin, and others for June 1984, sometimes also called “*combat des phrases*” (see diagram, March 1984, reprinted in *Album* 1985, 43). Corinne Enaudeau has pointed out that the expression “*combat des phrases*” may have been coined with reference to Lyotard’s 1983 book *Le Différend* (pers. comm., 13 March 2021).

37 Judging by the style of writing and drawing, this sketch is by Jean-Paul Martin (Gisèle Cloarec, pers. comm., 3 October 2020); its main aspects can also be found as hand-drawn sketches by Martine Moinot in the minutes of a meeting on 8 April 1984 (CPA 1994033W668_011, 35–36). For an exemplary study of the role of such technical diagrams in the collaboration between artists and engineers, see Bardiot (2006).

these factors might impact the work of the authors and the eventual catalogue production.

Importantly, these were not discussions about the technical implementation of something that had been preconceived. Rather, the structure of the database, the number of authors, the number of keywords, as well as the envisaged number of lines per keyword, all these details emerged from the affordances of the technical system at hand. The technical system, in its conception and presentation by Alain Rey, brought about and channeled the imagination for what would become the *Épreuves d'écriture*. If originally the idea for *Épreuves d'écriture* had been born from the question of how electronic media technologies were changing the aesthetics of artistic creation, the project was now given its particular shape by the technical logic and affordances of the Minitel system.

There were, for instance, speculations about a degree of hypertextuality that could, in the end, not be realized: "Querying a keyword first generates the 'comment texts,' and then all the texts including this keyword, creating a path through the catalogue."³⁸ This notion of the path ("*parcours*") coupled the imagination of a hypertextual structure of the "online" catalogue with the idea of the *carte mémoire* which would record the individual *parcours* of a visitor through the exhibition. Throughout 1984, the idea persisted that the records on the *carte mémoire* might form the basis for an individually generated catalogue, composed of the "*fiches*" [sheets] for the sites and printed as the visitor would exit the exhibition.³⁹ Even if this project could not be realized, it may well have informed the conceptualization of how the visitors would move around in, and experience, the exhibition.⁴⁰

In some instances, pragmatic issues had to be weighed against conceptual ideas, as is documented in this excerpt from the minutes of the meeting on 23 February:

It seems essential for the team to keep the telecom connection between the authors even with splitting into time slots (network established according to the principle mentioned at the previous meeting). Real-time communication does not seem to be absolutely necessary for this

38 CPA 1994033W666_016, 3.

39 A simplified version of this idea is still mentioned in the invitation for the press conference at the beginning of January 1985, presumably drafted sometime in mid-December 1984: "*À l'entrée de l'exposition, il est remis à chaque visiteur une carte magnétique qui, introduite dans des plots situés sur le parcours, conserve en mémoire la 'trace' de ce trajet singulier. À la sortie, une machine imprimante échange la carte magnétique contre une cartographie de la déambulation qui y est inscrite*" (CPA 2009012W006_009). It is not mentioned in the press pack distributed on 8 January 1985, so the plan may have been dropped in the weeks between.

40 See Lyotard's considerations for the scenography of the exhibition, drafted in March 1984, in Lyotard (2015).

operation, a delay would be sufficient, based on the principle of a messaging board, for example. SERPEA is re-examining the problem on this basis.⁴¹

After such assessments, conclusive decisions had to be taken. In the following example, Alain Rey's experience clashed with the conceptual principles that Chaput and Noël envisaged for the writing experiment, and a decision was taken that had far-reaching consequences for the later course of the project. In the meeting on 28 March 1984, Chaput questioned the proposal by SERPEA to provide the authors, in addition to computers for writing their texts, with Minitel terminals for reading the submitted texts online. Instead, Chaput requested a technical set-up through which the authors would work using only one screen. According to Rey, such a set-up would require a more complicated installation and handling of the computers, which would, from his experience, result in the authors reverting to writing with pen and paper ("si tel est le cas, les auteurs passeront probablement par le papier"). However, both Noël and Chaput insisted that the Minitel terminals should not be used in such an ancillary manner. The minutes sum up the result:

At the end of the discussion, the decision was taken to do away with the Minitels as dictionaries for the authors and to carry out the experiment in its "purest" form.⁴²

The Minitel terminals would be used only in the exhibition, whereas the authors would do both their reading and their writing of definitions and comments on the same computers.

This decision resulted in a technical complication of the software program for *Épreuves d'écriture*. It forced the writers to work with two separate disks and separate programs for writing and reading, creating a practical hurdle that, as we will see later, frustrated them and caused a serious, maybe decisive, impediment for a livelier online debate.

After such general conceptual and technical guidelines had been established, it was possible to move on to the technical realization of the project. Alain Rey and Thierry Chaput worked together to procure the hardware sponsorship of computers from the Olivetti company,⁴³ and connectivity support from the

41 CPA 1994033W668_008, 4.

42 CPA 1994033W668_007, 2. The separation of writing (on computer) and reading (on Minitel) was described in the feasibility study by SERPEA dated 27 March 1984 (CPA 1994033W224_006).

43 There was a whole series of meetings with Giorgio Parisi of Olivetti France, starting in April 1984. A contract with Olivetti is drafted by the CCI on 27 July 1984, giving the technical details of the agreement, which was signed and returned by Olivetti only on 9 November 1984 (CPA 1994033W668_031).

state-owned VTCOM network agency, through the national telecom directorate, DGT (Direction Générale des Télécommunications).⁴⁴

There were unforeseen delays in these preparations during the spring, and it took until the end of July for the CCI to confirm the commission for SERPEA to develop the communication software and provide the server of the writing experiment by 10 September, and carry out the authors' training by 15 September.⁴⁵ Also at the end of July, the programmer Jean Tixier of SERIAL, who worked as a sub-contractor for SERPEA, was commissioned to realize the software.⁴⁶ A sketch by Tixier that found its way into the *Album*, "*Note pour le logiciel traitement de texte*," must have been drawn during one of the preparatory meetings that Tixier had with the team at the CCI, most probably with Nicole Toutcheff (*Album* 1985, 43).

While Tixier delivered the programs necessary to run the different elements of the technical system in September 1984, work on the software appears to have continued even after the authors started writing, responding to difficulties in the interaction or repairing bugs in the programs.⁴⁷

The Authors

The people who participated in the writing experiment as authors represented a broad spectrum of artistic and scientific backgrounds. They ranged from literary writers like Michel Butor, Maurice Roche, and Jean-Noël Vuarnet, experimental writers Nanni Balestrini and Jacques Roubaud, and science fiction writer Philippe Curval; through visual artist Daniel Buren, musician and theorist Daniel Charles, and theatre producer and theorist Jean-Loup Rivière; to the philosophers Jacques Derrida, Philippe Lacoue-Labarthe, Christine Buci-Glucksmann, François Châtelet, and philosopher of life sciences

44 Meeting notes 28 March 1984, CPA 1994033W668_007, 2.

45 CPA 1994033W669_262.

46 Reference is made to meetings with Tixier on 6 and 20 July 1984, and to the comprehensive, ten-page description of the technical requirements Jean Tixier summarized in a "*cahier des charges*" of 25 July which laid out the "*performances et l'ergonomie du produit*," as well as the estimated costs (CPA 1994033W239_002). No financial arrangements are laid out in these two documents of 27 July, suggesting that Tixier's estimate was accepted in principle and that there was urgency to start the work, even before a proper contract could be drafted and signed. The financial offer and a description of the tasks are laid out in a document by SERPEA on 3 September (amended on 14 September 1984), which also includes the cost for the software development (all of these in CPA 1994033W668). According to Gisèle Cloarec, the software for word-processing was implemented in DOS, while the software for the data transfer on the network was implemented in UNIX (pers. comm., 3 October 2020).

47 See the letter by Lyotard and Noël explaining amendments to the technical procedures, undated, CPA 1994033W669_245. A technical and historical analysis of the software developed by Tixier is pending. It is also not clear why the Olivetti M20 computer was used despite its apparent technical limitations.

Michel Tibon-Cornillot. Among the scientists, there were anthropologist and linguist Dan Sperber, science theorists Bruno Latour and Isabelle Stengers, sociologist Jean-Claude Passeron, psychoanalyst René Major, and theorist of the sociology and economy of media Marc Guillaume. The scientific advisors with whom Lyotard and Chaput had met regularly in the first half of 1984 were also authors of the *Épreuves d'écriture* (Mario Borillo, Paul Caro, Michel Cassé, Pierre Rosenstiehl).⁴⁸ Others who had also previously been part of the research process for *Les Immatériaux* included the philosopher and linguist François Recanati, with whom Chaput had already been in contact in 1982,⁴⁹ and the politician Hubert Astier, charged at the Ministry for Culture with questions of authorship and copyright.⁵⁰

The final list of 26 authors came together through a lengthy process to which different members of the team contributed (Martine Moinot and Chantal Noël, pers. comm., 25 September 2017, 16 March 2021). At the end of March 1984, a much larger number of around 75 people were contacted to ask whether they would in principle be interested in participating in such a project. In addition to most of the 26 eventual contributors, this long list of invitees included the curator Hubert Damisch; film and theatre directors such as Chantal Akerman, Peter Brook, Jean-Luc Godard, Ariane Mnouchkine, Alain Resnais, and Jacques Rivette; and philosophers and writers such as Jean Baudrillard, Italo Calvino, Michel de Certeau, Umberto Eco, Pierre Guyotat, Edmond Jabès, Edgar Morin, Paul Ricœur, Michel Serres, Claude Simon, and Paul Virilio. It also included Simon Nora, who co-wrote with Alain Minc a famous report to the French government about the informatization of society, published in 1978 and influential for the development of the Minitel system.⁵¹ Not all of these people participated. Even before the initial requests were sent out, it was clear that, due to the technical restrictions, a selection would have to be made if there were too many positive responses.⁵² By the middle of May, the number of responses was so high that such a selection became necessary.⁵³

48 See chapter 3. Of the scientific advisors, only microbiologist Jean-Pierre Raynaud did not participate in the *Épreuves* writing experiment.

49 See list of contacts established, 21 September 1982, CPA 1994033W234_016.

50 See notes by Martine Moinot for several meetings with Astier, CPA 1994033W668_003, 1994033W668_004.

51 See list "*auteurs sollicités*," collection Jean-Louis Boissier. The only two contributors who were not yet on this long list were Dan Sperber and Michel Tibon-Cornillot.

52 See minutes of the meeting on 6 March 1984, CPA 1994033W666_016, 2.

53 In a meeting with the scientific advisors on 14 May 1984, it was indicated that the scientific advisors might be unselected. (CPA 1994033W666_013.) With regard to the question of the entanglement of the concept, the technical system, and the project realization, it is noteworthy that, presumably due to technical and organizational reasons, it was apparently not possible at this moment to scale up the project by including a larger number of authors.

There are no records available about the actual feedback from the invitees or about the selection procedure that ensued, and it seems futile to speculate about a process that would have had multiple factors. One aspect that may have brought changes to the list was organizational: the schedule set out in the letters sent in March suggested that the authors would be given the computers in early June, and that the experiment would finish no later than the end of October. But due to the delays that occurred in the technical preparations, these dates had to be moved twice, perhaps making it difficult or impossible for some of the original prospective contributors to stay on board. And a new criterion of a more active selection may also have occurred as the intricacies of the technical system became evident during the summer, making it appear reasonable to prioritize contributors in the Paris region, where the necessary technical maintenance and support could be ensured more easily.

The accompanying materials, incl. the “Rules of the game” and the list of keywords, were sent to the authors in the first half of July 1984, and the authors were asked to submit the first set of definitions by 16 August, using “their usual writing tools.”⁵⁴ The delivery of the computers and training of the authors took place in late September, and the computer-based writing was finally possible from early October onwards.

The Words

The keywords around which the writing experiment would be structured were, according to the “Rules of the Game,” intended to be “fifty words related to the problematic of the manifestation *Les Immatériaux*.” Elsewhere, Lyotard

54 CPA 1994033W669_244, cover letter by Ch. Noël, undated (9 July 1984). The final lineup of the authors appears to have been volatile until the last moment. A list preserved in the archives of the Centre Pompidou contains the names of 29 contributing authors, of which three are struck through: electronic musician Tod Machover, and writers Pierre Guyotat and Jacques Roubaud. However, Roubaud did eventually participate, whereas the sociologist and psychoanalyst Marie Moscovici is on the list, but did not ultimately participate (CPA 1994033W233_004). According to his calendars, Lyotard met Pierre Guyotat on three occasions during these months (29 May, 21 June, 10 July, see *Chronology*), and presumably the name “Guyotat” was still included in the technical system in November: in a joking remark, Dan Sperber suggested that the name of this “*auteur fantôme*” could be used as a collective pseudonym by all others, if only they knew the login code for the vacant account (*Épreuves*, SPER. 186, 27 NOV., 18). A very similar list, adjoining an invitation letter to Claude Simon, dated 14 August 1984, includes Guyotat and Moscovici, but not Machover (CPA 1997086W011). The definitive list was sent to the authors by Noël in a letter, probably at the beginning of October (CPA 1994033W669_244). For a short commentary by Lyotard on the participants, see the transcript of his talk on 22 May 1985, 18–19 (CPA 1977001W130_003). On the issue of delivering the computers to the authors, see Noël and Toutcheff’s letter to Olivetti of 20 August 1984 (CPA 1994033W669_226).

and Chaput called them “a small lexicon of the im-materials” (introduction to *Épreuves*, 6).

A first attempt at putting together this list was announced at the end of the first meeting of the scientific advisory committee in December 1983, when Lyotard requested from the scientists for their next meeting the formulation of 10 keywords or phrases “which elaborate on the issues raised in the dossier and discussed at this first meeting.”⁵⁵ However, what the scientists brought to the next meeting in January 1984 was a mix of notes and sketches, while only Raynaud brought a list of short keywords.⁵⁶ The discussion with the scientists soon turned to suggestions for exhibition sites, while the discussion around the writing experiment took its own independent course in which the composition of the list of words was left until quite late. The list was probably put together only in July 1984. This happened in a procedure that was carried out collaboratively by the team, together with Lyotard, as can be deduced from several handwritten and photocopied lists, two of which were facsimiled in the *Album*, while several others have been preserved in the archive.⁵⁷

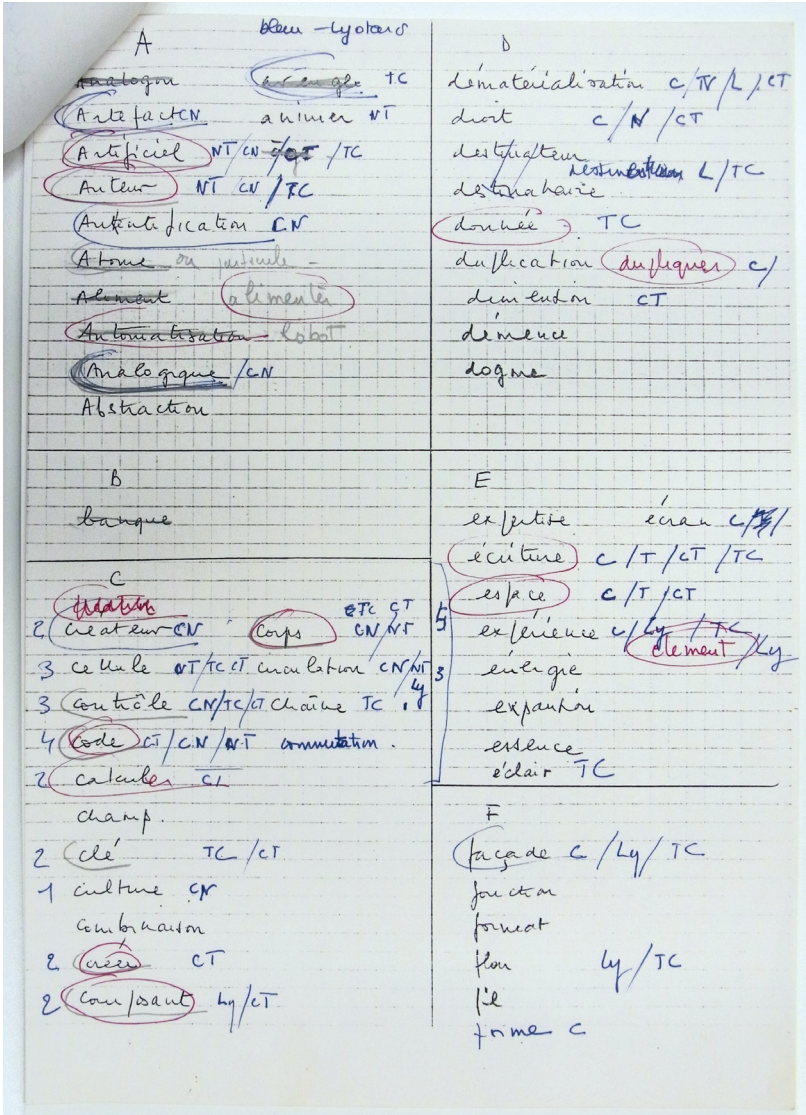
As a first step, the team members were asked to assemble lists of words that they felt were relevant to a reflection on *Les Immatériaux*; from the various lists, one long list of words was compiled (Martine Moinot and Chantal Noël, pers. comm., 25 September 2017).⁵⁸ The longest version of this list, handwritten by Nicole Toutcheff and with further additions by Martine Moinot, contains more than 300 terms. From this list, a reduced version containing 170 words was made—one copy of which was printed in the *Album*. The team took votes on the different terms. While the list in the *Album* registers only the numbers of votes cast, in another copy of this list, Martine Moinot registered the people who voted for the respective words, comprising Thierry Chaput,

55 CPA 1994033W666_001, 3.

56 See Borillo (dated 20 January 1984, CPA 1994033W666_008), Caro (n.d., CPA 1994033W666_006), Cassé (dated 23 January 1984, CPA 1994033W666_005), and Raynaud (dated 23 January 1984, CPA 1994033W666_007).

57 *Album* (1985, 40–41), and CPA 1994033W668_012. It is not clear when exactly these lists were made, though they might relate to a team meeting on 6 July 1984 (see footnote 58).—A preliminary schedule discussed on 6 March (CPA 1994033W666_016) suggests that, at that earlier point, it had been planned to integrate feedback on the keywords from the authors by the end of May, before the database system and the computers for writing would be installed (at that moment envisaged for June). This possibility was apparently dropped in the face of the delays that mounted in the spring and summer.

58 “There were,” as Moinot remembers, “suggestions from everybody.” Although there is no clear indication when the selection of the words took place, the date of submission of materials including the list of words around Monday 9 July, suggests that the selection may have taken place during (or at least not later than) a day-long meeting of the CCI team with Lyotard on Friday, 6 July 1984 (see *Chronology*).



[Figure 30] List documenting the selection process of the keywords for the *Épreuves d'écriture* writing experiment, written by Martine Moinot, August 1984. Centre Pompidou Archives. [1994033W668_012]

Jean-François Lyotard, Martine Moinot, Chantal Noël, Catherine Testanière, and Nicole Toutcheff (fig. 30).⁵⁹

The selection of the first set of words was then made on a purely quantitative basis. This first set was drawn from all those words that received at least four votes; these were 30 words which were all included in the final list of 50:

artificial	image	memory
author	interaction	money
code	interface	multiple
body	language	nature
dematerialization	light	order
writing	content (matter)	prosthesis
space	raw material	sign
facade	hardware	simulation
gesture	matrix	time
habitation	maternity	speed

These words more or less directly reflect the concepts that guided the curatorial process.⁶⁰ They included the five *Mât* terms, as well as a number of terms which appeared in some form in the titles of exhibition sites (for example, "body," "dematerialization," "habitation," "image," "light," "artificial," "memory," "money," "time," "simulation," in *Corps éclaté*, *Matériau dématérialisé*, *Habitacle*, *Images calculées*, *Lumière dérobée*, *Mémoires artificielles*, *Monnaie du temps*, *Visites simulées*, etc.). Other terms were drawn from the register of media and technology ("code," "interaction," "interface," "prosthesis," "speed," etc.). The fact that a quantitative method was used for selecting these words suggests the wish to arrive at a basic set of "most common" terms.

For the next set of words, an active selection was made from the words that had received three votes:

law	proof	translate
immortality	network	voice
mirror	sense	
mutation	simultaneity	

Beyond the quantitative criterion of votes, a qualitative decision must have come into play here, because there were a number of other words with

59 Moinot registered only the votes taken by others, which explains the discrepancy between, for instance, the five acronyms ("C, N, CT, Ly, TC") she registered for the words *lumière*, *temps*, and *vitesse*, and the tally of "6" for these words in Chantal Noël's version of the same list printed in the *Album*.

60 It seems that the exact number of words in this set (30) was arbitrary, because the distribution of votes beyond the threshold of four could not have been predicted.—The English translations of the keywords are listed here in the sequence of the French original. For a synopsis of the full list in French and English, see Appendix 3.

three votes that were not chosen: "cell," "component," "control," "circulation," "experiment," "taste," "manipulation," "model," "origin," "perception," "property," "support."⁶¹

Finally, a second long list was composed in order to arrive at the 10 words yet missing to arrive at 50 ("*liste des 10 derniers mots à choisir*").⁶² There is a strong sense of qualitative decision-making in this final procedure, given that during the previous, quantitative procedure, a variety of words were actively excluded. Instead, a new vocabulary, again in alphabetical order, was composed. It served to arrive at the last set of 10 words:

capture	improbable	seduce
confines	meander	breath
desire	metamorphosis	
blur	navigate	

It is difficult to interpret these different lists. However, it seems clear that, in the overall procedure, there was a strongly collaborative element, choosing 30 of the 50 words through the slightly arbitrary, quantitative method of a majority vote with all team members.⁶³ Moreover, in this last set of 10 deliberately chosen words, there is a tendency toward a register of nontechnicity, transformation, and excess, which suggests that Lyotard himself was strongly involved in the selection, especially in this final phase, contrasting the more "modern" tendency of the first set of 30 words with what we could perhaps call a "register of the postmodern." These final 10 terms point toward the modes of resistance against the modern technosciences which Lyotard occasionally spoke about in the mid-1980s, a resistance which could in fact be characterized by resorting to terms such as "desire," "blur," "improbable," "meander," "metamorphosis," "seduce."⁶⁴ Even a term like "capture," which appears to derive from a modernist, technoscientific register, can be read as a critical term that highlighted a problematic aspect of the technosciences, giving a critical inflection to the previously selected, more neutral terms. A critique of

61 See *Album* (1985, 40): *cellule, composant, contrôle, circulation, expérience, goût, manipulation, modèle, origine, perception, propriété, support*.

62 See *Album* (1985, 41), handwritten by Chantal Noël; in the Centre Pompidou Archive there is a similar list registering the same procedure ("*liste de 10 mots restant à choisir*"), handwritten by Martine Moinot (CPA 1994033W668_012, 3).

63 Lyotard himself commented in a public talk that he gave on 22 May 1985, during the exhibition, on the "list of 50 words, which have been worked out by the team and which belong to the semantic field ... of the exhibition; 50 words taken from there, some very close, others further away, but in fact as in topology, often much closer than those that are close" (CPA 1977001W130_003, 18).—The example of the two lists underscores the fact that the documents in the *Album* were deliberately chosen to offer the audience a direct insight into important curatorial procedures.

64 See the discussion of Lyotard's critique of technoscience in chapter 3, and his discourse on the notion of resistance in chapter 9.

the mechanisms of capture might well have featured in an exposition of what Lyotard sketched, in March 1984, as the “informatics of domination.”⁶⁵

For the more general question of what the list of 50 words may have meant for Lyotard, it is significant that at no point in 1984 through 1985 does Lyotard seem to have had the urge to write about these terms himself (which he will only do in his response to Derrida’s entries in 1990, in “Notes du traducteur”) or to participate in the writing experiment of autumn 1984. This detachment was complementary to the fact that he took the selection of the words as a collective effort, done together with the team. Lyotard felt no inclination to be the author of either the list of words or the reflections that they elicited.

The Writing Process

When in the summer 1984 the writing process of the *expérience d'écriture* began—it was yet referred to as an “experiment” (*expérience*) and not yet as a trial (*épreuve*)—the authors were equipped with the list of words as well as with the April 1984 concept for the planned exhibition.⁶⁶ Lyotard’s conceptual outline provided in this *Présentation* thus became an important rhetorical hinge that set the tone for several of the contributions. In the guidelines that laid out the “rules of the game” (“*la règle du jeu*”), the challenge of the overall experiment was formulated in media-theoretical terms: “Moving from graphic inscription to electronic display: probing the effects of new machines on thought formation.”⁶⁷ Even the letter of invitation that the authors had received in the spring had already made it clear that the goal of the experiment was the publication of the texts, in print and on the Minitel network. And from the start, the self-reflexive aspect of the experiment was emphasized:

- 65 See Lyotard (2015, 65), and above, chapter 3. Several other interpretive paths can also be taken; for instance, Lyotard had a penchant for the word *méandre* because it was (almost) an anagram of his first wife’s name, May Andrée (Dolorès Lyotard, pers. comm., 12 March 2021). As regards the word *confins*, at the time Lyotard was co-editing a collection titled *L’Art des confins* (Cazenave, Gandillac and Lyotard, 1985). Other conjectures could be made on the basis of Lyotard’s responses to Derrida’s definitions of the terms in Lyotard (1990c).
- 66 See *Épreuves*, 9, side note. The version of the *Présentation* that was given to the authors was a typed document (CPA 1994033W666_029) whose text is almost identical with the typeset and printed version produced in April 1984 (CPA 1977001W130_009, partly facsimiled in the *Album* [1985], 16–22).
- 67 For the “rules,” see *Épreuves*, 6–7. A first sketch of these rules can be found in the handwritten minutes of a CCI team meeting on 22 March 1984 (CPA 1994033W668_011). The rules were also part of the contractual agreement that was made with each of the authors and that also determined the granting of comprehensive publishing rights of the texts to the Centre Pompidou. This contract apparently impacted the attitude of the authors toward the experiment, since, even though they were anything but strict, frequent reference is made to the “rules” throughout the book. It may have been a somewhat irritating feature, not least for the authors associated with Oulipo, who were used to writing under a set of constraints but not ones that were legally binding.

"In particular, we would like you to comment on the modifications this brings about in your experience of writing."

The authors were asked, in a first phase, to give short, two- to ten-line "definitions" of at least 15 to 20 different words.⁶⁸ And in a second phase, after these definitions would have been uploaded to the server and shared with the other authors, either to continue to work on their own definitions, or respond to and comment on ("complete, refute, modulate") the definitions by others, "by connecting to other authors, to link on the one hand to their definitions and on the other hand to their own linkages for whatever reason" (*Épreuves*, 7).

The technical procedure required of the authors for reading and writing is summarized in a short text that the journalist Brigitte Dyan added at the end of her interview with Noël and Toutcheff for the *Modernes, et après?* anthology:

When turning on his microcomputer, the author has to introduce a communications software program in the form of a floppy disk. Then, after a number of instructions, insert another diskette, switch on his modem, dial a number on his telephone. Now he has access to the central memory, which offers him a menu of five possibilities: consulting the texts by author, or by word, or finally by path, i.e., by the succession of submissions and replies. He can also send or call up a text. For the latter operation, he must first use one of the three modes of consultation. Sometimes he has to switch from one mode to the other to compare, for example, a certain discussion thread with the totality of an author's texts. When he calls up a text to read it, he goes into reception mode, the text arrives on his diskette, without being visualized. The screen displays, "procedure in progress, do not touch anything." This can take a long time. Finally, the author retires the software, turns off the modem, inserts the word processing program, chooses "read" mode, then calls up the text. If the text has been correctly received (if there has not been a break in the telephone line), the text finally appears on the screen. If not, everything has to be started again... (Dyan 1985, 37)

A photo taken at the time shows one of the authors, the philosopher François Châtelet, at the Olivetti M20 computer with two slots for the eight-inch floppy disks: one for the software programs, the other for storing and retrieving the

68 The first set of definitions was delivered to the CCI by the authors only on paper, even though some authors had written their contributions on their own computers, as evidenced by the printer typography (see UC Irvine Critical Theory Archive Jacques Derrida, MS.C.001b, box 59, folder 2). The texts were typed into the system by the team at the Centre Pompidou (presumably by Chantal Noël and Élisabeth Gad, and the secretary Véronique Guillaume), and only from October on the authors could use their M20 computers for commenting the contributions of others. This is also how the procedure was described in the "rules of the game" (see *Épreuves*, 6-7), and in Lyotard's talk on 22 May 1985 (CPA 1977001W130_003, 18).

texts. The photo also shows a list of handwritten notes next to Châtelet, which appear to be the instructions that he took down while receiving his training from Hadmut Holken of SERPEA (fig. 31).

The writing process was supported by the team of the CCI, a fact that the authors occasionally make reference to in their contributions. The editors, on their part, were monitoring the progress of the contributions on the server located at the CCI office in the Centre Pompidou, and took on the challenge of guiding the authors through a complicated and sometimes frustrating experience. In their "Post-scriptum," they write retrospectively:

The rules of the game have certainly not been assumed by everyone, and not always in this [sporting] spirit. They were sometimes rejected, sometimes opposed by silence, an avarice of writing, anger against the masters of the game, suspicion mixed with curiosity with regard to the "*dames Pompidou*" (the people in charge of the operation who at the Centre received calls for help, requests for explanations, insults, recriminations, for two months, without losing heart). (Gad et al. 1985, 262)

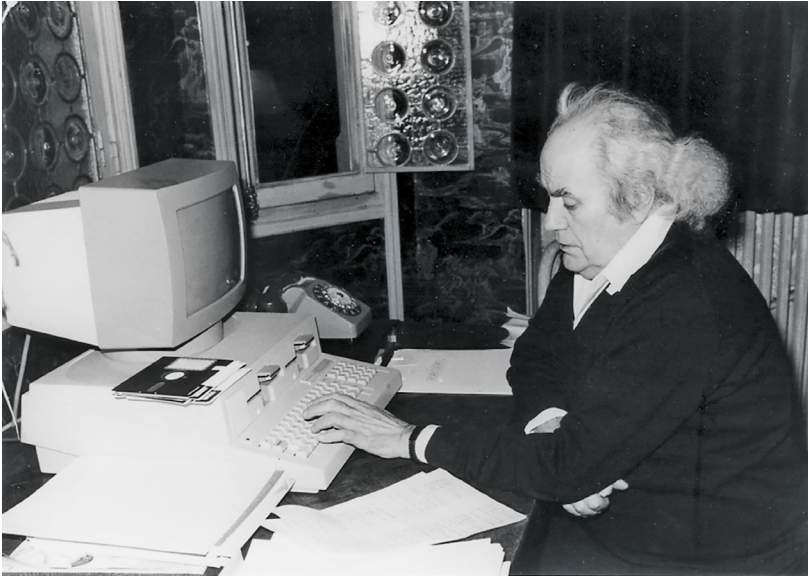
Given the procedural complications and the limited transmission rates for downloading the online texts, the authors were sent a 191-pages long, photo-copied compilation of all initial responses.⁶⁹

The contributions by the different authors were hugely divergent, and it seems difficult to find an analytical angle that would make it possible to look at the whole of the *Épreuves d'écriture* as one united text. The evaluation in the "Post-scriptum" identifies a variety of different attitudes and roles that the authors adopted, and sometimes switched between. The editorial team summarized:

One might expect the result ... to be a kind of puzzle, a patchwork, a collage. This is not exactly the case. Rather, we see a kind of collection of opinions relating to the same corpus of terms, but written in heterogeneous genres and styles. So, a doxographic anthology, which could also be a satire, in the old Latin sense of *salad*. Or, if one prefers, a volume taken from the Borgesian Library of Babel, one of those works where the total content of the library is shown in miniature. (263)⁷⁰

69 See the cover letter by Chantal Noël (CPA 1994033W669_244), and the full set of texts at UC Irvine Critical Theory Archive Jacques Derrida, MS.C.001b, box 59, folder 2. For a thorough description of the complicated technical procedures, see the manual provided by SERPEA, entitled "Écriture sur écriture" (UC Irvine Critical Theory Archive Jacques Derrida, MS.C.001b, box 59, folder 5, 29–49, second version 65–79). Noël also remembers contacting various authors by phone, including Derrida, in order to check whether they were experiencing any problems, and to encourage them to write (pers. comm., 25 September 2017). She also recalls a personal correspondence with Lacoue-Labarthe, after the end of the project (pers. comm., 16 March 2021).

70 Corinne Enaudeau affirms that this usage of the term "*salad*" was dear to Lyotard (pers. comm., 13 March 2021).



[Figure 31] François Châtelet in his study with the Olivetti M20 computer provided to him for the *Épreuves d'écriture* writing experiment, October 1984. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet for Olivetti France. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0464]

There are different possible methods to analyze this complex material. One would be to look at all the entries of individual authors, in order to get a sense of their specific contributions and thus try to unravel the labyrinthine structure. Another would be topical, drawing out key themes that run through much of the book, and analyzing how they develop over the time of the experiment and between the different authors. What one would find, in any case, is that many of the contributions are rather tame attempts at responding to the set task, making chapters like the one on the keyword *espace* (space) very general, failing to probe the concepts beyond a variety of “modernist” affirmations.⁷¹ This is increasingly the case in the second half of the book, showing how the alphabetic listing prioritized engagement with the words that come before the letter N. At the same time, some chapters—for example, on *auteur*, *métamorphose*, and *simulation*—stand out with their particularly spirited exchanges, which fulfilled the hopes associated with the experiment.

71 See also the comment by Curval on the absence of any responses to the initial definitions in this chapter, CURV. 110, 15 DEC., 69. The chapters on the five *Mât* terms are also conspicuously short (see 123–133); presumably, these terms were so ostentatiously “claimed” by Lyotard in the *Présentation* that most authors may have shied away from them. These and the following references are all from *Épreuves* (1985).

The perspective we take in the present analysis is rather structural, looking at how the different authors and their texts contributed to the communicative and self-reflexive, media-theoretical goals of the experiment. We can identify three different types of approaches among the authors: first, those who wrote only the bare minimum and whose contributions remained solipsistic; second, those who made occasional, if monological responses to other authors; and third, a small number of authors who engaged actively with the communicative and social situation that had been technically enabled for them.

In the first group were several authors whose entries were all registered on only one day, and who did not contribute to the second phase of commentary and dialogue. Among them were Astier, Buren, Charles, Châtelet, Latour, Rosenstiehl, and Roubaud.⁷² Their “definitions” reveal a serious engagement with the keywords that they chose to write about. Daniel Buren, for instance, consistently relates the respective term to the context of art,⁷³ whereas the contributions by Daniel Charles frequently engage with the relationship of the modern and the postmodern. In this first group, we can also find two of the writers: Michel Butor consistently submitted one short text for each of the keywords, literary miniatures which reflect more or less explicitly on the respective terms, but not once does he relate his responses to any of the other contributions.⁷⁴ And Nanni Balestrini contributed two sets of texts, one at the beginning of the first project phase and one at the end of the second. The first set of texts stochastically combine different keywords and construct “automatic” sentences with them, while the second applies a similar, random

- 72 Like everyone else, these authors sent their initial contributions to the Centre Pompidou on paper, after which these were typed and uploaded by the CCI team on the respective dates when these entries were registered. It is possible that these authors logged on later to read contributions by others without responding to them; it is, however, also conceivable that some of them never actually logged on even once. (Note that the computer screen in the photo of François Châtelet, fig. 31, is switched off.) Most of the dates in the *Épreuves* catalogue seem to make sense, but there are some small inconsistencies which are perhaps due to mistakes in the editorial process. For instance, BUTO. 048 [*prothèse*] and BUTO. 057 [*signe*] are dated 30 October, while all other BUTO entries from 043 onward are dated 30 November; there is an entry BALE 068 [*signe*] dated 18 December, and one BALE 071 [*souffle*] dated 12 December, while all his other late entries are dated 16 December. In the appendix to *Épreuves* (248), Major (MAJO) responds to a late entry by Vuarnet (VUAR); both entries are dated 16 December; yet, how could Major know about something that Vuarnet had sent to the CCI by post?
- 73 Buren later lists his contributions among his writings (*Écrits*) on his website (danielburen.com/bibliographies/1/25); they were reprinted in Buren (1991), 81–86, and in German (1996).
- 74 In a detailed recollection of his friendship with Lyotard, Michel Butor does not mention the *Épreuves* experience, which in the economy of this particular memory appears to have been less important, or not registered, or not registered as something they shared. See Butor and Harvey (2001).

system to words and short phrases that had been used by other authors in their definitions.⁷⁵

Two other authors who barely contributed to the dialogical aspect of the project are Philippe Lacoue-Labarthe and Isabelle Stengers. Both of them, however, returned on one occasion to report about their writing experience. In a personal letter addressed to Lyotard, Lacoue-Labarthe apologizes for his failure and explains how his usual mode of writing and his phobia for technology and the instructions for using it, as well as his lack of knowledge about the themes guiding *Les Immatériaux* in general, made it impossible for him to participate in an adequate manner. He admitted that he should not have accepted Lyotard's invitation in the first place. Lacoue-Labarthe concludes:

Basically, the machine should have freed me and made my writing "light"—all the more so as the experience was eminently social and I don't dislike sociality at all, at least restricted sociality, conversation. The opposite happened: my inhibition was stronger. Which, paradoxically, can be considered as part of the experience, let's say under the heading of "resistance." (*Épreuves*, 244)⁷⁶

In contrast, Isabelle Stengers used a response to the keyword *preuve* (proof) for a polemical critique of the experiment, imputing that one of the goals of the experiment was to convince the participants of the usefulness of its technical system.⁷⁷ To the contrary, however, for her the experience was one of intense frustration:

the slowness of the procedures for receiving texts, the fact that it is not possible to "peek" at a text without first storing it, and that it is therefore not possible to get a quick overview of an author's production or of the various definitions of a word, will make the thesis that the machine

- 75 See Gallo (2008, 135), for a reference to Balestrini's writing experience. The second set of contributions by Balestrini, registered on 16 December, was perhaps inspired by a proposal that Butor made in a rare, nonliterary contribution on 30 October (BUTO. 020, 28). What Butor suggests here sounds like a program for what Balestrini will execute.
- 76 LACO., 16 DEC. See also the self-reflexive contributions in the appendix by Major (232–233) and Borillo (237–242), and the reflections by Balestrini, Lacoue-Labarthe, and Roubaud (Soutif 1985, 31) about their experience of writing on a computer.—For all of the citations from *Épreuves* (1985), I include the code from the print publication, indicating the first letters of the author name, the sequence number (when given), the date on which the submission was logged in the system, occasionally followed by the page number.
- 77 Stengers refers to an earlier comment by Latour: "The problem with even the most striking evidence is that it ultimately proves little. It only convinces if it is accompanied by many preconditions. For example, no one in their right mind would be convinced of the usefulness of a home computer. It has to be pushed by a network. There is always too much interest in the proof itself and not enough in the quality of the network that accompanies it" (LATO. 105, 9 OCT., 187).

fools the author remarkably convincing. After an hour of successful but repetitive and unfruitful operations, I smoked too much and I have a headache.⁷⁸

Stengers argues that the true goal of the experiment appears to have been to introduce a number of intellectuals not to a new form of communication but to using a word processor, a goal that could, as she believes, have been reached in other, simpler ways:

In France, in any case, communication by modem is for tomorrow, but today word processing can serve you. The misunderstanding is that, in fact, I was already convinced.⁷⁹

A second set of authors comprises those who occasionally responded to the contributions by others, thus signaling that they had actually logged on to the central server in the second project phase, and retrieved at least some of the various texts. In this group we find Marc Guillaume, René Major, Jean-Claude Passeron, Jean-Loup Rivière, Maurice Roche, and Jean-Noël Vuarnet, as well as some of the scientific advisors, Mario Borillo, Michel Cassé, and Michel Tibon-Cornillot—all three submitting often lengthy, monological explanations on certain scientific topics, in a form that seems to have prolonged their deliberations during the advisory committee meetings.⁸⁰

In this second group of occasional respondents we find two major exceptions: both Christine Buci-Glucksmann and Jacques Derrida made an effort, in the first half of December and thus toward the end of the project phase, to contribute to the project by responding directly to definitions submitted by other authors.⁸¹ Buci-Glucksmann's initial definitions had been submitted on

78 STEN. 175, 20 OCT., 187–188. Recanati foresaw this and speculated about how discouraging the experience with the word processors and modems must be for novices, whose “inexperience combined with the bugs and the idiocy of the software must have effects likely to discourage them forever” (RECA. 147, 18 NOV., 59).

79 STEN. 175, 20 OCT, 188. Writing here somewhat impatiently and prematurely on 20 October—the project had been running for only three weeks, and had eight weeks yet to go—Stengers declared that the authors were not communicating, decrying something that was not even intended during this first phase of the experiment. However, it may well be that the foundations for the awkward reputation of the *Épreuves* project were already laid, and for some cemented, during this problematic starting phase.

80 Some of these contributions (for instance, PASS, 20–21, 43–45; TIBO, 28–31, 249–253) were uploaded only on 16 December. These were obviously intended by the authors as material for the publication, but not as contributions to the dialogue, since at this late moment no one could respond anymore; a certain remorse about this can be sensed in some of Major's contributions in the appendix. In the “Post-scriptum,” the editors also remark on the “didactic” style chosen by some of the scientists (see 262).

81 There are entries in Lyotard's personal calendar for 28 October (“appeler Jacques D., Christine”) and 3 December (“appeler Jacques D.”) which might indicate that Lyotard called Derrida and Buci-Glucksmann in order to ask them to contribute to the second project phase (see *Chronology*); however, these calls may have had other reasons.

8 October, addressing 15 of the 50 keywords, registered all on the same day. She returned in December to write a series of six responses to contributions by other authors, commenting on keywords that she herself had previously written about (*capture, désir, image, métamorphose, miroir, simulation*), which suggests that she retrieved and read the multiple entries for these keywords that she felt most interested in. In her replies, Buci-Glucksmann vividly engaged with the previous contributions, quoting the authors, weighing and expanding their arguments, and referring to examples from literature and art history. Whereas such responses would usually get linked to a single previous entry, in the case of her response on the keyword *image*, Buci-Glucksmann directed her reply to five previous entries, making it a recension of the discussion as a whole and signaling a broad and synoptic approach that she was taking to the textual material.

In her reply (on 13 December) to what Derrida had written (on 5 December) in response to her own earlier definition of *capture*, Buci-Glucksmann offers a reflection on some of the tropes Derrida had used:

Would “telextextuality,” “telemachination,” place us in this type of experience of the sublime in the absence of a body? Technological dematerialization through the interface of the screen hardly institutes this “erroneous togetherness” proper to true seduction. Too “coded,” too contained, too little excessive, too much *mât*, even if everywhere there is absence, emptiness, something that establishes dialogue. I capture messages, texts, I build up a memory, I call the other, I interpellate, I extrapolate ... Of course I do. But the capture by the imaginary—“by the memory of an image”—that which situates me, destitutes me and “kills” me is a completely different economy. “Margins of philosophy,” margins of the screen perhaps, the place of writing: “This general space is first of all spacing as a disruption of the presence in the mark, what I call here writing,” you wrote.⁸²

These responses by Buci-Glucksmann, arriving late in the process, only days before the experiment finished, could hardly be taken up again by others. But they show a critical engagement with the topics, and a commitment to an open and personal exchange.

Another exception in the second group of authors who replied occasionally is Jacques Derrida. His contributions to the first project phase already stand out because he was, besides Michel Butor, the only participant who wrote initial entries for each of the keywords.⁸³ It seems that he approached the

82 BUCI. 086, 13. DEC., 25.

83 Apart from two entries which were registered on 9 October, all of these first-phase definitions by Derrida were logged on 10 October 1984. See the various preparatory versions of Derrida's texts in UC Irvine Critical Theory Archive Jacques Derrida, MS.C.001b, box 59, folders 1-4; the version submitted to the CCI on 27 August 1984 can be found

whole series of his contributions as an integral task, leading not to an overarching, coherent text, but to a series of fragments which correlated on different levels, frequently drawing on the vocabulary offered by the list of words, and connecting general philosophical reflections with the themes of *Les Immatériaux* laid out in the *Présentation*, and with the circumstances of the writing experiment.

Derrida returned later that autumn to submit seven responses to other contributors (on the keywords *artificiel*, *auteur*, *capture*, *code/confins*, *droit*, *geste*, *immortalité/signé*), all registered on 5 December. For example, in a summary response to the definitions of the keyword “author” by Passeron, Major, and Lacoue-Labarthe, Derrida wrote:

All three of us insisted on augmentation and on the law. To what extent are we the authors of our texts about the author? We have submitted ourselves to the necessity of a concept and a rule of the game, to a list of words as well, and to other authors, the author of which basically remains rather indeterminate, disappearing. Is there an author in this common enterprise? Who? Where? The said disappearance of the author perhaps always passes through the experience of such a socio-technical device (word processor, anonymous telephone exchange, etc.) which now reflects what has been happening in the “cultural world” for so long, forever. Unless, through the machine of immaterials, to lose tone and hand in it, by giving up all our old mirrors, we are still seeking to augment ourselves with some additional authority, an authority so symbolic, it is true, that the image no longer belongs to us, nor any other living wage. But let’s not forget, everything is still signed, no one has the right to touch the text of the other, our copyright is very much protected as in the good old days of modernity (17th–20th centuries).⁸⁴

Among the small number of more active participants who we will turn to in a moment, such late contributions were met with irony, as can be seen in an entry written by François Recanati who, using the metaphor of a message in a bottle, quipped about the many participants who had disappeared from the screens. Recanati wrote in direct response to Derrida’s contribution quoted above:

in folder 2, 73–99. See also Derrida’s cover letter copied to Lyotard, *Bibl. litt.* Jacques Doucet, Paris, JFL 39. I’m grateful to Kiff Bamford for pointing out this source.

84 DERR. 139, 5 DEC., 19. This set of responses by Derrida were apparently based on his reading of the photocopied texts. He seems to have sent the responses to the CCI team on paper; see the compilation of Derrida’s responses in an undated, typed four-page document at UC Irvine Critical Theory Archive Jacques Derrida, MS.C.001b, box 59, folder 4, 47–48.

It had been more than three days since I had confided [on 3 December] to the waves of the sea the chronicle 158, when one of the twenty missing, perhaps the most famous, suddenly appeared in the circle of survivors. He did nothing to dispel the mystery of his well-shaven cheeks, his fresh and clean clothes, belying what we had imagined of his long absence. He did not utter a word that could shed any light on his trials, nor did he ask any questions about the nineteen others who had disappeared. Nevertheless, as usual, he was loquacious, and his playful words were like messages from another time, from another world.⁸⁵

But Recanati's allegations were not completely justified, since in what appears to have been his final contribution to the *Épreuves, on immortalité/signé*, Derrida had, in fact, "shed some light on his trials":

The time of the immaterials is also, as it has long been in Japan, the time of cemeteries without bodies or graves. Word-processing machines and small urns, barely. Just a little respite: we didn't really write on our new machines, we wrote by hand on our old typewriters, electric or not, and then laboriously transcribed. It is true, however, that some cruelty was noticeable: when my first words were "grasped," the difficulty I had in rereading them, in recognizing a tone, a rhythm, a way of putting down the voice or the hand, all this made me understand that I had already written, telegraphically, saving signs, for this new machinery, in this new world, following the rules of the game, at full speed and at a speed that is no longer mine. One only signs at a certain speed, everyone at his own, and that doesn't depend on the length of the name. Conclusion: accept the earth, the human burial, stay in your place and demand (with an inner smile) that one doesn't disturb oneself too much, that one doesn't disturb one's habits which are also of speed, sign, and mortality.⁸⁶

In addition to such self-effacing reflections on the procedure, Derrida's contribution as a whole is remarkable in yet another way. It mostly comprises philosophical reflections *departing from* the various keywords, reflections which never appear like monologues, but rather like a continued dialogue with Lyotard, taking the latter's remarks in the *Présentation* as starting points. Derrida and Lyotard had been in an ongoing philosophical exchange since the late 1950s, most lately with regard to Lyotard's philosophical monograph, *Le Différend* (1983). Derrida engaged very seriously in the *Épreuves* project—or

85 RECA. 159, 08 DEC., 20, referring to RECA. 158, 03 DEC., 19. See also Sperber's comment on the issue of the absentees, asking himself whether he is wasting his time (SPER. 187, 14 DEC., 20).

86 DERR. 144, 5 DEC., 95 In addition to practical and procedural impediments, Derrida was also extremely busy around this time with multiple trips and public lectures, as well as undergoing medical treatment in late December; see Peeters (2010).

perhaps in his indirect dialogue with Lyotard—often using a personal, even intimate tone of writing.⁸⁷

Derrida took up a similar tone in a lecture that he held in 1999 in honor of Lyotard, who had passed away the previous year. The text of this lecture, published as “Lyotard and *Us*” (2001), deals with intellectual and affective layers of their friendship. Derrida took the pivotal sentence—“there shall be no mourning” (2001, 228)—from a commentary which Lyotard had written in 1990 about the contributions that Derrida had made to the *Épreuves d'écriture*, and which had been published, together with some of these contributions, in a special issue of the French philosophical journal *Revue Philosophique* dedicated to Derrida (Lyotard 1990c).⁸⁸ In his lecture of 1999, which otherwise does not speak directly about the writing experiment, Derrida made another confession, namely, that since then the “new machines” had taken over his writing, and that it was Lyotard’s invitation which instigated “the wonderful machinations that led me to learn to use, despite my previous reluctance, a word processor, which I have depended upon ever since” (Derrida 2001, 228).

- 87 On the relationship between Lyotard and Derrida and their related discussions at symposia in Cerisy in 1980 and 1982, see Bamford (2017, 127–132). They discussed *Le Différend* in a radio broadcast on 27 October 1984 (Lyotard 2020, 67–70).
- 88 The entries published in the *Revue philosophique* in 1990, presented in alphabetical order, are not a complete set of Derrida’s contributions but a selection of about two-thirds of them (Derrida 1990). Derrida wrote 57 separate texts for the *Épreuves*, of which 36 were republished in the *Revue philosophique*; not included are his entries for the following 16 keywords: *artificiel*, *auteur*, *dématérialisation*, *façade*, *improbable*, *interface*, *langage*, *lumière*, *matériau*, *matériel*, *métamorphose*, *monnaie*, *multiple*, *nature*, *simulation*, *souffle*. The selection was, apparently, made on the basis of Lyotard’s commentary—that is, the republication includes those texts which Lyotard commented on (noting the respective keyword in parentheses, and italicized) (Lyotard 1990c). This suggests that the selection was conceived less as a set of original texts by Derrida included in this honorary issue of the *Revue Philosophique* than as an appendix to Lyotard’s text, which is why the “author” name listed in the table of contents is Lyotard’s, whereas Derrida’s name appears as part of the title. On the pages with Derrida’s texts, Lyotard’s name appears as “author” in the top right margin of each double page, and the title in the top left margin is the title of Lyotard’s accompanying essay, “Notes du traducteur” (which follows on 285–292), where Lyotard takes (at least in the dialogical game they are playing in 1984, 1990, 1999) what Derrida wrote in 1984 as addressed to him. In the 1990 publication, Derrida’s contributions appeared strangely detached from their original context. The meaning of the recurring term “*Présentation**” (even with the asterisk taken from the *Épreuves* publication), 270 ff, remains as unexplained as the fact that Derrida’s remark, “*Ici, je n’ai pas le droit d’aller plus loin: conséquences ...*” (274) refers to the *Épreuves* rule that the definitions should not be longer than 10 lines. The 1990 publication also ignores the fact that Derrida was responding to other contributions (in “*nous ... tous deux*,” 270, he addresses Christine Buci-Glucksmann, DERR. 140, 5 DEC. / BUCI. 069, 8 OCT.; in “*Oui, ...*,” 271, he responds to and quotes Daniel Buren, DERR. 141, 5 DEC. / BURE. 002, 5 OCT; “*tu cites Aristote ...*,” 273–274, responds to Daniel Châtelet, DERR. 142, 5 DEC. / CHAT. 069, 24 OCT; equally, DERR. 143, 5 DEC., 275, responds to and quotes Michel Butor, and DERR. 144, 5 DEC., 276, responds to contributions by Lacoue-Labarthe and Roubaud, on *immortalité*).

There is no evidence which would support the suspicion formulated by both Latour and Stengers that a goal of the *Épreuves* project might have been to “convince” the authors of the usefulness of word processors or networked computers. Rather, it seems to have been a straightforward, if technically complicated, exploration of how these technologies changed the conditions of writing. A hazardous aspect may have been that most of the participants were skeptical novices to such writing tools, so that the technical difficulties which were challenging even for people versed in working with computers stopped some of the potential engagement in its tracks.

However, there was the third, smaller set of participants, consisting of Paul Caro, Philippe Curval, François Recanati, and Dan Sperber, who would not be intimidated by such difficulties and whose contributions and reflections, at least in retrospect, testified to the creative potential and latitude of the writing experiment. Their experience can be described as that of a nascent online community, a constellation of people who happened to get connected through a network without having worked together before, and without a common goal outside of the ongoing exchange, moderately channeled by the “rules of the game” and the list of keywords.

These four authors did not act as a cohesive group, but acted as individuals encountering each other online and in the written contributions, with which they continued to engage at times when most of the other participants had given up. Each of them “performed” in a different style, Caro writing sometimes long, exhausting discourses, while Curval occasionally made short comments on the technical system at hand, like this one on the keyword *capture*:

By “capturing” through the symbolic channel of the modem, the slot on the right side of the device turns red, a sign of intense emotion or pure shyness. The floppy disk slows down and remains silent.⁸⁹

Sperber often entered into dialogue, addressed other authors personally, and on several occasions thanked them for specific ideas and comments. And Recanati, like Caro, often broached the technical system, trying to understand its potentials and limitations. He also started writing responses—officially intended only for the second phase of writing—as early as 9 October.⁹⁰

Together, these four seemed to have an unspoken agreement that it was not necessary to stay “on topic,” as Derrida, Buci-Glucksmann, and others insistently did, but to use the online forum as an open space for communication, jumping between threads and topics, between topical discussions, technical

89 CURV. 113, 15 DEC., 25.

90 See RECA. 133, 9 OCT., 38. In this set of four authors, only Recanati and Sperber knew each other previously, sharing their interest in how word-processing, networks, and computers in general were changing language and culture (pers. comm., F. Recanati, 10 June 2021; D. Sperber, 23 August 2021).

deliberations, and idle online chit-chat. They focused their exchanges on the sections of the keywords *auteur*, *écriture*, *image*, and *mémoire*. These topics lent themselves for dealing with the experience of computer-based writing in general, and with the specifics of the system provided for this writing experiment. But the four authors also used these keywords as channels for tinkering with the functionalities of the technical system, experimenting with screen poetry,⁹¹ with different communication styles, writing in the form of traditional letters, or poems,⁹² playing around with the keywords,⁹³ deliberately interlacing different threads of the discussion, and directly addressing specific co-authors, or all of them together, or the moderators and editors at the Centre Pompidou.⁹⁴

Receiving feedback is significant for any online communication, whether in the form of a response and confirmation, or as an experience of co-presence. At the end of one of his entries, Caro requested direct responses from people who would read the entry, as a proof of their having been there.⁹⁵ And Sperber on one occasion celebrated a moment of feeling online and connected:

Ah! Someone in the network. Hello. Hello. But what are we doing here? Have you been walking around here long? I have. I've heard noises once or twice. I've shouted too, but without any answer. Cold? Yes, it's cold. Some coffee? It will warm us up. Yes, I'm kidding. I know that this machine doesn't even make coffee. No, no, don't get me wrong, I'm not against computers. I've got one at home and I work on it all day long, but this one, ah well! They've invented the slowest, most viscous, most disheartening programs you can imagine. Who are they? No, I don't know, not them anyway. Yes, I like to phone them too, to complain a little bit. Well, that's not all, but I have to send this text now. Anyway, it was a great pleasure to meet someone. Yes, maybe I'll see you soon. Bye, now. Brrr! How cold it is.⁹⁶

A week later, Caro picked up the metaphor of the café in a less enthusiastic reflection on how the online forum as a social environment was impacting the writing and collective thinking:

we note a beginning of communication, but still without much brainstorming, between the (rare) authors active in the experiment on the

91 See CARO. 042, 24 OCT., 136; CARO. 043, 24 OCT., 106; CARO. 067, 9 DEC.; and CARO. 069, 12 DEC., 98–99.

92 See SPER. 179, 11 NOV., 172.

93 See CURV. 087, 26 OCT., 12, where Curval responds to CARO. 016, 8 OCT., 11, by using exactly the same words in a different order.

94 Caro writes on one occasion: "Hi guys!" (CARO. 060, 21 NOV., 18), and Recanati asks: "But you, dear immaterial colleagues, what do you think?" (RECA. 133, 9 OCT. 38.)

95 See CARO. 044, 24 OCT., 16–17.

96 SPER. 183, 18 NOV., 17–18 The wish to meet in a café instead had first been voiced by Jean-Loup Rivière, a week before (RIVI. 162, 16 NOV., 17).

open channels in the words “author” and “writing.” This choice for this café-forum is characteristic. It’s a sign that it bothers us. It’s a bit as if in our childhood we had written pages of essays on the difficulties of using Sergeant Major pens (which are great) and on the perversion of inkwells (or fountain pens). One would surely have picked up a double-pointed zero.—I’ll stop there because the page is about to end and that can lead to transmission difficulties. With my best regards.⁹⁷

Significantly, all four authors also commented regularly on technical issues and reflected on how they were entangled in the experience of writing and reading, as well as in the communication and social interaction among the authors. In a series of contributions to the keyword *mémoire* and over a period of several weeks starting at the end of October, Caro wrote in the form of a diary about a persisting technical problem with storing a text:

14 November 22:36: The “path” procedure has been corrected, the missing names and numbers have been restored for the second author (with an error for CARO 055, which in fact responds to CASS 070 [and not 057]). But this is an idle detail. I salute these ladies of the Pompidou who watch so carefully over the server and who even discover the clumsy, annoyed, or mechanical remarks made from time to time under this heading. In response to Madame Holken’s concern, I will try to send this text in reply to two different authors; the question is whether I am handling it badly or whether the system has a flaw in terms of multiple answers. I have chosen, with apologies to the authors concerned, CHAR 071 and LACO 111, two texts on “memory.” Come on, let’s go! If it doesn’t work, I will report in detail in the next issue of this little journal. See you soon!⁹⁸

In the second half of November, Recanati, who on one occasion offered Caro technical advice to remedy his problem,⁹⁹ wrote an extremely detailed description of the arduous procedures necessary to use the system, and of the various technical problems that could occur.¹⁰⁰ Seen from this angle, the writing experiment was, no doubt, a nerdy affair. These four authors must have spent many hours on their computers during the autumn of 1984. By

97 CARO. 061, 24 NOV., 87–88, qu. on 88. In retrospect, Philippe Curval has spoken about the experience of working on the *Épreuves* project as a “nocturnal” and “dreamlike” experience (“*un travail nocturne*,” “*comme un rêve*,” in a radio program on France Culture, 2009).

98 CARO. 058, 14 NOV., 142 See various contributions by Caro, 141–143, 27 October until 15 November, and a last entry in the series, on 16 December. See also CARO. 062, 27 NOV., 59–61, esp. the end, 60–61; and CARO. 052, 4 NOV., 85–87, at the end, 87, on the accidentality of finding worthwhile texts to read. On one rare occasion, Jean-Loup Rivière also comments on procedural issues (RIVI. 162–165, 16 NOV., 17).

99 RECA. 154, 27 NOV., 142.

100 RECA. 147, 18 NOV., 57–59; see also RECA. 153, 24 NOV., 12. This is now an important historical record of the functionality of the technical system whose core problems lay, as Recanati imputes, in bad software (“*le logiciel est mauvais*,” 59).

December, it would have taken more than an hour just to retrieve all the contributions for the keyword *écriture*—and that's not counting the switching of program modes and the tracing of entries to download. Those who wrote long texts were aware of this impediment, and sometimes they played around with it. At the end of his account of the technical problems of the system, Recanati apologized for the time it would take to retrieve his lengthy text, and predicted that his colleagues would curse him; to which, on the next day, Sperber tersely responds, "*OUI*" [YES], and Recanati retorts, two days later, "*N'est-ce pas?*" [Isn't it?].¹⁰¹

Many of the other participants were less patient with these circumstances. Mario Borillo drew his own conclusions in a lengthy contribution to the appendix, written in the style of a scientific paper about the potential impact of the new technologies on creativity and authorship, writing, text, and hypertext. Borillo prefaces his essay with some critical remarks on the shortcomings of the writing experiment:

If creation must in some way have a modestly interactive or participatory dimension, it presupposes means of communication and exchange which have also been rather cruelly lacking [in the *Épreuves* experiment]. Does this mean that this type of experiment is technically impossible? Or worse still by their sterility, since the constraints linked to the electronic environment do not induce anything that is in the order of the imaginary and in any case do not produce anything original. Shouldn't we reject from the outset anything that might undermine the very notion of creation and creator? And then, given the importance of the necessary means, doesn't this aggravate the logic of dependence?¹⁰²

The experiences of the various authors appear to have been as different as their input to the collaboration. While some of them threw in the towel after only a few weeks—Borillo was one of those who only submitted some initial texts on paper, besides his three contributions to the appendix intended for the catalogue publication—others struggled with the apparatus and quite apparently drew insights and, in some cases, even a somewhat masochistic pleasure from the unfolding exchanges with the other authors, the editors, and the technical system.

The Publications in Print, in the Exhibition, and on Minitel Screens

When the writing phase finished on 16 December 1984, work immediately began on the preparation of the texts for presentation in the catalogue and

101 RECA. 147, 18 NOV., SPER. 184, 19 NOV., RECA. 149, 21 NOV., all 59.

102 BORI., 10 DEC., 238–242, this quotation 238.

in the exhibition. Chaput's original intention, from spring 1983, to use the deliberations of the authors for the exhibition catalogue was realized in the form of a 264-page, A4-size bound softcover volume. In it, the chapters for the 50 keywords are arranged in alphabetical order, while within the chapters the responses are arranged chronologically. On the text pages, each entry is coded with the first four letters of the author's name, a sequential number, and the date of submission (for example "RECA. 147, 18 NOV."). References to other texts that a certain entry responds to are indicated in the right margin ("SPER. 184"). The main text body of 248 pages includes as appendices (*Annexes*) a set of contributions that were sent to the editors by means other than the electronic network (231–258). The text body is bracketed by a two-page introduction by Chaput and Lyotard, the table of contents, and a list of the authors at the front of the book, and a five-page postscript by Gad, Lyotard, Noël, and Toutcheff at the end. Because this book, dedicated to *Épreuves d'écriture*, was considered as the first volume of the catalogue, and the folder with the *Inventaire* and the *Album* as the second, the front matter of *Épreuves d'écriture* also includes the most definitive list of credits of the people who contributed to the project of *Les Immatériaux* as a whole (3).

Chaput's second ambition for this publication—namely, that it would be produced in an integrated, purely computer-based process—could not be realized. As the technicians of the SERPEA had already foreseen in the spring of 1984, it proved technically impossible for them to automatically extract the text entries from the database and have them flow into the text editing of the keyword chapters. Instead, the editorial work of reconstructing the chronological sequence, as well as the referencing in the margins, had to be done manually, a laborious procedure that took Chantal Noël and Élisabeth Gad weeks to complete. Noël remembers that she did all of her editorial work on paper and did not use a computer herself. She compiled, read, corrected, and created cross-references for a total of three versions (Noël, pers. comm., 25 September 2017).¹⁰³

Lyotard followed this editorial process with a keen interest, and he seemed somewhat proud of the strange, multi-author publication of which he could hardly even call himself an "editor." In his public reflections on the overall project in May 1985, Lyotard said hesitantly:

It is probably a "book" that introduces a type of beauty, if I may say so, quite different from anything I knew. It seems to me that it is a great book.¹⁰⁴

103 During this process, the authors received copies of their texts on paper for corrections, as had been agreed in the contracts.

104 CPA 1977001W130_003, 19.

The question of whether the result was a “book” haunted Lyotard as much as the question of the “author.” Only a few weeks earlier, he had said in an interview: “It’s not a book because we don’t know who the author is,” adding:

It is obviously not a catalogue, but, in my opinion, a magnificent monument that one reads, in any case, with great pleasure, like a kind of galaxy of texts that evolves a little bit by itself... (Lyotard 2024, 76)

In light of these questions about the form of the book and about the author, it appears that Lyotard experienced the writing experiment and the book production as a form of research, an experiment that he had prepared together with the team around Chaput:

I thought I found in the effects of this experience things that others say or have said about writing today in general, whether it be Blanchot, Derrida in his own way, or other writers like Beckett. This trouble is presumably about the author himself: am I really the author of what I write? (76)

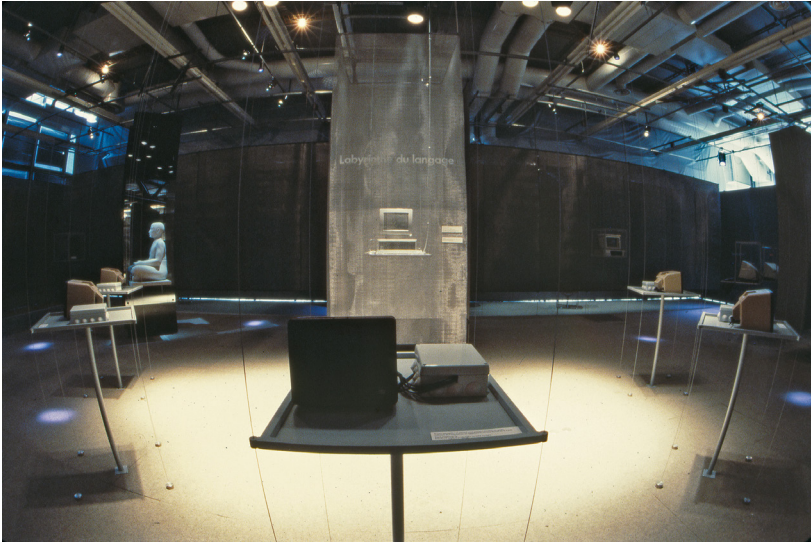
There are only very few indications that anyone actually read this book in a conventional, cover-to-cover manner.¹⁰⁵ The aphoristic, nonlinear structure of the text invites leafing and browsing through it, more than reading it from start to finish. And this was also how people would have approached the version of the *Épreuves* text that was created for the Minitel system, which could be consulted both locally in the exhibition and on any terminal connected to the Minitel network. Its hypertextual structure encouraged a type of reading that was intuitive rather than comprehensive.

The presentation of the *Épreuves d'écriture* project in the *Labyrinthe du langage* included the Olivetti M24 server placed in the middle of the large space, suspended like most other exhibits from the ceiling grid and surrounded by the semitransparent metallic fabric that was used throughout the galleries. Five Minitel terminals were positioned around this central “shrine” in a semicircle (fig. 32). They were placed on metal supports, which were suspended from above and were additionally connected to the floor by metal tubes serving as ducts for the electricity and network cables.¹⁰⁶

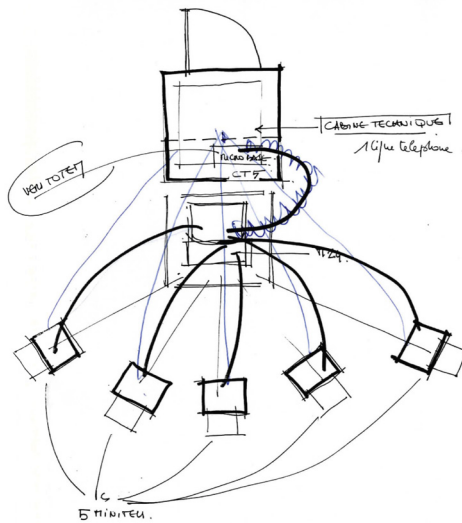
The spatial arrangement of five terminals placed around a central server appears in a drawing by the scenographer, Philippe Délis (fig. 33), and seems to have been prefigured in the diagram of the information system sketched by Jean-Paul Martin in March 1984 (fig. 29).

105 The only direct quotations from different parts of the book appear in Balpe (1991) (see the analysis in the section on the reception of the *Épreuves*, below), and in Gallo (2008), 136–139.

106 The technical infrastructure of the display was implemented by Pascale Deville-Hertzmänn, who developed software and network architectures for SERPEA and was also involved in installing the network infrastructure of the *Labyrinthe du langage*.



[Figure 32] Site *Labyrinthe du langage*, installation of *Épreuves d'écriture*. Behind the dark rear screen the chairs in the site *Temps différé* (Deferred time), installation by Catherine Ikam. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0461]



[Figure 33] Sketch for installation of *Épreuves d'écriture*, by Philippe Délis. Centre Pompidou Archives. [2009012W006_022, p. 7]

For the exhibition, the Olivetti M24 was programmed to display the text of the writing experiment, appearing at reading speed, word by word.¹⁰⁷ In contrast to this rolling text display, the Minitel terminals in the exhibition gave access not only to the *Épreuves* project, but also to a whole variety of information pages that had been prepared in relation to the *Immatériaux* project, offering details about the different exhibition sites, an exhibition plan, and general information, as well as several hundred pages for the *Épreuves d'écriture*, here categorized as "*Mots*" (Words).¹⁰⁸ The opening page for the *Mots* section displayed all 50 keywords on one screen, presenting the four-letter combination for selecting specific keywords highlighted in white (fig. 34).

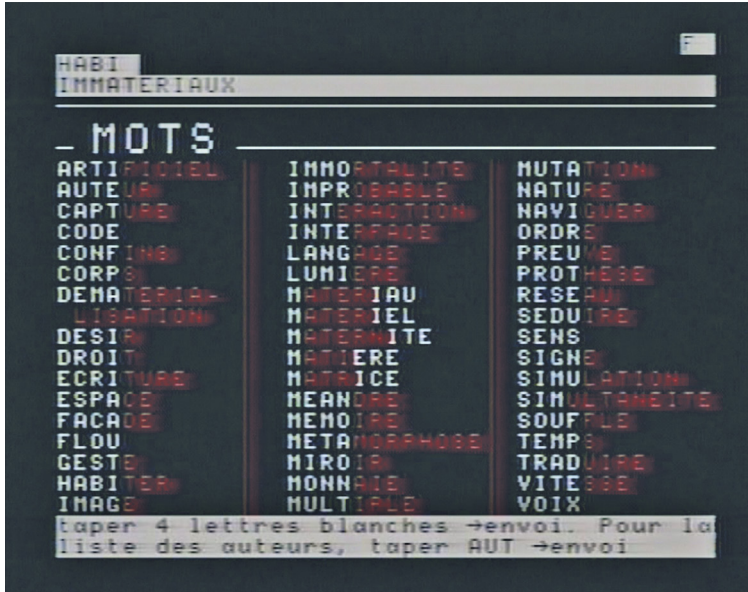
Typing one of the letter combinations, like for instance "ECRI," would bring up the following screen, with the names of 12 writers who had written definitions for the word *écriture*. Selecting one of them would then, for example, brought up François Recanati's entry, RECA. 135, 09 OCT. (fig. 35).

There was an important difference between the printed catalogue and the Minitel version of the project. The Minitel version only included the initial definitions that the authors wrote in the first project phase. It ignored the extensive exchange which followed in the second project phase and which filled, in the case of the chapter on *écriture*, eight catalogue pages, thus also omitting from the Minitel audience's experience the dialogical aspect of the project as well as the responses the authors had written to specific entries and to each other. Moreover, the programming of the Minitel pages allowed only for a maximum of 12 names to be listed, even if more than 12 authors had contributed to a certain keyword.¹⁰⁹

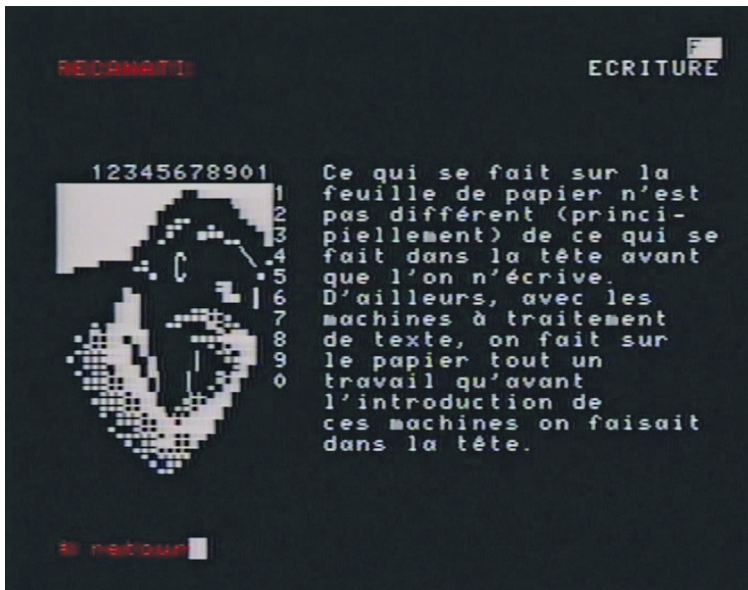
107 See the exhibition review by Gauville (1985). There are two photos (CCI_147_0462, CCI_147_0463) which seem to have been taken within only a short span of time; they both show slightly different parts of the same text (CARO. 051, 2 NOV.; see *Épreuves*, 156), suggesting that the screen of the M24 displayed the text by adding the words consecutively in the bottom line of the displayed block of text which, when the line was filled, would move one line up, making room below for the next line of text. At the top left of CCI_147_0462, we see a reference indicating that the displayed text, CARO. 051, is a response to CURV. 097. It is not clear whether these screen images also show how the interface appeared on the screens of the Olivetti M20 computers with which the authors worked.

108 The respective invoice suggests that a total of 760 Minitel pages were designed by SERPEA (see CPA 1994033W239_002). The following description is chiefly based on a set of 25 Minitel screenshots that Gisèle Cloarec preserved as a PDF document (private collection), and on sequences in the documentary film *Octave au pays des Immatériaux* (Zajdermann and Soutif 1985) which show the interaction on the Minitel screen. In the Minitel section "Sites," the respective pages for the different exhibition sites were grouped according to the *Mât* paths, and in an order that reflected their spatial sequence in the exhibition.

109 To further ascertain this assumption, we would need to see more of these screens, especially those for a keyword like *image* where, in the catalogue, there are definitions by 16 different authors, and for a keyword like *traduire*, where there are definitions by only eight different authors.



[Figure 34] *Épreuves d'écriture*, Minitel screen of all keywords. Filmstill, Zajdermann/Soutif, *Octave au pays des Immatériaux*, 1985 (min 19:48). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.



[Figure 35] *Épreuves d'écriture*, Minitel screen of text by François Recanati, "Écriture", screen design by Gisèle Cloarec. Filmstill, Zajdermann/Soutif, *Octave au pays des Immatériaux*, 1985 (min. 22:13). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

From the existing screenshots, we can deduce that the selected texts themselves were not edited but always presented in their entirety, arranged either on one or on several consecutive pages, indicated by the word “*suite*” (following) in the bottom right corner.¹¹⁰ The end of a text entry is indicated by “* *retour*,” which appears mostly in white, but sometimes also in other colors available in the Minitel system at the time (red, yellow, blue, green, pink). While standard text mostly appears in white letters, italics are also indicated by one of the other colors.¹¹¹ The positioning on the screen of the header information (author name and keyword) is not systematic but changes considerably.

Since extracting the texts automatically from the database on the Olivetti M24 server proved technically impossible, this procedure was also done “manually” for these Minitel screens, which means that the texts were printed, edited on paper, and retyped on a special terminal (*Vidéotex*) into the Minitel system (Gisèle Cloarec, pers. comm., 3 October 2020). The selection of texts for the Minitel screens was done at the CCI by Nicole Toutcheff, who extracted these texts and delivered them to the editorial team at SERPEA responsible for creating and designing the Minitel screens (Chantal Noël, pers. comm., 16 March 2021).¹¹²

One member of this team was the journalist and editor Gisèle Cloarec, who was at the time also working for the France Culture radio station; she also had her own channel on the Minitel network, *VIP—langue de vipère*, a sort of blog with idiosyncratically selected content of general interest. Cloarec worked for SERPEA from March 1983 to June 1985; afterward she moved on to work for the national computer agency G.CAM and for the France 3 television station (Cloarec, pers. comm.).¹¹³ Besides designing the Minitel screens—a special, signature design feature was developed to frame the texts of each author—Cloarec was also tasked with the creation of the tree structure for the entire Minitel site (fig. 36).¹¹⁴

110 For a single-page text, see, e.g., MAJO. 051, 24 OCT., on *matériau* (*Épreuves*, 124), and Cloarec screens, 4; and RECA. 135, 9 OCT., on *écriture* (*Épreuves*, 55), Cloarec screens, no. 9, and screenshot from the *Octave* film; for a dual-page text, see, e.g., CARO. 022, 08 OCT., on *espace* (*Épreuves*, 65), Cloarec screens, 3.

111 For examples of the different colors, see: red (e.g., CHAT. 088, 24 OCT., *capture*, *Épreuves*, 24; Cloarec screens, 8); yellow (e.g., LACO. 104, 25 OCT., *geste*, *Épreuves*, 78; Cloarec screens, 12); blue (e.g., VUAR. 188, 11 OCT., *corps*, *Épreuves*, 39; Cloarec screens, 13); green (e.g. ROCH. 163, 16 OCT., *capture*, *Épreuves*, 56; Cloarec screens, 14); or pink (e.g. CURV. 065, 9 OCT., *artificiel*, *Épreuves*, 11; Cloarec screens, 18).

112 The page dedicated to the *Épreuves d'écriture* project in the *Inventaire* catalogue lists (verso) the following names: “*Graphisme vidéotex: Jacques-Élie Chabert, Elesig [Gisèle Cloarec], Françoise Hanss, Caroline Krakowiecki, Jérôme Oudin.*”

113 G.CAM was the software and informatics branch of the national budget fund, the Caisse des dépôts. G.CAM also provided the server space for the pages of *Les Immatériaux* on the Minitel network (see the confirmation on 14 January 1985, CPA 1977001W130_010).

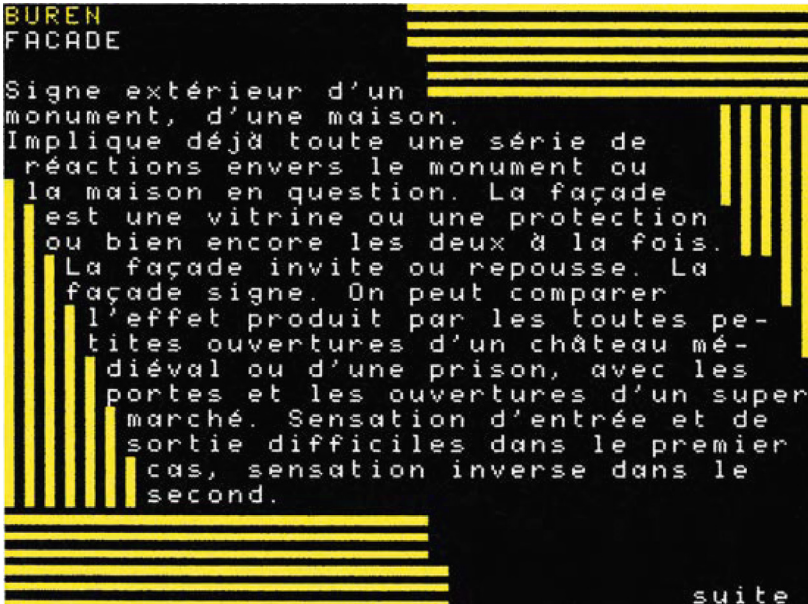
114 See the diagram by Gisèle Cloarec, “Projet arborescence SERPEA Vidéotex, 9 Nov 84”, reprinted in *Album* (1985, 44–45) (only the handwriting in the box at the top, “Plan/

Cloarec's role is exemplary for the way that *Les Immatériaux* and its individual projects—in this case, *Épreuves d'écriture*—was part of a broader cultural context in which the arrival of new technologies—in this case, the electronic network of the Minitel—were impacting the jobs and careers of the people who got involved in the project, more or less tangentially. In retrospect, Cloarec writes:

The *Immatériaux* came down on us like a fresh wind, quite violent, however: we had to be quick, to think quickly, to realize quickly—thinking and realizing becoming one and the same task. As far as I was concerned, I had to climb the tree of the authors' contributions, and I discovered arborescent thinking, the daughter of a binary logic far removed from the modal logic of language. I had to transcribe for the Minitel the thoughts of then illustrious authors, more or less illustrated—uh... It wasn't easy, with twenty-five lines, forty columns, six colors and B&W, a single font. Buren, being sensible, did not inflict diagonals on me. (Cloarec, pers. comm., 3 October 2019)

Les Immatériaux was thus a special moment in the conjunction of many different developments, but it was also just one of the things that were happening around that time in the lives of those involved.

suite," is not Cloarec's); see also an earlier version of this diagram with ink and pencil corrections (private collection); here too, the *Épreuves* section is referred to as "*les mots*".—Cloarec recounts that her working hours as a part-timer at the SERPEA were fully absorbed by the *Immatériaux* project from January through till March 1985. According to her calendar, Cloarec had meetings with Nicole Toutcheff on 2 January and 1 February 1985, and entries indicating long working sessions at the SERPEA on 5 and 6 January ("*travail SERPEA*") which probably related to the *Immatériaux* project, on 7 through 10 February, at the end of February, and through the first half of March; full working days at the Beaubourg followed on 21, 22 and 23 March, and a meeting with Thierry Chaput in the afternoon of Saturday 23 March, probably as preparation for a program for France Culture, broadcast on Monday 25 March, in a series of such culture programs that Cloarec did for the national radio station (Cloarec, pers. comm., 3 October 2020).



[Figure 36] *Épreuves d'écriture*, Minitel screen of text by Daniel Buren, "Façade", screen design by Gisèle Cloarec. Screenshot. Private collection.

The Reception

The reception of *Épreuves d'écriture* began in the course of this editorial process, and was reflected in the analysis and interpretation that Lyotard and the team members offered in the foreword and afterword to the catalogue. In their introductory text, "La raison des épreuves," Lyotard and Chaput observed that the writing project for the catalogue content had been intended not as a "museum of consensus" but as a "workshop of divergences" which had turned into a "laboratory of disagreements [*différends*]" (Chaput/Lyotard 1985, 6). It was meant to be an exercise to explore forms of writing induced by the postmodern situation:

It is a fearsome property of electronics and computers that they can open up from afar the closest intimacy. Our retreats are filled with messages. In the coming and going of information flows, the walls that protected us have become the poorest of interfaces. The secret of writing, the back and forth of the text that is being written, pre-texts, supporting texts, drafts, erasures, evasions of thought in the face of the known, as much as the anamnesis necessary to dispel possible prejudice—if this too were exposed to what is called by the anti-phrase of "communication," we would ask ourselves, what would happen? Perhaps this is the trial

[*épreuve*] that awaits writing in the postmodern age. (Chaput/Lyotard 1985, 6)

In their more extensive analysis in the “Post-scriptum,” the authors Gad, Lyotard, Noël, and Toutcheff insisted that the specific experience of the *Épreuves*, in many ways born from a rather peculiar technical and organizational setting, was nevertheless exemplary for the ways the new means of writing, especially the computer and electronic networks, were changing the conception of the author, the audience, and of writing in general (Gad et al. 1985, 259–263).¹¹⁵ Some of their media-theoretical and linguistic conclusions sound strangely familiar in our age of so-called social media (another “anti-phrase”). On the question of the audience and how it is possible to establish social relations through the new tools, they conclude: “Perhaps this is how we are: alone together. ‘We’?” (Gad et al. 1985, 261)¹¹⁶

Their analysis arrives at realizations which, more than three decades and several Internet revolutions later, still haunt the current transformation of language:

we would like to suggest the following contradiction: language technologies seem to presuppose that language is an instrument of communication between users. Writing is therefore dedicated to the transparency of the message, to the transport of information without loss. The value of the message is measured by its information content, and the information is in inverse proportion to the most likely distribution. Everything is thus pushing toward the simplification of languages, the uniformity of messages and the accessibility of codes, for the greater comfort of users. (Gad et al. 1985, 263)

The authors of the postscript argue that, against such a tendency of simplification, writing and its media should be understood as conditions of thought, not as means of expression. They maintain that writing is not at the service of human communication, and that writing is the very matter of a form of thinking that goes beyond humans. Complexity is therefore inherent to writing and to the work of thought that is developed within it:

115 Wunderlich ascribes the “Post-scriptum,” as she writes, “mainly” to Lyotard, even though the names at the end are listed in alphabetical order; see Wunderlich (2008), 59–60. In contrast, Noël has affirmed that the text was written collaboratively; she has called it “*un texte pensé ensemble*,” even if the final revision was done by Lyotard (pers. comm., 16 March 2021).

116 Compare this statement to US media critic Sherry Turkle’s book title, *Alone Together: Why We Expect More from Technology and Less from Each Other* (2017).

Writing, if we think of it as the task of complicating everything, may not be owed to humans, but humans are owed to this task. This would be the real reason for these *Épreuves*. (Gad et al. 1985, 263)¹¹⁷

This particular relevance of the *Épreuves* experiment, which the organizers seemed aware of, was also recognized early on by Jean-Pierre Balpe, a writer and theoretician of experimental literature and member of the ALAMO group. Balpe's introduction to a symposium about the impact of computers on literary texts, held in Cerisy-la-Salle in August 1985, only weeks after the exhibition *Les Immatériaux* had closed, made extensive reference to the *Épreuves* catalogue (Balpe 1991).¹¹⁸ In the text, Balpe discusses the impact of the media and the technique of writing—whether quill, typewriter, or computer—on the writing and reading of literature. He referred to themes that had been aired in the *Immatériaux* and *Épreuves* projects ever since 1981, such as notions of originality, authorship, and ownership, the form and structure of texts—especially when displayed on computer screens—and the impact on readers and reading.¹¹⁹

In his discussion of these topics, Balpe frequently quotes excerpts from *Épreuves d'écriture*, which he does not approach critically but uses to affirm his own argument, making the *Épreuves* the main reference source in this text about “computer-based literary writing.”¹²⁰ Balpe employed the *Épreuves*

- 117 I'm grateful to Corinne Enaudeau for pointing out this qualification. It will be a task for scholars of Lyotard to ascertain what Lyotard may have taken from the various authors' texts for his own contributions to the *Inventaire* and the *Petit Journal*. Only some of the chapters in the *Épreuves* raised a discussion that supported a postmodern redefinition of the keywords; Christine Buci-Glucksmann occasionally tried to do this (e.g., BUCI 085, 11 DEC, 89, *image*, and BUCI 088, 15 DEC, 150, *métamorphose*), as did Derrida in his direct engagement with Lyotard's concepts. Furthermore, while Cassé's thinking was probably inspiring for Lyotard, he may perhaps have found Tibon-Cornillot's radicality (TIBO 184, 10 OCT, 207, *simulation*) rather challenging.
- 118 The publication resulted from the symposium “Ordinateurs, production et communication de textes littéraires” which Jean-Pierre Balpe and Bernard Magné organized at the Centre Culturel International in Cerisy-la-Salle, 5–15 August 1985. Balpe, who succeeded Roger Laufer at the University Paris VIII in 1990, emphasized that ALAMO had presented projects by some of its members at *Les Immatériaux* (1991, para. 60).
- 119 Balpe's introduction to the symposium proceedings appear to have been written or revised in 1990 to 1991 before publication. For the question of technical media, his main point of reference are the experiments of the ALAMO collective—including their own network system, *RIALT*, used starting in 1988 for the collective production of literary texts. But he also mentions as examples the *Épreuves d'écriture* catalogue, the collectively edited novel *Marco Polo* (1985), and the interactive narrative *Sindbad le marin* (1986) (para. 81). See also paragraphs 76–77 for a listing of several interactive writing projects realized for the Minitel system from 1985 to 1990.
- 120 Balpe quotes from texts by François Recanati, Paul Caro, Philippe Curval, Daniel Buren, Jean-Noël Vuarnet, Jean-Claude Passeron, Jacques Roubaud, and Michel Butor, as well as from the “Post-scriptum.” Conspicuously, in this text about the effects of word processing and automatic text generation, Balpe does not mention the “algorithmic” text contributions by Nanni Balestrini. The fact that he does not mention the engagement with

more as a quarry than as an exemplary project. The way that the project was structured—its focus on individual authors and the consecutive, if branching construction of meaning, through explanation and along topical keywords—seems to have been of less interest to him. On such a structural level, *Épreuves d'écriture* lacked aspects that were important in Balpe's own analysis of the transformation of text, namely, mobility, generativity, instantaneity, interactivity, and delocalization.¹²¹

It is striking that after such a positive, initial reaction, *Épreuves d'écriture* would barely even get mentioned in the secondary literature.¹²² A symptomatic exception is a text by the writer and theorist Jacques Donguy about the history of the impact of computers on literature and poetry in France (1995; republ., 1997).¹²³ For Donguy, himself a protagonist in that history, its two main poles are the Oulipo group, active since the 1960s, and the artist group LAIRE, founded in 1989. Donguy writes in 1997: "One of the possibilities opened up by the computer is that of interactivity, which Jean-François Lyotard has tried to realize through the interactive writing experiment *Épreuves d'écriture*. ... This experiment was a failure, in the sense that no one played the game of interactivity."¹²⁴ Taking up the topic again in 2023, Donguy concludes that "everybody wrote only their own texts, with the exception of Nanni Balestrini" (2023, 24).

Such a verdict of failure due to a lack of interactivity was unjustified, as the analysis of the writing process has shown. A number of the authors actually did "play the game," sometimes following the "rules of the game," and

the question of authorship, in the somewhat obscure *Immatériaux* exhibition site *Tous les auteurs*, is less surprising.

- 121 Instead, Balpe here referred to the exhibition *Mémoires du futur*, organized by Bernard Stiegler and Catherine Counot for the BPI (the Bibliothèque Publique d'information) of the Centre Pompidou in 1987.
- 122 The project is not mentioned in the text on early collaborative network projects by Gidney (1991), nor in books on computer-based literature, like Bolter (1991) or Eduardo Kac's anthology (2007). It's mentioned only in passing in Simanowski (2002, 36), together with Ascott's *La Plissure du texte*, as an example of online collaborative writing projects in the 1980s, and without even specifying the title of *Épreuves d'écriture*. (Simanowski's glancing citation is based on a reference to the text by Donguy [1995], discussed below.) An exception to this negligence—besides the studies by Wunderlich and Gallo mentioned earlier—is Paul Devautour's contribution to a symposium in 2005 that marked the twentieth anniversary of the exhibition. Based mainly on a critical reading of the introduction and the postscript, Devautour speaks about the *Épreuves* catalogue at length (see "Retour sur Les Immatériaux" [2005], especially from min. 5:20 onward), noting its design which points to the collaborative character of the work (min. 7:30), and the alternative ways it offers for thinking about the exhibition format (min. 15:30: "*fin d'auteur, fin d'expo, fin de l'institution*").
- 123 In the earlier version of this text, Donguy talks about projects by Chabert and Philibert, and about Ascott's *La Plissure du texte*, but not about *Épreuves d'écriture*; see Donguy (1995).
- 124 For another critical take on the work of ALAMO, see Bootz (2002).

sometimes following their own rules. But Donguy's misjudgment reflects a general sentiment that has dominated the reception of the *Épreuves* experiment.¹²⁵

Like others, Donguy instead preferred the "connectionist" paradigm of Roy Ascott's *La Plissure du texte* (1983). And indeed, *Épreuves d'écriture* was different from such artistic endeavors that searched for an "aesthetics of communication," as Fred Forest and Mario Costa called it (Forest and Costa 1988; see also Costa 1991). Rather, *Épreuves d'écriture* was a literary and philosophical writing experiment that mostly lacked the excitement of live connectivity, and was marred by the fact that most of its participants were unenthusiastic novices to the computer and network media. The principles of an aesthetics of communication that emphasized the aspects of "event," "real-time," "presence," etc., were not implemented in the technical set-up of *Épreuves d'écriture*, in favor of data storage and the quality of the text content produced for the exhibition catalogue. In the technical paradigm that guided *Épreuves d'écriture*—a paradigm inherited from the database logic of the Minitel system—information storage and retrieval were deemed more important than co-presence.

At the same time, the technical set-up of *Épreuves d'écriture* did not address the issues that concerned theorists and practitioners of hypertext at the time (see, e.g., Joyce [1995]), like nonlinearity and openness (which here were undermined by the keywords in their strict alphabetical ordering), hyper-linking (whose technical realization proved impossible), and participatory structures involving a wider audience (which were not implemented). Instead, the online audience on the Minitel network was served only an edited, cleaned-up, and tamed version of the original and far more diverse exchange.

In addition to these technical and partly programmatic issues, a more affirmative reception of *Épreuves d'écriture* was probably also undermined by the lack of an enthusiastic apologist, someone who would have identified with the project and highlighted its advances and particularities in a language that would have connected it to contemporaneous discourses on networked writing and art. Instead, what dominated was the impression of a difficult project that mostly disappointed Lyotard's peers in the group of authors,

125 Equally symptomatic is an episode remembered by Dan Sperber. When he became involved around 2000 in the preparations of the online symposium "Text-e. Le texte à l'heure de l'Internet," organized by Gloria Origgi and Noga Arikha for the BPI, Centre Pompidou, he never connected the topic of this symposium to his own experience, two decades earlier, of participating in the *Épreuves d'écriture* project—a connection that was only pointed out later by the philosopher Barbara Cassin (Dan Sperber, pers. comm., 23 August 2021). The symposium, which structurally resembled the *Épreuves* experiment, ran from October 2001 to March 2002, and the proceedings were published as Origgi (2006). See the account at Arot (2002, 93–95) and the project website, archived at "Text-e" (n.d.).

leading Lyotard himself to consider it unsuccessful.¹²⁶ The hope that the project, with its very elaborate preparations, would produce a dense philosophical discourse was not fulfilled. But maybe Lyotard simply did not recognize at the time that for some of the authors (Caro, Curval, Recanati, Sperber, and to some extent Buci-Glucksmann and Derrida) the experience of a lively online interaction really did exist, and that, compared to what was happening elsewhere in the field of online writing, these dialogical and polylogical passages were actually quite remarkable experimental contributions to the reconfiguration of writing and authorship.

The title of the first catalogue volume, *Épreuves d'écriture*, appears to have been chosen quite late in the production process. Throughout 1984, the project was referred to as “the writing experiment” (*l'expérience d'écriture*), a term that is still used in the information pack for the press conference on 8 January 1985. There were many other such last-minute changes in the naming of sites and other elements of this complex exhibition project, but it is hard to imagine that Lyotard and the editors would not, after such a complicated production, have deliberately chosen—and enjoyed—the polyvalence of the term *épreuves*, oscillating between printing proofs, writing tests, and the trials or ordeals of writing.¹²⁷

It is not clear where the immediate inspiration for this term came from, but if we look for indications, we find that there was frequent use of the term *preuve* (proof), which was also one of the keywords. But it is under the keyword *interface* that Paul Caro wrote:

To conduct an experiment is to manipulate operators (thus, quantum science is inseparable from experiment, for the world exists only insofar as it is constantly subjected to the test of experience [*soumis à l'épreuve de l'expérience*], i.e. to the bringing into play of operators). Similarly, we exist only in the manipulation of interfaces that reveal the presence of the physical world, of others and of ourselves.¹²⁸

126 Jacques Donguy remembers Lyotard saying in private during the opening that, in terms of the interaction between the authors, the project was a failure (“*un échec*”) (pers. comm., 4 March 2021). Some years later, and in a different context, Lyotard wrote about how the act of writing in the arts eludes a systematic understanding and communicability: “Today’s intellectuals don’t need to put themselves to the trials of writing [*épreuve de l'écriture*]. They are called by the system to proclaim publicly, simply because they know a little better than others how to use language to reiterate the urgency of consensus. The terror I’m talking about stems from the fact that, if you write, you are forbidden to use language, it is the Other. You can, you must, be an intellectual on the podium. But in front of the canvas or the page, consensus is null and void.” Lyotard (1997), chapter “The Intimacy of Terror,” 199–216, quotation on 215.

127 Jean-Louis Boissier kindly pointed out this latter connotation of the French word *épreuves*.

128 CARO. 045, 25 OCT., 108.



[Figure 37] Site *Labyrinthe du langage*, visitors at a Minitel terminal. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0267]

Not only was the experiment of *Épreuves d'écriture* an exploration of writing under emergent technical conditions, but it was also experienced as a scientific experiment, a “trial” to which the authors were submitted as guinea-pig operators of newly developed interfaces. In a sense, Caro here seconded the suspicion formulated by Latour and Stengers.

The “writing experiment” with its technical as well as philosophical dimensions was one of the key components of *Les Immatériaux* for both Lyotard and Chaput. Along with the other one of the two projects that received a special credit—the *bande-son*, or soundtrack, which Lyotard was specially credited for, as Chaput was for the *Épreuves*—it provides important insights into how Lyotard and Chaput cooperated, because the projects could only be realized in tandem. While many of the authors for the *Épreuves* probably contributed only because Lyotard invited them, it was Chaput who not only managed the technical realization of the software and hardware infrastructure for the writing experiment, but also found the technical system necessary for the auditory experience of the *bande-son* that Lyotard had imagined and that became so important for his own appreciation of *Les Immatériaux*.¹²⁹

From a pragmatic point of view, and seen from the perspective of Chaput’s original proposal, the *Épreuves* project was a clear success, since it had managed to generate the content for a catalogue book that reflected on the key

129 For more on the soundtrack, see chapter 1.

issues of the exhibition. The ambition to do this in the form of an online and collaborative debate may have proven more difficult than had been anticipated, but the editorial project—and its presentation on the Minitel network—worked out as intended (fig. 37).

And it may well be that the actual significance of some of the more specific contributions made by the “social medium” of *Épreuves d’écriture* (well before this term became associated with networked communication) to the discourses on interdisciplinarity, the critique of authorship, and online collaboration, can be seen more clearly at some historical distance.

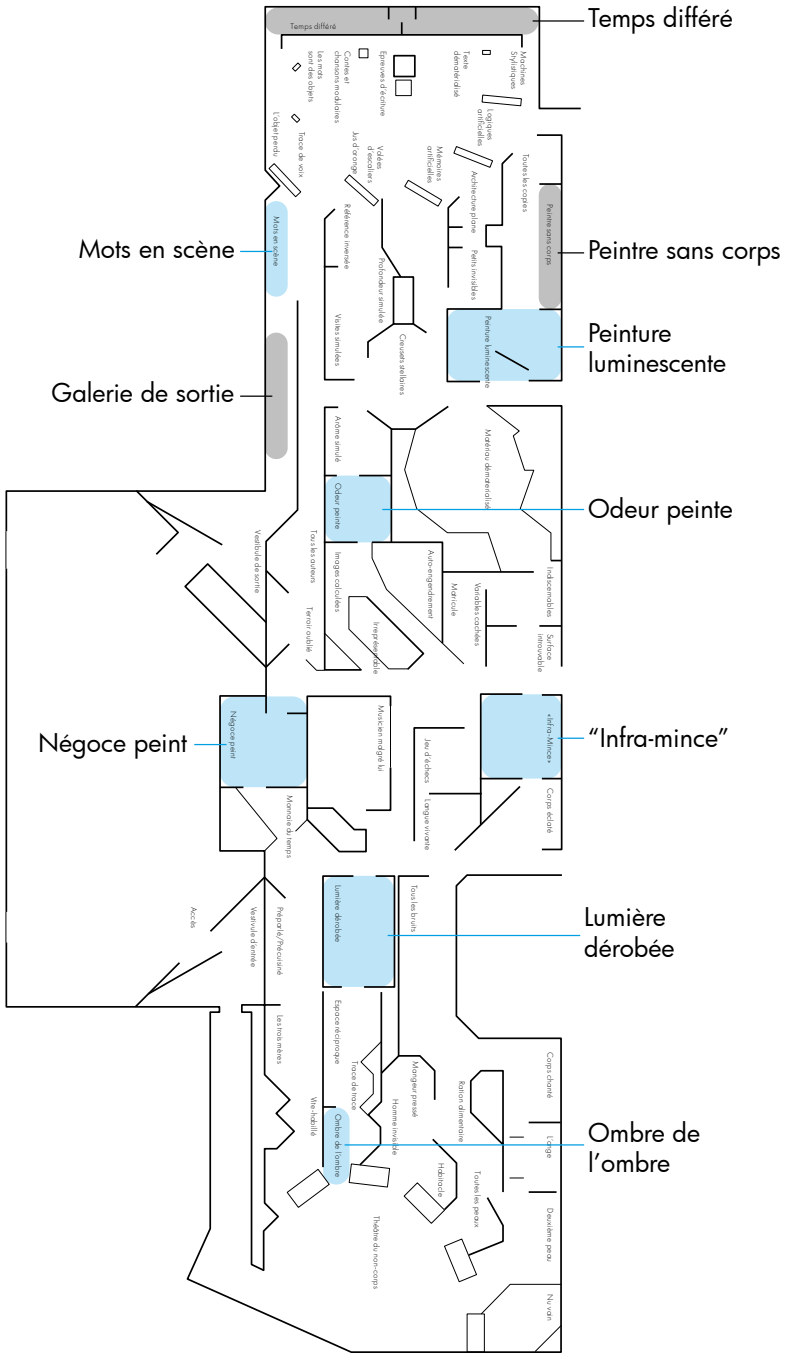
The Visual Arts Program of *Les Immatériaux*, Curated by Jean-François Lyotard and Bernard Blistène

The Visual Arts Sites in the Exhibition Context

Out of the 60 sites that made up the exhibition *Les Immatériaux*, seven sites were occasionally labeled in preparatory documents as “visual arts” (*arts plastiques*). The composition of these seven sites was the result of a collaboration between Jean-François Lyotard and art historian Bernard Blistène (born 1955), who at the time worked as a curator for the Musée National d’Art Moderne (MNAM) at the Centre Georges Pompidou. Like other departments of the Centre Pompidou, including the sound research center, IRCAM, and the public library, BPI, the MNAM contributed to the interdepartmental project that had been initiated by the Centre de Création Industrielle (CCI) and was managed by Lyotard’s co-curator, Thierry Chaput.

The seven visual arts sites were entitled “*Infra-mince*,” *Lumière dérobée*, *Négoce peint*, *Odeur peinte*, *Ombre de l’ombre*, *Peinture luminescente*, and *Mots en scène*; the last was located in the large space located at the end of the exhibition, the *Labyrinthe du langage* (fig. 38). They comprised historical as well as modern and contemporary artworks. The exhibition had several other sites that also presented works of contemporary art or projects by contemporary artists, including but not limited to some artists directly selected by Lyotard whose works did not go through Blistène, like the paintings by Jacques Monory (in the *Peintre sans corps* site), the closed-circuit video installation *Temps différé* by Catherine Ikam in the site of the same title, and Claude Maillard’s portfolio *Matière en vertige* (in the *Galerie de sortie*).

Given that there were visual arts projects in other sites as well, the designation of the seven sites that Blistène worked on as “the visual arts sites” is



[Figure 38] Plan of the exhibition *Les Immatériaux* (from *Inventaire* 1985), with labels added to show the locations of the “visual arts sites.”

somewhat misleading. However, from the perspective of the production team at the CCI, the preparation and installation of these “visual arts” sites were a separate matter, as they were the responsibility of the MNAM.¹ Another feature that makes these sites and the artworks they included stand out is their coverage in the exhibition catalogue, the *Inventaire*. While the verso pages of almost all other sheets of the catalogue dedicated to the various sites provide only short production credits, and leave most of the available space empty, the verso pages for the visual arts sites make ample use of the space, providing detailed technical descriptions and short, interpretative texts and quotations for the exhibited artworks. These descriptions and texts were prepared and edited by Bernard Blistène, whose name was not mentioned—as was true for all other text contributions from staff members (Sabine Vigoureux, pers. comm., 12 May 2020).²

It is generally known that Blistène had a role as an advisor to Lyotard for the selection of artworks. In the credits section of the exhibition catalogue, Blistène is mentioned as a conceptual advisor for visual arts, and as a coordinator for the MNAM’s cooperation with the CCI (alongside Catherine Counot for the BPI, and Nicolas Snowman for IRCAM) (*Épreuves*, 3). However, the extent of the collaboration between Blistène and Lyotard has so far been neither acknowledged nor analyzed—an unfortunate deficit, not least in view of Blistène’s career, which led him to become the director of the MNAM from 2013 to 2021, making his contribution to *Les Immatériaux* one of the first major exhibition projects of one of the most important museum curators of contemporary art in and beyond France.³ In the retrospective reception of the exhibition, the unobtrusiveness of Blistène’s contribution to the visual arts sites was exacerbated by the fact that when he conducted a much-noted interview about *Les Immatériaux* with Lyotard for the French and international editions of *Flash Art* magazine, early in 1985, there was no indication that

- 1 For instance, they appear in a planning document compiled by exhibition scenographer Philippe Délis and architect Katia Lafitte for the set-up of the exhibition (“mis en scène, descriptif montage,” dated 17 January 1985, CPA 1995052Wo26_011); while there are installation details here for all other sites, this document summarily refers to the “MUSEE” for the installation of the seven “visual arts sites.”
- 2 Vigoureux assisted Blistène and compiled the material for the catalogue. Another exception is formed by the *Inventaire* sheets for three sites related to architecture (*Architecture plane, Référence inversée, Terroir oublié*), which also include detailed descriptions of the exhibits, drawn up by the CCI’s curator of architecture Alain Guiheux; see chapter 6.
- 3 While the study by Wunderlich (2008, 96) mentions Blistène only with regard to the interview that he did with Lyotard for *Flash Art* in 1985 (Lyotard 2024), Gallo (2008, 81) and Hudek (2015, 74) briefly acknowledge the fact that the collaboration occurred. Hudek even writes that “Blistène was responsible for the selection of most artworks in *Les Immatériaux*,” but, like Gallo, offers neither proof for this claim nor further analysis of Blistène’s contribution.

Blistène was in fact himself involved in the project in a role which was much more active than that of the critical observer he enacted for the interview.⁴

Yet, this oversight is somewhat understandable given that the visual arts sites were dispersed throughout the large and diverse exhibition on the fifth floor of the Centre Pompidou, making it unlikely that any visitor would have been able to conceive of these seven sites as an ensemble. Lyotard would mostly have regarded the sites in their respective constellations with the immediately surrounding sites which contained a variety of other exhibits that he and other team members had selected. And even Blistène was aware that the visual arts sites would not be perceived as an interrelated constellation, but rather as separate “interventions” into a wider, complex mesh of exhibits in which, for most visitors, they were mere random encounters in a maze where, infamously, some visitors afterward claimed not to have seen any artworks at all (Bernard Blistène, pers. comm., 7 September 2020).⁵

Viewed from the perspective of the overall exhibition and given the multiple other artworks and artists’ projects on display, a focus on the ensemble co-curated by Blistène and Lyotard may therefore appear arbitrary.⁶ It would certainly not make sense to extract this set and to view it as separate from the rest of the exhibits. Blistène was well aware of the conceptual context in which the works he proposed would be presented. He joined several of the CCI’s team meetings and therefore knew about the diversity of angles from which the issues of materiality and mediality were being approached. Moreover, Lyotard would presumably have made the meshwork and complex interrelations and neighborhoods within the exhibition an important part of their preparatory conversations in 1984. However, if we want to understand the exhibition by analyzing the thematic, medial, and conceptual relations between different sites and contributing actors, then one of these constellations to study should be the “visual arts sites” that Lyotard developed together with Blistène.

This analysis will also provide another aspect to the question of curatorial authorship of the exhibition as a whole. Whereas the collaborative structure

4 See Lyotard (2024, 23–46). Blistène was a contributing editor to *Flash Art* at the time and did a series of interviews with French theorists, including this one with Lyotard.

5 For the latter claim, see Heinich (1986, 77), and Wunderlich (2008, 43).

6 From the perspective of Lyotard’s own, more synoptic view, it appears justified that, for instance, in a chapter on the arts program of the exhibition, Gallo (2008, 115–117) reviews the works by Annegret Soltau (in *L’Ange* and *Trois mères*), Ruth Francken (*Inventaire* page for *Tous les auteurs*), and Klonaris/Thomadaki (in *L’Ange*) together, even though they were featured in different parts of the exhibition, and outside the visual arts sites. And a broader perspective on the contemporary art program of *Les Immatériaux* would also take the screenings of the *Ciné-immatériaux* film program, curated by Claudine Eizykman and Guy Fihman, into consideration which, among others, included Marcel Duchamp’s *Acinema*, Michael Snow’s *Wavelength*, and Lyotard’s conversation with René Guiffrey, à *blanc*...

for other sites involved certain constellations of actors—think of the widely distributed network of contributors associated with the sites initiated by the scientific advisors, or the techno-social assemblage that led to the *Épreuves d'écriture* project—we are here confronted with Lyotard and Blistène acting as co-authors of this particular set of sites.

The first part of this chapter gives an account of the institutional and organizational context in which the collaboration of Lyotard and Blistène evolved, while in the second part we look more closely at the selection of artworks. The preparatory documents held by the Archives of the Centre Pompidou offer unique insights into the curatorial process because they not only refer to the works that were eventually presented in the exhibition, but also mention a number of artworks that were considered at some point during 1984, but that for one reason or other did not make it into the final show. These works which were deselected, *pas-choisis*, or which could not be included for other reasons, elucidate aspects of Lyotard and Blistène's curatorial process and will be discussed as an element of the conceptualization of these sites.⁷

The purpose of this chapter is twofold: it presents the specific historical case about which too little is known up until now, and it explores a methodology for adequately describing this case of curatorial practice, furrowed by the multiple entanglements that are part and parcel of the everyday experience of many curators. The investigation is marred by the fragmentary quality of the archive on which it can draw: while certain aspects can be gleaned from the available archival documents with much accuracy, other aspects of the curatorial process are today quite obscure and can only be guessed at. Such inconsistency is a standard feature of any historiographic work, yet it is worth considering its effects in the context of an art historical investigation of curatorial practice, asking how the material base of such research informs its potential results.

Institutional and Pragmatic Aspects of the Cooperation between Lyotard and Blistène

Among Jean-François Lyotard's first initiatives in the summer of 1983 when he joined the team at the CCI was to insist on the addition of artworks to the exhibition project. Thierry Chaput's concept of April 1983, *La matière dans tous ses états* (Matter in all kinds of states), had mentioned a variety of media, art, and design exhibits, but no artworks from museums or art collections. This document also lists a host of potential cooperation partners, institutions,

7 For deselected projects from other parts of the exhibition, the *zone des pas-choisis*, see chapter 8.

agencies, and companies, including the Centre Pompidou's IRCAM and BPI, but it does not mention the MNAM.⁸ That the MNAM was envisaged at that point as not participating is confirmed by the minutes of a general meeting at the CCI on 22 June 1983, shortly after Lyotard had first been contacted. The CCI's director Paul Blanquart affirmed that the project on "*Matériaux nouveaux et création*" (its working title, first formulated in the summer of 1981) would be developed further with Jean-François Lyotard as its chief curator, "assisted by Thierry Chaput and his team, who have done a lot of hard work and who are maintaining their responsibilities." Regarding the position of the project within the Centre Pompidou, Blanquart stated that, "originally an interdepartmental project, it has now become essentially a CCI project with the participation of IRCAM and BPI."⁹

Upon his arrival, Lyotard immediately tried to bring the MNAM back into the project. When his first conceptual sketch, the *Esquisse* (Sketch), was distributed to the directors of the different departments at the beginning of September, copies were sent not only to Michel Melot (BPI) and Pierre Boulez (IRCAM), but also to Dominique Bozo (MNAM).¹⁰ There was a personal meeting between Lyotard and Bozo a couple of weeks later (19 September), during which the participation of the MNAM was arranged.¹¹ When Lyotard returned from the United States in December, he had a follow-up meeting with "Bozo & équipe" (9 December), including the MNAM's contemporary art curators Alfred Pacquement, Catherine David, and Bernard Blistène; and, three weeks later, Blistène had the first occasion to join the *Immatériaux* team at the CCI, on 29 December (*Chronology* 2020). The participation of the MNAM was officially confirmed in the dossier for the Centre Pompidou's annual press conference in February 1984, which states, in the chapter on the activities of the MNAM, that "the Museum will participate in the interdepartmental exhibitions of the Centre, such as, for instance, *Immatériaux, Miroir, ...*"¹²

- 8 CPA 1994033W232_001. In 1981 Lyotard contributed a text to a book about a project by Daniel Buren, curated in 1977 by Jean-Hubert Martin of the MNAM. Lyotard's essay features prominently among texts by Buren, Benjamin H. D. Buchloh, and Martin, and offers an indication that Lyotard was close to these circles, and that the MNAM was aware of his contemporary art expertise. See Lyotard (1981b).
- 9 Document dated 1 July 1983. For the origin of the project for *Les Immatériaux* in 1979–1981, see chapter 2.
- 10 See CPA 1994033W666_032.
- 11 See Sabine Vigoureux's handwritten meeting notes in her notebook, CPA 1994033W232_002.
- 12 See CPA 1999032W009, 25. Analogously, in the chapter on the BPI: "La B.P.I. participe également aux deux expositions de la Grande Galerie: Immatériaux [du 7 mars au 25 mai (1985)] et Intercultures [de fin novembre 1985 à mars 1986]" (76). See also a letter by Bozo to the president of the Centre Pompidou, dated 17 October 1983, sketching the terms of the agreement between Bozo and Lyotard (CPA 1992014W060).

Bringing the museum on board for his exhibition project was a significant achievement by Lyotard. There were tensions between the departments and a general skepticism within the MNAM toward the activities of the CCI, which were mostly dedicated to applied arts and design. And that skepticism on the part of the MNAM was not without justification in this case, since Lyotard quite obviously did not seek to reserve a special status for the artworks within the exhibition, but rather professed to mix them in with exhibits from other fields. In the *Esquisse*, Lyotard suggested using a “semantic” understanding of “im-materiality” that would make it possible to juxtapose the “dematerialization of financial securities or electronic money on one side, and Suprematism, Minimal Art in painting, or Serialism in music on the other” (1983, 3). Artistic experimentation and technoscientific research would be put on the same level, the overarching *sujet* being how they were both moving away from the human as their main scale of reference (6–7). Similarly, in the follow-up concept drafted by Lyotard and Chaput in October 1983, examples for the “im-materials” addressed in the exhibition comprise “a distant star, the helix of the DNA, a sound, a mark in a painting.”¹³ Lyotard’s “semantic” approach meant that he looked more generally at the shift of relational meanings, at associations which changed in a variety of areas, not in any area in particular. It is therefore not surprising that in the selection process that followed, he was rarely concerned about specific exhibits (including artworks) but more focused on their constellation in the overall exhibition.

During the encounter in September 1983, Bozo and Lyotard agreed that there would be several corresponding curators from the museum who would work with Lyotard and liaise between the CCI and the MNAM for the visual arts program of the planned exhibition. Bernard Blistène, reminiscing in 2015 on how he first got involved in 1983, described himself as a young curator who had recently been invited to join the MNAM’s curatorial staff by its director Dominique Bozo, where he worked in a team of “*contemporains*,” together with Alfred Pacquement, Catherine David, and later Christine van Assche (see Blistène 2015).¹⁴ On one occasion that autumn, Bozo asked the assembled

13 CPA 1994033W669_003. The same text is used in the press dossier for the press conference on 19 February 1984 (CPA 1999032W009). In a meeting with the scientific advisors on 19 December 1983, Lyotard mentions as potential exhibits “scientific next to technological, artistic, etc. [*dispositives*]” (CPA 1994033W666_001). During the following meetings with this group (24 January, 24 February, 20 March, 24 April, 14 May 1984), which did not include Blistène and must have been perceived by Lyotard as a different research track, the minutes show no explicit mention of artworks. (Lyotard mentions these meetings with the scientific advisors in the interview with Blistène [Lyotard 2024, 36].) See also Lyotard’s remark in the conference talk on 12 May 1985, where he states that the interrogation intended by the exhibits can occur in “des œuvres qui peuvent être de pensée, de science, de réflexion, de littérature, de peinture, de cinéma” (CPA 1977001W130_003, 9).

14 Blistène and David started working for the MNAM at the same time, in 1983, whereas van Assche had worked at the Centre Pompidou since 1974 and in 1984 joined the curatorial

curators who would want to be the *correspondent* for a project of the CCI with the philosopher Jean-François Lyotard. Blistène recounts that he raised his hand quickly and without hesitation, because, as he said in 2015, he hoped that this would be an opportunity to engage more closely with Lyotard's philosophy, which he had encountered during his studies in the 1970s through books like *Discours, figure* and *Dérive à partir de Marx et Freud*. From the end of December 1983 onward, Blistène assumed the assigned role, which implied a series of personal meetings between him and Lyotard, as well as occasional participation in meetings of the *Immatériaux* team at the CCI.

Bernard Blistène, born in 1955, had studied art history and archaeology at the École du Louvre and worked as an art critic before joining the MNAM in 1983. His first tasks, besides the assignment to work with Lyotard, included exhibitions in the Centre Pompidou's contemporary art galleries, of work by Barry Flanagan, Ulrich Rückriem, Christian Boltanski (all in 1984), Klaus Rinke (1985), and Enzo Cucchi (1986). For our present context, it is also interesting that, in the summer of 1984, Blistène curated a group show called *ALIBIS*, which brought together a rather diverse mix of artworks on the theme of staging and make-believe.¹⁵

The work on *Les Immatériaux* was thus one of the early steps in the curator's career. In retrospect, Blistène regarded the insights gained from the collaboration with Lyotard—though not so much from his own involvement with the CCI and *Les Immatériaux* in general—as crucial for his future approach to contemporary art and exhibitions as spaces of knowledge and discourse:

I entered into an extraordinary situation, because here was Lyotard, who considered the exhibition space as a space of reflection, as a space of genuine experimentation. In his private apartment, Lyotard gave me and my wife, who was equally interested as I was, an “accelerated” philosophy course on the “postmodern condition” in order to build a base for moving ahead together. For me, this was a truly enlightening moment. ... The relation between the museum and knowledge [*savoir*] became a crucial aspect of this adventure. What I want to say is that this exhibition has opened up crucial breaches [*à ouvert des brèches essentielles*] above all in the relationship between universities and museums, especially with respect to the question of speech [*parole*]. (Blistène 2015)

staff of the MNAM, of which Pacquement had already been a member since 1974.

- 15 Exhibition *ALIBIS*, 6 July–17 September 1984, Centre Georges Pompidou, Galeries Contemporaines, with works by Richard Artschwager, Gérard Collin-Thiébaud, Gérard Garouste, Luciano Fabro, Pierre Klossowski, Robert Longo, Carlo Maria Mariani, Cindy Sherman, Jan Verduyck, Didier Vermeiren, and William Wegman, and a catalogue insert by the artist group IFP (Information Fiction Publicité), whose members were Jean-François Brun, Dominique Pasqualini, and Philippe Thomas.

A more formal description of Blistène's working relationship with Lyotard and of the institutional relationship between CCI and MNAM is provided by the phrasing used in the lending requests for artworks, submitted by the CCI in September 1984. It explained that the CCI had invited Lyotard to organize an exhibition entitled *Les Immatériaux* at the Centre Georges Pompidou and continued:

The Centre de Création Industrielle has asked the Musée National d'Art Moderne to take charge of the visual arts part of this exhibition. This is why, in agreement with Dominique Bozo, Bernard Blistène was entrusted with the task of elaborating it in conjunction with Jean-François Lyotard and his team.¹⁶

In similar contexts, Blistène wrote to his own correspondents that the CCI was organizing with Lyotard an exhibition entitled *Les Immatériaux*, and again for Blistène the collaboration with the philosopher was more important than the institutional framing: "Jean-François Lyotard asked me to work with him on the visual arts part of the exhibition."¹⁷

More practically, Blistène retrospectively described his position toward Lyotard like this: "My role was one of a courier [*porteur*], to show to him certain artists of the time—I remember, for instance, introducing him to the work of Philippe Thomas; I also remember showing him the work of conceptual artists like Ian Wilson, who then in fact appeared in the exhibition" (2015).¹⁸ This is, however, an overly modest description of the work that Blistène did for the exhibition, in the months from December 1983 to March 1985. A synopsis that was drawn up in the summer of 1984 and that documents the names of the people responsible for the conceptualization of the various sites clearly indicates Blistène as the person in charge of the visual arts sites— analogous, for instance, to the scientific advisors Paul Caro and Michel Cassé for some of the scientific sites, or Alain Guiheux named for the architecture sites, or Jean-Louis Boissier for the site *Visites simulées*.¹⁹ The two people who Blistène worked with most closely on this project, Jean-François Lyotard and Sabine Vigoureux, also confirmed his active and decisive role.

- 16 See respective letters to Dan Graham, Joseph Kosuth, Takis, and other artists, dated 22 February 1985 (CPA 1994033W669).
- 17 Blistène, 24 September 1984, to gallerist Eric Fabre (CPA 1994033W223_027).
- 18 In the same context, Blistène also mentions that he carried "a gigantic computer to Jacques Derrida," a remark that relates to the computer Derrida was provided for his participation in the collaborative writing experiment *Épreuves d'écriture*, a project that Blistène was otherwise not involved in; he must have volunteered to help out, even though this task lay outside of his responsibilities.
- 19 1994033W234_003. In this document, Blistène's name is mentioned for six sites; only *Mots en scène* and the entire *Labyrinthe du langage* had not yet been conceptualized. For the contributions of the scientific advisors, see chapter 3.

Sabine Vigoureux was detached from Chaput's team to assist Bernard Blistène and act as a go-between for the CCI's cooperation with the MNAM. Vigoureux had worked for the CCI, and occasionally with Chaput, since 1975, and had been part of the current project team for over a year already when she started working with Blistène in April 1984, first researching the availability of artworks and later preparing lending forms, soliciting photographic reproductions, and so forth.²⁰ In retrospect, Vigoureux wrote:

As far as I remember, Blistène made a number of suggestions that were generally accepted. He understood perfectly the spirit of the exhibition and Lyotard's aspirations. From these meetings were born the themes, the ideas, which were then transformed into a site. (Sabine Vigoureux, pers. comm., June 2020)

As historical sources, reminiscences like these have to be evaluated critically; not only were they formulated with a temporal distance of over 35 years, but we must also presume that Vigoureux would not have been present at each of the conversations between Blistène and Lyotard, possibly making her the witness only of the results, and not the discussions that led to them. Moreover, Vigoureux was only referring to the period since April 1984, when many foundational decisions about the artworks had already been taken, and not to the earlier period in the winter and spring, when the conceptual ideas for sites and proposals of specific artworks were first worked out. Yet, it is striking how she describes the unanimity between the two men:

Bernard Blistène presented his plans and intentions for the sites to Jean-François Lyotard. From my memory, Blistène asked me to research some of these works without him having talked to Lyotard about them previously. Blistène and Lyotard were in perfect agreement, as far as I recall. Lyotard trusted Blistène completely in his choice of works. Perhaps they had discussed them together before, but I believe that Blistène was effectively quite autonomous. Lyotard had a lot of respect for Blistène and accepted his propositions. They were very courteous with each other and, from what I remember, Lyotard did not question Blistène's decisions. I don't remember any disagreement between the two of them. Quite the contrary! (Vigoureux, pers. comm.)

Vigoureux also remembers that the final decisions on the exhibits were taken collectively by the team, confirming Lyotard's frequent remarks about the active role that Chaput and the other team members played in shaping the exhibition:

20 See Vigoureux's notes of the first meeting with Blistène that she participated in, on 2 April 1984, after her return from maternity leave (1994033W232_002). Judging from her notes, this meeting established the state of planning of the visual arts contributions, as they also appear in the first full overview of the planned exhibition, compiled in April 1984.

Blistène then presented the concepts and works which Lyotard had approved to Chaput and the rest of the team. To my recollection, there were hardly any critical discussions with the team, and on the whole, everything was accepted. (Vigoureux, pers. comm.)²¹

These memories are seconded by Lyotard's own rendition of the collaboration with Blistène, formulated in his talk at the Centre Pompidou on 22 May 1985, where he described the mode of working quite similarly. Lyotard recounted:

Bernard Blistène, after joint briefing sessions, he said, "OK, I see, I'm going to make proposals." So we examined the proposals, we discussed, we refined them and so on.²²

Lyotard mentions that the purpose of the selection was not a full art historical treatment of the themes but rather to arrive at a number of significant examples. About the concrete working process, Lyotard said:

We take a theme, ... we look at how that theme has been treated [in different art historical contexts], ... and basically we left the responsibility for that to Blistène, I fully endorse what has been done.²³

Again, looking critically at the historical source, the overall, unedited transcript of this talk in May 1985 suggests that Lyotard was speaking rather casually; but what we can glean from these remarks is that Lyotard saw a dual responsibility: Blistène's for the specific proposals of artworks, and Lyotard's own responsibility for their grouping and placement in the overall exhibition.

It is therefore not surprising to find documentation photos, taken during the official opening of the exhibition in March 1985, that show Blistène in the space of the site *Odeur peinte*, talking to the Minister of Culture Jack Lang, Claude Pompidou, widow of Georges Pompidou, and Centre Pompidou President Jean Maheu, with Lyotard staying in the background (fig. 39).²⁴

21 For examples of Lyotard's comments on the collective character of the team work, see above, chapter 1.

22 CPA 1977001W130_003, 30.

23 CPA 1977001W130_003, 30. Blistène himself remembers the cooperation similarly: "Lyotard was happy to be convinced of my proposals; we discussed them, and then finally we decided whether something fit or not. I couldn't just do what I wanted, but Lyotard asked me to propose things which, in many cases, he accepted" (pers. comm., 7 September 2020).

24 See CP-BK photos CCI_147_0021_P, and CCI_147_0022_P. Lyotard provides another, more indirect indication of Blistène's role when in the May 1985 talk, which covers many aspects of the exhibition, the only artist he mentions by name, and three times, is Marcel Duchamp, suggesting that only this prominent figure, about whom Lyotard had himself published a book, was really strongly present for him, while all the other artists—31 in the visual arts sites alone—did not so easily come to his mind; see CPA 1977001W130_003, 30–31.



[Figure 39] Bernard Blistène (left) with Isabelle Maheu, Jack Lang, Claude Pompidou, Jean Maheu, and (far left, background) Jean-François Lyotard, during the exhibition opening of *Les Immatériaux*, 26 March 1985, site *Odeur peinte*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0021]

Up to the present day, the exhibition is occasionally criticized for the sometimes problematic ways in which it dealt with artworks, utilizing them as topical placeholders rather than presenting them as autonomous artworks in their own right.²⁵ What for Lyotard was a calculated and intended provocation turned out to be more problematic for the reputation of the young art curator Bernard Blistène because these deliberate conceptual decisions impacted not only the institutional relations within the Centre Pompidou but also the long-term reception of the exhibition.

Several years before its eventual opening, the exhibition project on creativity and new materials that would become *Les Immatériaux* had originally been initiated by the CCI in 1981 as an interdepartmental project of the young Centre Pompidou, presuming the participation and support of the MNAM and its director Dominique Bozo, who had succeeded Pontus Hultén in that position in September 1981. By spring 1983, the MNAM was not contributing to the project anymore, a decision that, as we have learned, was only reversed by Bozo after conversations with Lyotard in autumn 1983.

However, the relationship between the project leadership and the MNAM remained fraught. During a meeting of Bozo, Blistène, and other MNAM staff

25 See Wunderlich (2008), especially as regards the presence of German artist Annegret Soltau; Glicenstein (2014).

members with Lyotard in May 1984, the museum confirmed that Blistène and Catherine David were assigned to Lyotard as curatorial advisors, and that Bozo himself would support lending requests for artworks, but it was also asserted that all practical, administrative, and financial matters relating to the exhibition, including loans and technical services, would be the sole responsibility of the CCI, and that the staff of the MNAM would not intervene.²⁶

This agreement was forgotten or ignored when, at the beginning of 1985 and now only weeks before the exhibition opening, the director of the CCI, François Burkhardt, wrote to Bozo, requesting support from the MNAM for arranging the transportation, storage, and installation of artworks. Burkhardt's argument was that these artworks had been proposed and negotiated by Blistène, and that he hoped the museum would now take responsibility for the works "for which Blistène has given us reason to hope for your collaboration."²⁷

These instances of interdepartmental wrangling show how Blistène was caught between two sides, with conflicting loyalties toward his professional superiors and peers on one side, and toward his partners—including the admired Lyotard—in the exhibition project to which he had devoted so much energy on the other. According to Blistène, this conflict with his colleagues had begun when he first committed to the project in 1983. He recalls that, when he volunteered to work with Lyotard and the CCI, the other MNAM curators looked at him in dismay, one of the modern art curators even calling him a traitor ("tu as trahi déjà"), a sentiment which Blistène retrospectively affirmed:

and yes, I betrayed the doxa of museum curatorship [*doxa de la conservation*], I betrayed the separation between the university and the world of the museums, at that moment I felt like a wolf in a sheepfold [*comme un loup dans une bergerie*], naïvely thinking that a young curator could create links and passages between the worlds of the university and of museums. (2015, min. 05:26–06:30)

According to his own recollections, Blistène's colleagues sneered, "ah, a philosopher who wants to make an exhibition, a philosopher who does not know what he is talking about, who has written a book about painting and speaks about Adami, Arakawa, and Buren, proving that he does not know what he is venturing into." Retrospectively trying to make sense of the implied

26 Note by Jean-Jacques Aillagon (MNAM) to Gourevich (CCI), 29 May 1984, CPA 1994033W669_452. There are no traceable indications of practical contributions by Catherine David; the impression that she had no active role in the preparation of *Les Immatériaux* has been confirmed by Bernard Blistène (pers. comm., 7 September 2020).

27 Note by François Burkhardt to Dominique Bozo, 20 February 1985, reiterating a request that Chaput had put to Aillagon on 10 January (CPA 1977001W130_014). See also the complaints by the MNAM about the CCI's usage of the film projection space Salle Garance for the *Ciné-Immatériaux* film program (CPA 1977001W130_011).

humiliation, Blistène explained in 2015: “This was, I say this with emphasis, for me a very important moment, because I realized how vertiginous was the step away from the museum and away from the field of art history” (2015, min. 06:55).²⁸

It was a difficult position for a young curator to be in, not least because this was such a complex and enticing project.

The exhibition’s development in the course of 1984 was marked by several crucial dates. There was a deadline for the completion of the first full project outline in the middle of April, and a meeting with the exhibition architects at the beginning of September, during which important decisions about the division of the overall gallery space would have to be taken.²⁹ The two documents that describe the state of planning at those two moments provide the main basis for the following analysis of the conceptual and programmatic decision-making process.

Between December 1983 and April 1984, there were six documented meetings between Lyotard and Blistène, and another five leading up to the September meeting with the architects.³⁰ Soon afterward, the first lending requests were sent out and the frequency of meetings between Lyotard and Blistène diminished.

In the course of the entire year of 1984, the list of Blistène’s tasks for *Les Immatériaux* included the meetings with Lyotard; meetings with the CCI

28 Blistène was confronted with this sentiment not only at the MNAM. In December 1984, the Louvre curator Jacques Foucart wrote a letter to CCI director François Burkhardt to explain the rejection of lending requests for paintings by Metsys and Reymers-waele; on a copy of the letter, Foucart added a handwritten note addressed to Blistène, whom he knew from Blistène’s time as a student of the École du Louvre: “J’avoue être scandalisé. Le Metsys pour cela, non! Je vous tiens donc au courant et salue cependant avec plaisir vos réalisations, mais pitié pour les vieux tableaux qui sont l’acmé de notre culture et n’ont pas à être des otages de nos brillantes (et parfois inutiles) spéculations! Ne croyez-vous pas? Bien à vous et avec mon meilleur souvenir, JF” (dated 21 December 1984, CPA 1995025W155_003). The somewhat careless way in which Lyotard responded in May 1985 to questions about the decontextualization of valuable artworks would not have appeased the critics, and would thus also not have made it easier for Blistène to defend his own participation in the project in front of his peers. Lyotard, asked whether many artworks were being misused in the exhibition, retorted that a strong artwork would resist such misuse: “if its complexity is such that it can withstand the service it is asked to perform, BRAVO!” (CPA 1977001W130_003, 32). In the same talk, Lyotard somewhat ironically explains that the visual arts sites were granted the exceptional right to exhibition walls, “qui ont droit à des cimaises parce que le conservateur ne peut pas supporter de voir un beau Flamand du XVIIe suspendu à notre grillage de métal donc il a exigé les cimaises et on a fait une concession” (30).

29 Both dates can be found in Lyotard’s calendars for 1984: 16 April 1984, “Donner Maheu, texte, liste sites,” and 11 September 1984, “architectes, Blistène” (see *Chronology*).

30 The dates of meetings recorded in the *Chronology* are 29 December 1983; 19 January 1984; 9, 20 and 28 February; 2 April; 2 June; 17 July; 14 and 20 August; 6 September.

team, and with individual team members, especially with Sabine Vigoureux; researching and selecting artworks to be proposed and the preparation of presentation materials;³¹ the presentation and discussion of proposed artworks with Lyotard, leading to the final conception of the sites, proposition of their titles, and selection of artworks to be presented in team meetings, to the architects, and on other occasions.³² Then followed the submission of lending requests, some of which had to be followed up with phone calls, the collection of information on technical and security aspects of sites and artworks for the installation, the preparation of the catalogue entries.³³ Finally Blistène also supervised the installation of the artworks in the exhibition.³⁴ In sum, Blistène acted as an executive curator for this part of the exhibition, assisted by Sabine Vigoureux and supported and supervised by Lyotard.

Program and Concept of the Visual Arts Sites

The documents on which the following analysis is based suggest that the overall conceptual framework for the exhibition was established by April 1984.³⁵ In this overview document, two-thirds of all the exhibition sites already

- 31 Among the production materials for the exhibition (see CPA 1994033W223), there are photocopies of illustrations of artworks which constitute the materials that Blistène himself collected for his discussions with Lyotard. This has been confirmed by Sabine Vigoureux (pers. comm., May 2020).
- 32 Eventually there were a total of 39 artworks in the seven visual arts sites; the preliminary list from September 1984 (CPA 1994033W233_022) comprised 34 works, not all part of the final list of 39, so that we can estimate that in the autumn of 1984 Blistène was negotiating around 50 artworks. See also the transportation lists in CPA 1995025W155_002.
- 33 Blistène also proposed a short bibliography on visual arts (CPA 1994033W223_020); the 10 titles were, together with titles on photography, music, and architecture proposed by others, added to the section "Lectures/Sensibilités" of a four-page reading list in the *Inventaire* catalogue. Blistène's list included books on futurism, Arte Povera, land art, and conceptual art; Rosalind Krauss's *Passages in Modern Sculpture* (1981); Benjamin H. D. Buchloh's *Formalism and Historicity* (1982); and the catalogue of the exhibition *When Attitudes Become Form* (1969).
- 34 Katia Lafitte, architect at the CGP and responsible for the installation of the exhibition, remembers that, "the installation team for the museum paintings was from museum. The CCI would never have had the right to do it, and I think that as the curator, Bernard Blistène certainly followed the installing of the paintings and took the decisions." Lafitte also seconds the account of the problematic relationship between the MNAM and the CCI: "I remember very well it was not easy for Bernard Blistène to negotiate and be the link between the museum people and the exhibition team. The director and curators of the museum felt that the hanging of artwork above the floor on plaster sheets was kind of degrading for artwork. They had difficulties working with the CCI people. A lot of discussions, quarrels and negotiations went on and I think it only worked because of Jean-François [Lyotard]... To a well-known philosopher you cannot say 'no'!! and JF was very persuasive!!" (Katia Lafitte, pers. comm., 4 December 2019).
- 35 The following analysis largely draws on a comparison between the final composition of the visual arts sites as they are documented in the *Inventaire*, with the planning documents from April 1984 (CPA 1994033W666_030), September 1984 (CPA

appeared under the titles they would eventually carry a year later. Of the seven visual arts sites, only one (*Mots en scène*) is not yet mentioned; it was to be part of the *Labyrinthe du langage*, which was conceptualized only in a second phase of the curatorial effort. In the first three months of working together, Blistène and Lyotard had thus defined the general program of the visual arts sites and had agreed on about 20, that is, half of the artworks that were shown in these sites.

Our analysis here does not provide a full interpretation of the visual arts sites and how they were embedded in the overall structure of the exhibition (the *Mât* paths, the audio zones, etc.). Rather, the attempt is to give an account of the two co-curators' collaboration, their conceptual strategies as well as pragmatic considerations with respect to the visual arts sites, their relationships with other sites, and their respective position in the overall exhibition. We do this through a close reading of archival traces of the curatorial working process and of the results.

The sequence in which the sites are discussed here is arbitrary. It is based on the artworks in the sites and the themes they address, in an attempt to organize them into a comprehensible narrative. The labyrinthine spatial structure of the exhibition itself prescribed no such sequence, and ideally, they should be considered simultaneously, as a tableau of co-present constellations, and not sequentially. For each of the sites discussed here, there is an overview of the artworks as they appeared in the exhibition, together with a list of works that were, more or less tentatively and at different points in the process, considered for inclusion in the respective sites.

The conceptual notes which were included in these different lists, and whose final versions would eventually appear as introductions on the *Inventaire* sheets for the respective sites, expose the gradual evolution of the concepts of the sites. The short texts served as a curatorial tool, a conceptual handle through which Lyotard and Blistène defined and distinguished the themes. They thus also provided criteria for selection or rejection, as well as a description. This familiar curatorial principle establishes a circular and, in some way, tautological structure: step by step, the exhibition becomes congruous with the written concept, as both the selection of exhibits and its conceptual foundation are gradually approximated and assimilated to each other.³⁶

1994033W233_022), and Sabine Vigoureux's handwritten notes for the preparation of the sites, lending contracts, etc., gradually elaborated in the autumn and winter 1984/1985 (CPA 1994033W235_001). Another relevant document is a 67-page typescript of draft texts for the *Inventaire*, probably written by Lyotard at the end of December and early January 1984/1985, containing texts which are very close to those in the *Inventaire*, though some editorial changes were still made (CPA 1994033W666_033).

36 The *Petit Journal* visitor guide, in its short conceptual texts, summarizes the audio zones, and comprises excerpts from the soundtrack for each zone; it is a less pertinent source

Despite the chapter title, we find no indications of an explicit “program” that determined the elaboration of the visual arts sites. Rather, the available documentation gives the impression that the curators departed from a more general interest to see how some of the core themes of the *Immatériaux* (language, signification, body) were articulated in the field of the visual arts. This also implied that some works were selected or placed due to only one aspect of the work. For example, Piero Manzoni’s *Merda d’artista* (1961) was shown in the site *Odeur peinte* (Painted scent) because of its reference to the theme of smell, even though the piece could equally have been presented as part of *Négoce peint* (Painted trade), where it would have referred to the aspect of the commercial value of artworks. Such ambivalent decisions led to a conceptual blurring which may have added to the confusion of the visitors about the presence and status of artworks in the exhibition.

As a basic criterion for their selection, Lyotard emphasized that the artworks would have to bear the juxtaposition with exhibits from a variety of different, often non-artistic contexts. In the interview with Blistène conducted during the preparations, Lyotard stated, “any [art] objects that may be placed next to other elements of the exhibition will have to be compatible” (Lyotard 2024, 45).³⁷

Some of the questions that the following analysis of the visual arts sites seeks to address are:

- a. What is the specific correlation between the themes of the visual arts sites and the artworks selected for them? Why were these particular themes deemed to be most appropriately articulated through artwork? How did the curators arrive at these particular themes to frame the inclusion of artworks in the exhibition?
- b. How do the works discussed here relate to the artworks and projects by contemporary artists in other sites? Is there a conceptual or other form of coherence, or is this set perhaps characterized mainly by the (rather formal) fact that it was the MNAM’s contribution? Would it have been recognizable as a set only from the perspective of Blistène, or the MNAM, and would it for everyone else just blend in with the rest of the exhibition? Was this “diffusion”

for understanding the conception of the individual sites, though it is interesting to see that here the perspective of the content and sequence of the zones (as an intermediate structure between the *Mât* paths and the individual sites) was taken as a significant structuring feature in this main didactic medium intended for the visitors.

37 In the selection of artwork, the question of the gender balance of represented artists appears to have been of no concern. Among the seven visual arts sites, only one, *Lumière dérobée*, included works by two female artists, compared to works by a total of 30 male artists in these sites. In contrast, in the rest of the exhibition, the situation was a little bit more diverse, with works by around 10 different female artists.

another reason for his MNAM colleagues' disapproval, namely, the "invisibility" of the museum's perspective and curatorial authorship?

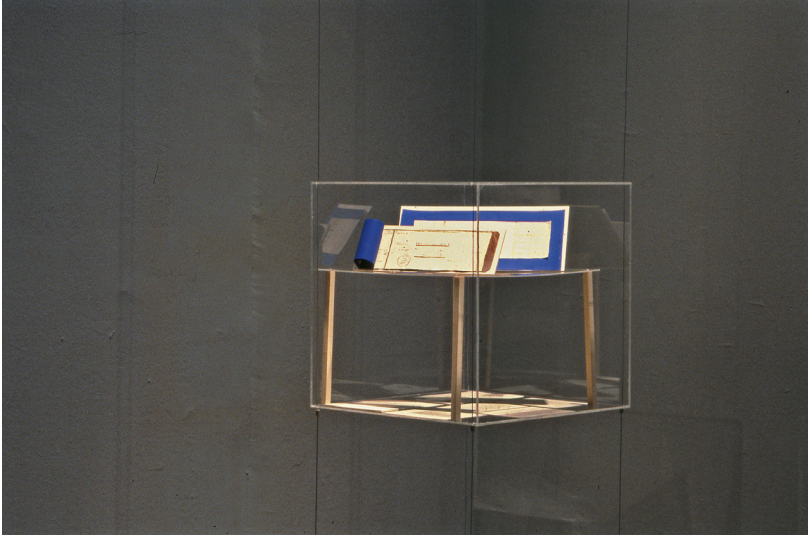
c. Is it possible to characterize Blistène's particular contribution to *Les Immatériaux* through his dialogue with Lyotard?

"Infra-mince"

The standard passage through the exhibition would take the visitor from the *Théâtre du non-corps* (Theatre of the non-body) at the southern end of the Grande Galerie on the fifth floor of the Centre Pompidou, to the *Labyrinthe du langage* (Labyrinth of language) at its northern end. Between these two poles was a maze of small spaces, organized into five paths that were intersecting and occasionally interrupted, jumping to another position a bit further down, so that the theoretically preconceived, thematic passage from the physical presence of the body to the dematerialized presence of language could only be felt but barely navigated, or even recognized consciously, by the visitors. The first, eastern-most path, which was described in the introductory stroll in chapter 1, was defined by the term "*Matériau*," highlighting the material support, the raw material. In the middle of this path, after passing through a number of sites relating to the human body—its physical presence and transformability—visitors would encounter a site, its space not bigger or smaller than others, which was noticeable mainly because of the particular ephemerality of the exhibits. While many other sites clearly showed "something," this one showed very little: some scribbled words on snippets of paper (Marcel Duchamp) some drawn sketches (Yves Klein), placed together in a small, cubic plexiglass showcase, a video monitor displaying the almost completely white image of a female figure, slowly fading into and out of visibility (Thierry Kuntzel), and a slide-projected word, "visible," that could only be seen when the body of another visitor passed through the projection beam (Giovanni Anselmo). On encountering this site, it would have been easy to think that there was "almost nothing" to be seen (fig. 40).

It is one of the paradoxes of the exhibition as a whole that this site, which is perhaps the closest to the conceptual core of *Les Immatériaux*, was more or less hidden by the unobtrusiveness of its exhibits. Its title, "*Infra-mince*" ("Infra-thin") was taken from Marcel Duchamp who jotted down his thoughts about this concept in multiple notes and short texts.³⁸ The word means "less than thin" and refers to the status of immateriality in a dual sense, namely as "almost nothing" and as "in-between," pointing to a state of indeterminacy and semiotic indistinction. The site thus hinted at two important aspects of the

38 The title of the site was an exception in that it contained quotation marks. For the relationship between Lyotard and Duchamp, see Parret (2010).



[Figure 40] Site “*Infra-mince*” (“Infra-thin”), plexiglass case with works by Yves Klein and Marcel Duchamp. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0393]

exhibition: the general status of materiality and the theme of encounter and translation.

The preparatory documents show that the decision to include a site with this title was taken very early on—as was true for many other site titles—and they indicate that the curators wanted it to specifically feature Marcel Duchamp. The first list of works planned for this site, from April 1984, includes four works by Duchamp, suggesting that the curators intended a focus on his work. Lyotard had published his book on Duchamp in 1977, and we can surmise that this was a terrain where Lyotard felt safest in terms of his knowledge and judgment in the wider field of modern and contemporary art.

Another artist who is mentioned in the first preparatory list is Yves Klein, and the artwork that will represent him in the exhibition is even named there, while the pieces by Duchamp that will eventually be shown are different from the works first mentioned. Whereas Duchamp’s sculptural objects were being considered in April 1984, Lyotard and Blistène decided by September to exhibit a selection of Duchamp’s notes from the *White Box* and the *Green Box* that explain the notion of the *infra-mince*. In our attempt to gain a deeper understanding of the curatorial process, it is interesting to consider this specific constellation: it seems that the piece by Klein—drawings and paraphernalia of a performance—was recognized early on as serving to articulate this crucial,

Duchampian concept. In retrospect, the first list of works by Duchamp appears rather haphazard—and thus may not have convinced the curators themselves. It reflects the initial impulse to show actual artworks, an impulse that was later corrected in favor of a more conceptual approach, leading to a site in which both Duchamp's and Klein's exhibits are classified in the *Inventaire* not as artworks but as “documentation.”³⁹ Moreover, the pieces by Duchamp and Klein were presented together in one relatively small plexiglass showcase.

Yves Klein had worked on the concept of the “immaterial” in several texts and projects around 1960, including the performance *Zones de sensibilité picturale immatérielle* (1959) from which two sketches were on display in the “*Infra-mince*” site. In this project, Klein reflected on the notion of ownership and the ephemeral value of artworks, as well as on the impossibility of representing forms of art that manifest as events, rather than as material objects (Riout 2004; Morineau 2006; and Woodward 2016, 151–164). In the context of the preparations for an exhibition about “im-materials,” this project by Yves Klein would have easily come to mind, not least because only a year earlier, in spring 1983, the MNAM had hosted Klein's work in a retrospective exhibition that had previously been shown in the US.

The curatorial shift, from April to September 1984, toward a more conceptual approach in articulating the notion of *infra-mince* in the exhibits by Duchamp went along with the addition of the works by Giovanni Anselmo and Thierry Kuntzel, both responding to the dichotomies of visibility and invisibility, appearance and apparition, in a more concrete and obvious manner—visually, in the case of Kuntzel, and both visually and corporeally in Anselmo's work. Thierry Kuntzel's video installation *La Desserte blanche* (1980), which was borrowed directly from the Paris-based artist, is usually set in a white-painted space, including white benches for the audience to sit on and white neon tubes at the ceiling; a video monitor is mounted inside the facing wall, playing a video which shows faint still images, continuously fading into and out of total whiteness. The entire setting of the installation is designed to make it hard to discern what these screen images show (Bellour 1981; Van Assche 1984; Kuntzel 2006, 339–44).⁴⁰

39 Lyotard, in his talk at the CGP on 22 May 1985, somewhat flippantly calls these notes and paper snippets Duchamp's “bumph” (...*Duchamp avec toutes ses paperasses* ...) (CPA 1977001W130_003, 30–31). In Blistène's accompanying note in the *Inventaire*, special attention is drawn to the fact that Duchamp's materials are taken from the collection of the MNAM, and that they had been edited by Paul Matisse in a recent publication (Duchamp 1983).

40 The form of the installation in *Les Immatériaux* is not documented and can currently only be speculated upon; Blistène vaguely remembers a reduced setting in which the video monitor was suspended from the ceiling, with one or three white neon tubes suspended above and in front of it (pers. comm., 11 November 2021).

Giovanni Anselmo had previously done a whole series of works playing with the prefixes of words, using slide projectors as well as metal casts, among them several works employing the term “in/visible” (Ammann 1980; Bordaz 1985). The MNAM bought other works by him in 1980 and 1985, while *Invisible* (1969), the piece that was shown in *Les Immatériaux*, was borrowed from the collection of the artist through the Galerie Durand-Dessert. The visibility and legibility of the word “visible” was conditioned on the presence of the audience, even of two visitors at the same time, since one could easily miss seeing the projection if it fell on one’s own body. At the same time, the projection rendered the respective body of a visitor “visible,” highlighting his or her physical presence in an exhibition environment that was otherwise designed to obfuscate the contours of the perambulating bodies.

Besides Duchamp and Klein, the initial preparatory concepts mention another artist, Yannis Kounellis. His work *Untitled (Marguerite de feu)* (1969) was considered for the exhibition throughout 1984, and was included in a lending request to the Galerie Durand-Dessert in the autumn. The work includes a black, flower-shaped sheet of metal in whose middle there is a small, gas-fired flame; this “fire marguerite” is mounted on the wall and connected through a red tube to a small gas bottle that is placed on the floor. The conceptual notes accompanying the April list for this site include a phrase that can be directly related to this piece by Kounellis: “Paradoxes about the support of the artistic message: water, earth, air, fire...”⁴¹ This phrase does not appear anymore in the September concept, indicating a shift away from the classical elements as possible material supports for artworks, and toward the question of perception and presence.

Another, more mundane aspect that led to the final abandonment of this work were discussions about the potential fire hazard caused by the open flame. Among the exhibition designer Philippe Délis’s production sketches for the site are drawings that suggest deliberations about how to shield the work from the audience, and finally a note on one of these sketches by Délis, from December or January, remarking that the work has been “refused” (*refus*).⁴² By that time, the curators knew that there would be another installation by Kounellis in the site *Odeur peinte*, and that the fire-like materiality of light would be represented in the site *Peinture luminescente* (Luminescent painting) by the glass-contained flickering gases in the installation *La Méduse* by Takis, making it easier, perhaps, to let go of the *Marguerite de feu*. But if we want to reconstruct how the site “*Infra-mince*” was conceived and imagined by Lyotard and Blistène throughout 1984, it is necessary to take into account the unrealized

41 These four elements also form the main themes of a series of books by the French philosopher Gaston Bachelard; see chapter 10.

42 See CPA 1995052W027_007; confirmed also by a handwritten note by Sabine Vigoureux (“*refus, ... pbe de sécu*” [security problem], 1994033W235_001, 1). The work is still mentioned in Lyotard’s catalogue draft, 1994033W666_033.

constellation that the light, heat, and sound of Kounellis's *Marguerite de feu* would have constituted, along with the paper notes and the ephemeral images in the other works.⁴³

There are several indications that "*Infra-mince*" played a key role in the overall exhibition, not least in the connections it made with other sites. The short conceptual text on the *Inventaire* sheet includes a sentence by Duchamp, taken from a graphic work reproduced on the same page: "When the tobacco smoke also smells of the mouth that exhales it, the two odors are married by *infra-mince*." ("Quand la fumée du tabac sent aussi de la bouche qui l'exale, les deux odeurs s'épousent par *infra-mince*.") This doubly present phrase emphasized the *infra-mince* quality of smell, which also featured in the sites *Odeur peinte* and *Arôme simulé* (Simulated aroma).

The text for Duchamp's contribution on the verso side of the same *Inventaire* sheet also implicitly referred to the site *Surface introuvable* (Elusive surface), which lay immediately next to "*Infra-mince*" and which displayed different representations of the volume and relief of paper surfaces that usually appear flat to the naked eye (fig. 9). The text quotes Duchamp's explanation of *infra-mince* in an interview: "The noise or music that corduroy pants like these make when you move around is *infra-mince*. The hollow in the paper, between the front and the back of a thin sheet..."⁴⁴ The neighboring site *Surface introuvable* appears to be an illustration of this remark by Duchamp about the voluminosity of paper. This type of "spillage" between sites happened with regard to both conceptual considerations and individual works which in the course of the planning process were shifted from one site to another.⁴⁵ The visibilities of physical bodies, their surfaces and inside structures, were also the topic of two other sites adjoining "*Infra-mince*" and both part of the *Matériau* path: *Matériau dématérialisé* (Dematerialized material) and *Corps éclaté* (Exploded body). And with some interpretive license, we can also count the transforming bodies in the video clips of *Corps chanté* (Sung body) and

43 Lyotard mentions the work *Marguerite de feu* by Kounellis in the interview with Saur and Bidaine for the CNAC magazine, confirming that it was still under consideration when the interview was held in January 1985; see Lyotard 2020, 74. For the conceptual relevance of unrealized project, see also chapter 7 below.

44 Duchamp, interview with Denis de Rougemont, in 1945. Duchamp referred to the same example in a note entitled *Transparence de l'infra-mince*: "... Chercher dans quel corps de métier on se sert d'instruments à mesurer l'épaisseur (marchands de plaques de cuivre) qui vont jusqu'à quelle minceur? $1/10\text{mm} = 100\mu = \text{minceur des papiers} \dots$ " And in another one of Duchamp's notes, *Pseudo-expérience / Différence entre le contact de l'eau...* (AM 1997-98, 14), he uses the term *rugosité* (roughness), which echoes the *rugosimetric* representation of paper in one of the panels in the site *Surface introuvable*.

45 This also happened in two other cases: works by Dan Graham and Joseph Kosuth, planned in April 1984 for *Peinture lumineuse*, were eventually shown in *Lumière dérobée* and *Mots en scène*, respectively.

the transsexual bodies in *L'Ange* (The angel) among the manifestations of the *infra-mince*.⁴⁶

We can only speculate whether Blistène also took such a perspective that transgressed the boundaries of the visual arts sites, but it is clear that Lyotard was keenly aware of the ramifications that, for instance, the concept of the *infra-mince* had across the exhibition. In his talk about *Les Immatériaux* at the Centre Pompidou on 22 May 1985, he spoke about “a visual arts site called ‘*l'infra-mince*’ (a word taken from Duchamp) where there is a showcase of Duchamp’s papers dealing specifically with these problems ... [of] the ‘untraceable surface’ (*surface introuvable*) but approached from another point of view.”⁴⁷ Lyotard here uses the title of the adjoining site, *Surface introuvable*, in order to explain the topic of the site “*Infra-mince*,” noticeably associating it beyond the boundaries of the visual arts sites.

Ombre de l'ombre

Another site that epitomized the overall concept and semiotic program of *Les Immatériaux* with its postmodern emphasis on translation and the increasing primacy of signs over objects, *Ombre de l'ombre* (Shadow of a shadow), could be encountered at the beginning of the fourth path, *Matière*, which dealt with the concept of the referent of a message, the content, asking what it is that the sign actually designates. On this path, several sites addressed the problem of simulation, for instance in computer animation, and the representation of scientific data. And the site next to *Ombre de l'ombre*, entitled *Trace de trace* (Trace of a trace), examined the referentiality of photography as a “trace” of reality.

46 It could be argued that the medium of sound in general was another example of the *infra-mince*, even though it was not explicitly addressed as such by the curators: the sensor-relayed interactions in Rolf Gehlhaar’s installation *Son=Espace* (in the site *Musicien malgré lui*) could have been interpreted as instances of such a minimal friction between two surfaces; the *Inventaire* text for the site *Tous les bruits* focuses on notation and the possibility of “inscribing” sounds and noises; and even the *bande-son* can be taken as a gesture toward the *infra-mince* in that it dissolves physical boundaries. The introductory text to IRCAM’s concert series, *Sons et voix*, does not mention the *infra-mince* status of sounds and voice in general, but rather focuses on the dichotomy of the immaterial/invisible in electronic sound production on the one hand and of the materiality of the technical hardware on the other: “What could be more immaterial than the sounds produced without us seeing how they are made. What could be more material than the machines and the way they are handled, which are the source of these sounds. IRCAM presents four series of concerts whose works create a continuous counterpoint between sounds created artificially, without human gestures, and the sounds/interventions produced directly by instruments and voices. Between these two universes, there are continuous transformations that make the material, the immaterial” (*Inventaire*, n.p., *Sons et voix*). See also Broeckmann (2020).

47 CPA 1977001W130_003, 30–31.

In the site *Ombre de l'ombre*, the curators presented only one work, Joseph Kosuth's *One and Three Shadows* (1965). This decision was taken early on in the curatorial process, the title of the site and the work appearing in identical form in all versions of the planning documents.⁴⁸ The installation has three parts, placed next to each other on a wall: the shadow of an object, a photograph of that same shadow, and a panel with a text explanation of the word "shade/shadow" from a dictionary.⁴⁹ The work was borrowed from the Parisian Galerie Éric Fabre. It is noteworthy that Lyotard and Blistène did not select Kosuth's signature piece of the same series, *One and Three Chairs* (1965), which had been in the collection of the MNAM since 1976. This work would have equally served to articulate the intricate relation between an object, its visual representation, and its verbal designation. But *One and Three Chairs* would have lacked the special "im-material" quality which the curators recognized in the threefold presence of a shadow, and which they emphasized in the April 1984 planning document: "*l'ombre = immatériau.*" We can presume that the curators took this thought more or less directly from Duchamp, who in his explanations of the *infra-mince*, after speaking about the volume of paper, had stated: "the *infra-mince* characterizes any difference that you can easily imagine but does not exist, like the thickness of a shadow: the shadow has no thickness, not even to the precision of an Angstroem" (Duchamp 1999, 20–21).

However, in the conceptual texts by the curators, the focus was placed on the shadow not as a physical phenomenon, but as a metaphor for the relationship between objects and concepts: "Reality becomes the shadow cast by that which repeats it in images and/or words," Lyotard writes in the *Inventaire*. The same conceptual gesture of semiotic reversal was also rehearsed, for instance, at the opposite end of the *Matière* path, where the site *Référence inversée* (Inverted reference) presented architectural drawings and models by Peter Eisenman. Here, the text in the *Inventaire* stated: "The reference to the hardware [*matière*] of architecture is inverted. The building represents its representation on paper."

48 At some point late in 1984, Blistène additionally considered a work by Christian Boltanski, *Ombres* (1984), for this site (see 1994033W235_001; the work is also mentioned in Lyotard's catalogue draft, 1994033W666_033). Blistène had curated an exhibition of Boltanski's recent works at the beginning of 1984, which included photographs of the *Composition théâtrale* (1981) series, precursors to the kinetic *danse macabre* of the *Ombres* series that Boltanski would realize in the following years. With hindsight, it seems apparent why this proposal was dismissed in favor of the more conceptual, less emotionally charged shadow-work by Kosuth. Moreover, Boltanski's work would have required the construction of a separate, white-walled space, which the curators tried to avoid wherever possible.

49 See Wunderlich (2008, 193, 199–201, 203). Gallo's book (2008, 118–123), in a section on Joseph Kosuth's *One and Three Shadows* (1965), provides an exemplary, art-historical contextualization of an individual artwork, without discussing the work and the site in relation to the neighboring sites. See also Lyotard (2012d).

Mots en scène

In addition to "*Infra-mince*" and *Ombre de l'ombre*, a third visual arts site that relied on pieces of conceptual art for articulating the transgressive semiotic potential of the "im-materials" was *Mots en scène* (Words on stage), which constituted a visual arts contribution to the *Labyrinthe du langage*. This major space at the end of the exhibition contained a total of 15 mostly screen-based projects, ranging from an online art gallery in the Minitel system, through generative computer animations, to a video documentation of voice-based live performances. Among these exhibits, the three artworks presented under the joint title *Mots en scène* stood out not only because of their peripheral placement at the exit of the *Labyrinthe* but because, in them, words manifested not electronically as almost everywhere else in the *Labyrinthe*, but physically. There was a sheet of typewriter paper announcing a discussion, by Ian Wilson, a square paper work by Robert Barry, inscribed with eight short, associative words and phrases, and a phrase written in bent neon tubing by Joseph Kosuth, *Five Words in Orange Neon* (Berndes, Esche, and Mot 2008; Denizot and Barry 1980). The first two came from the collection of the MNAM, while the latter was borrowed from the collection of the gallerists Liliane and Michel Durand-Dessert.

The research materials for *Mots en scène* are collected in a small dossier entitled "*Labyrinthe des mots*," which contains photocopies related to the three artworks, presumably collected by Blistène and held together by a folded A4 paper with the photocopy of a handwritten note by Jean-François Lyotard in which he formulated guidelines for the research of artworks for this site:

SITE for the labyrinthe du langage
 - grasp the language
 - no spectacular experience
 - syntactic system
 language / simulacrum of language.
 language of ordinary life and literature
 opposition dem- / im-materiality.⁵⁰

The last phrase is particularly interesting from an art-historical perspective, given that it pinpoints the distinction between the notion of "dematerialization" that has been so prevalent in conceptual art since around 1970 and the notion of "im-materiality" (*immatérialité*) proposed by *Les Immatériaux*. The works should, Lyotard suggested, not so much display the nonmateriality of language in art, but point to its precarious and transformational status—as ephemeral light, as documentary trace, or as semantic intimation.

The curatorial concept for the *Labyrinthe du langage* was not yet worked out in April 1984 and, as with most of its other projects and sites, references to *Mots en scène* don't appear until the September concept. From that moment on, the three works recur in the consecutive planning documents, as a stable constellation. However, there are indications that several other works were also under consideration for this site during the second half of 1984. One of these, by George Segal, appears in the research materials collected by Chaput's team, while for a number of other works, by Vito Acconci, Lawrence Weiner, and On Kawara, lending requests were made to the MNAM's own collection.⁵¹

A photograph of the installation by Segal, entitled *UNITED STATES* (1982), had appeared on the cover of *TIME* magazine's "Machine of the Year" issue of 3 January 1983. In addition to a photocopy of this article, the Centre Pompidou archive preserves various pieces of correspondence about the possibilities of presenting the installation in the *Labyrinthe du langage*.⁵² The installation included two of Segal's typical, life-size human figures made of white plaster, representing a male and a female human adult seated in front of a desktop computer. The research materials and occasional reference in the minutes of team meetings indicate that the installation was under discussion until the program of the *Labyrinthe du langage* was defined more precisely, from September 1984 onward.⁵³ However, Bernard Blistène affirmed retrospectively that this "home computer still life" was, for him, an impossible candidate for an exhibit and that, as with the paintings by Monory, he himself steered clear of Segal's work (pers. comm., 7 September 2020). Among the preparatory sketches and handwritten notes of Nicole Toutcheff, the project manager in Chaput's team who was responsible for the production of the *Labyrinthe du langage*, there are suggestions for how the work could be presented.⁵⁴ In retrospect, Segal's work appears to have been a placeholder that may have had a certain appeal as a mirror image to the theatrical absence of the human body in the *Théâtre du non-corps* at the opposite pole of the exhibition, yet it proved a mere illustration and eventually an undesirable conceptual digression once the projects for the *Labyrinthe du langage* crystallized. But in the present context, it is noteworthy that Lyotard did not share Blistène's outright

51 The compilation of notes by Toutcheff has a cover page entitled "arts plastiques"; all five works (Acconci, Barry, Kosuth, Segal, Wilson) are mostly also marked "Blistène"—indicating that among all the other projects for the *labyrinthe*, Blistène was responsible for these—and carried an additional note saying, "probabilité de présentation: certain" (CPA 2009012W006_023).

52 See CPA 1994033W223_021.

53 There was a renewed written request by Martine Moinot to *TIME*, dated 22 August 1984 (CPA 1994033W223_021). The project does not appear, though, in any of the plans drawn by Délis from September 1984 onward.

54 In addition to a short description, Toutcheff jots down: "Un programme différent se déroule sur chaque écran. Ambiance cozy" (CPA 2009012W006_023).

rejection but was willing to keep Segal's work on the long list of potential exhibits.

In contrast, three other works were temporarily considered for *Mots en scène* on the initiative of Bernard Blistène, a fact which indicates that Blistène was in fact independent in proposing works to Lyotard. They were Vito Acconci's *The American Gift* (1976), Lawrence Weiner's *Various liquids carried by virtue of their own weight from various points to form a pool of various liquids at a point of accumulation* (1978), and On Kawara's *August 14/15/16* (1975). For each of these three works a lending request was issued to the MNAM collection in November 1984, even though none of them was ultimately shown.⁵⁵ The date painting by On Kawara was possibly deselected because it would have duplicated the paradigmatic self-referentiality that also characterizes the *Discussion* piece by Ian Wilson. Analogously, the wall text of Lawrence Weiner's project would have redoubled the self-referential inscription that was already topical in Kosuth's *Five Words in Orange Neon*, and it would have required using the gallery wall in an affirmative manner that the scenography of *Les Immatériaux* made an effort to avoid.

Finally, Acconci's *The American Gift* is an audio work about 43 minutes long that combines sound samples from US American popular culture with a dialogical English lesson in which common phrases are translated into French.⁵⁶ One reason for its deselection may have been that, as testified by the site's concept text in the *Inventaire*, Lyotard and Blistène wanted to place an emphasis on written text, which precluded the spoken word, music, and other sounds so prominent in Acconci's piece that they would have taken the visitors into a zone decidedly "beyond (written) language" and toward the "spectacular," which Lyotard sought to avoid. Another possible reason Acconci's piece was not chosen can be deduced from the overall selection that Blistène and Lyotard made for the visual arts sites, as will become more evident in the following analysis of the other sites: the rather passionate and, in part, explicitly political soundtrack of Acconci's work went against the deliberately "cool" and socio-politically detached style that we find not only in the visual

55 Acconci's work was, alongside the others, requested from the MNAM collection on 20 November 1984, and its availability was confirmed on 23 January 1985 (MNAM, AM 1979-71; CPA 1994033W223_027_bis). In Toutcheff's notes, it is erroneously referred to as "Choses Vues, Choses Dites." The works by Weiner and Kawara were also on the list with lending requests to the MNAM of 20 November 1984, but both were crossed out on the copy of the request list that was returned to the CCI, suggesting either that they were not available or that the requests had meanwhile been withdrawn. In this request list, they are not connected to any site in particular; however, given their form and content, it seems likely that they were also considered for *Mots en scène*.

56 A sound recording of *The American Gift* (1976), 42:36 min, is available from <https://www.ubu.com/sound/acconci.html> (accessed 17 September 2024). The installation was realized for the exhibition *Identité/Identification* in Bordeaux (1976), and was acquired by the MNAM in 1979 (AM 1979-71).

arts sites, but in the whole of *Les Immatériaux*. Where there was a choice to be made, the curators went for the less emphatic, less agitating option—and not for Kounellis’s open fire (for “*Infra-mince*”), not for Christian Boltanski’s emotionally charged shadow theater (*Ombre de l’ombre*), not for Hans Haacke’s sharp irony, and not for Joseph Beuys’s passionate analysis of capitalism.⁵⁷

Instead, the three artworks chosen for *Mots en scène* emphasized the relation between the sign and the referent, between words and their meaning on a rather more conceptual level, inviting visitors also to reflect on their own role in this relationship of sense construction. Whereas Kosuth’s neon words display their self-referentiality and semantic closure in the mode of an aggressively colored glow, the work by Ian Wilson points the recipient to a potential discussion, his or her potential involvement, here or elsewhere, or at some other time, and Robert Barry’s associative terms suggest the invitation to openly and unpredictably continue the adumbrated phrases. With *Mots en scène* positioned right in front of the corridor to the exit, both of the *Labyrinthe du langage* and of the maze of *Les Immatériaux* as a whole, visitors were thus discharged on a cool note, instead of being thrown into the hot, excited, and critical transatlantic discourse that Acconci’s audio track would have opened up.

Lumière dérobée

In contrast to these three sites which drew strongly on conceptual artworks (“*Infra-mince*,” *Ombre de l’ombre*, and *Mots en scène*), the other four visual arts sites Blistène and Lyotard collaborated on referred more to visual art forms like painting, sculpture, and photography: *Lumière dérobée*, *Négoce peint*, *Odeur peinte*, *Peinture luminescente*. The explicit reference to “painting” in several of the titles is not to be taken literally, but reflected Lyotard’s extended conception of “painting,” which basically encompassed the “visual arts” in general—that is, all sorts of artworks that are not literature and not cinema.⁵⁸ Paintings did, however, play a significant role in these sites. Remarkably, the only site in whose title the word *peint/peinture* did not feature—*Lumière dérobée* (Stolen light)—was full of paintings, whereas the three other sites, which also contained light art installations, objects, and holograms, each had only one painting proper as a conceptual anchor piece (Metsys, Chardin, Ryman).

Two of these sites, *Lumière dérobée* and *Peinture luminescente*, dealt with the topic of light, both as a medium and as a subject of art. The short conceptual

57 The latter two artists were both considered but deselected for the site *Négoce peint*; see below. See also the discussion of this selection criterion in chapter 7.

58 See, for instance, Lyotard’s paper “Painting as Libidinal Set-up” (1973) in Lyotard (1994), English trans. in Lyotard (2006), and Lyotard (2012e).

texts that accompany their respective entries in the planning documents are rather similar and contiguous, making a general claim, for both sites, about the evolution from light as topic to light as medium. In the *Inventaire*, the text for *Lumière dérobée* reads:

The painter's problem: how to illuminate the subject (the 'content' [*matière*] to which the painting refers) when the only means available are those of chemical color? Solution: make light at once the subject (the content [*matière*]) of the painting and the means of painting it. Works about light, made of light. Their content [*matière*] is their raw material [*matériau*]: the vertigo of self-reference.

This is an art-historical argument that is also reflected in the separation of works between the two sites: while the works in *Lumière dérobée* employ the historical materials of oil paint, ink, crayon, and glass, most works in *Peinture lumineuse* use more recent technical media, like electrically charged neon tubes and holography.

From the preparatory lists, it is clear that the core of the works in *Lumière dérobée* would be drawn from artists of the classical avant-garde, including Giacomo Balla, Michail Larionov, Sonia Delaunay, and Robert Delaunay, all of whom extensively explored the luminosity of paint in their works.⁵⁹ Many of the proposed works came from the collection of the MNAM, suggesting that, even more than the other sites, this one was intended to point to the wealth of this collection. When the requests for several of these works were rejected by the collection management, alternative works—mostly of a humbler format that matched the limited available space—were requested instead (fig. 41).⁶⁰

As historical precursors, there were a pointillist painting by Georges Seurat (borrowed from the Musée d'Orsay) and the reproduction of a medieval altarpiece by Simone Martini (original in the Uffizi in Florence).⁶¹ Much effort was made to obtain the painting of the *Poseuse* by Seurat, probably because

59 The verso page for this site in the *Inventaire* is the only one which uses a smaller font size, probably due to the exceptional overall length of the text entries about the relatively large number of works.

60 As an exception, the painting by Balla was borrowed from the New York MoMA. When a lending request to MoMA for Kasimir Malevich's *White Square* was rejected, a small drawing by Malevich from the MNAM collection was selected instead. Another work that was requested from the MNAM collection in November, and that is not mentioned anywhere but in this lending request, is Gilberto Zorio, *Pugno fosforescente* (Poing phosphorescent) (1971); considering its form—a sculpture in the shape of a human forearm, made of wax and impregnated with phosphorescent pigment that glows after having been shone upon by an integrated set of lamps—it may have been regarded as too weak a candidate for *Lumière dérobée*.

61 During a meeting on 2 April 1984, Blistène also mentioned Piero della Francesca, Caravaggio, and a "*Nativity* by Tintoretto" (see the handwritten notes by Sabine Vigoureux, 1994033W232_002).



[Figure 41] Site *Lumière dérobée* (Stolen light), visitor in front of works by Natalia Gontcharova, Mikhail Larionov, Sonia Delaunay (left to right). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0748]

the historical shift from a utilitarian employment of paint and color to a conceptual one could be articulated most poignantly with this work.⁶² This early pointillist work exemplifies the dissolution of the representation of the human figure into an almost technical pattern of luminous color, engaging the beholder to engender the color perception and thus to actively instantiate the depicted elements.

In contrast, the inclusion of a photographic reproduction of Simone Martini's 1333 altarpiece, reduced to less than a third of the original size, appears less obvious.⁶³ While the interest in gold as a pictorial medium is comprehensible, it seems curious that the curators decided to show a photographic reproduction which, from a technical perspective, was incapable of achieving the intended effect. In this respect, the use of a photographic reproduction

62 A lending request for this work signed by François Burkhardt was sent to the Louvre on 24 September 1984, followed up by a phone call by Blistène and another letter on 12 December 1984.

63 In a technical planning document ("PH.D/K.L 17.01.85"), the size of the photo panel is given as "120 x 090 (Simone Martini)"; the original altar piece is 305 x 265 cm. See also Lyotard's (1993, 42) reference to Simone Martini.

had a different impact in the second case, Quentin Metsys's painting *The Money Changer and His Wife* in the *Négoce peint* site, because here the conceptual focus was on the depicted scene, and not on the material support of the depiction. Was the inclusion of the Simone Martini reproduction a deliberate and ostentatious gesture? What did the curators intend with it, beyond the rather didactic art-historical reference to the use of gold as a sign for "metaphysical light"? And wasn't it this flippant, somewhat frivolous deployment of artworks as mere illustrations or conceptual pointers that made the exhibition as a whole so difficult to stomach for some of Blistène's peers from the museum world?

A second peculiarity of curatorial decisions for *Lumière dérobée* concerns the inclusion of works by Larry Bell and Dan Graham. The untitled work by Bell is a 51 x 51 cm cube of coated glass in a metal frame on a pedestal, which had been in the collection of the MNAM since 1981; it was apparently first proposed at the beginning of September 1984.⁶⁴ In contrast, Dan Graham's name had already been mentioned in the April 1984 document, in the context of the site *Peinture luminescente*. The specific works by Graham that would be shown were first listed in September: *Two Adjacent Pavilions* (model version, 1978), *Cinema* (1981), and *Present Continuous Past(s)* (1974). The first two of these were borrowed from the Galerie Durand-Dessert, while the latter had been in the collection of the MNAM since 1976.⁶⁵

The miniature cinema space of Graham's *Cinema* with its interactive component, involving the exhibition visitor as potential screen actor, sat somewhat obliquely to the conceptual framework of the site *Lumière dérobée*; and the model version *Two Adjacent Pavilions*, dealing with mediated visibility and with the reflection and absorption of light, appears conceptually suitable to the notion of the "stolen light" (*lumière dérobée*), but is also rather similar in appearance to the piece by Larry Bell, so that a more rigorous curation might have opted for one or the other, but not both. Finally, Graham's *Present Continuous Past(s)*—a mirrored space equipped with a video camera and a monitor, set up with an eight-second delay between the recording and the image presentation on the screen—rather than dealing with light, is especially a play on time and a work that focuses on the presence and participation of the visitor, which is also the only aspect that is highlighted in the *Inventaire* text by Blistène about Graham's contributions. However, this aspect of temporality

64 Larry Bell, *Sans titre* (1966), AM 1981-253; among the planning documents (CPA 1995052W027_043), there is a list jotted down by Délis, dated 11 September 1984, which includes the artists' names as they are mentioned in the planning document from September 1984, in addition to "Larry Bell," suggesting that his work was only brought into the discussion between the editing of the document (in which it was not yet included) and the meeting on 11 September.

65 Graham's *Cinema* (1981) was bought by the MNAM five years later (AM 1990-362); see also Buchloh (2013).

and presence not only made Graham's work off-topic in *Lumière dérobée*, but it was also the theme of an installation in the site *Temps différé* by Catherine Ikam, a time-delay corridor not dissimilar to *Present Continuous Past(s)* and other works by Graham.

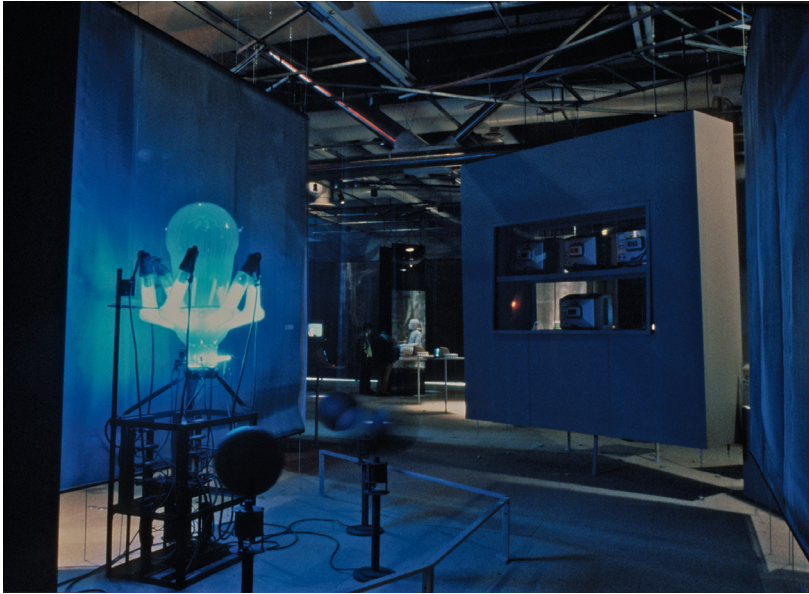
It is not entirely clear from the available documentation how *Present Continuous Past(s)* and *Cinema* were actually exhibited. The *Inventaire* contains a note suggesting that the installation *Present Continuous Past(s)* would be on display in the permanent collection of the MNAM on the fourth floor of the Centre Pompidou, and only from May onward, six weeks after the opening of *Les Immatériaux*. We're thus left with the impression that there was a strong interest to include Dan Graham in the exhibition with several works. Instead of deselecting *Two Adjacent Pavilions* (because of Larry Bell's glass cube) and *Present Continuous Past(s)* (because of Catherine Ikam's *Temps différé*), and dropping *Cinema* (for being off-topic), all three of his works remained on the list for *Lumière dérobée*. We might here see an instance where Blistène prevailed over Lyotard, who, according to a rare note by Sabine Vigoureux, actively opposed the inclusion of *Two Adjacent Pavilions*.⁶⁶ We have a few documents of such disagreements which show how Lyotard and Blistène found their ways of skirting potential conflicts by shifting the debated works onto "neutral" territory, as when they exported Monory's paintings from *Peinture luminescente* into their own site, *Peintre sans corps*, or presented Graham's works as part of the site *Lumière dérobé* but in the galleries of the MNAM, outside of the *Immatériaux* exhibition space proper.

Peinture luminescente

The art-historical argument of *Lumière dérobée* was continued in the site *Peinture luminescente*—even though it would have been difficult for the visitors to make that connection, given that both sites were placed in quite distant parts of the exhibition and on different paths. *Peinture luminescente* (Luminescent painting) comprised pieces of kinetic light art including László Moholy-Nagy's *Licht-Raum-Modulator* (1922–1930; a replica from 1930 borrowed from the Van Abbemuseum, Eindhoven), François Morelet's *Parallèles de néon 0°, 45°, 90°, 135° avec quatre rythmes interférents* (1963), as well as *To Donna* (1971) by Dan Flavin and *La Méduse* by Takis (1980; the latter two both from the collection of the MNAM), and a holographic installation by Sam Moree, *Cartesian Memories* (1981).

Light spillage between the different works, and from the site into its surroundings, appears to have been a major problem before and during the

66 On her production document for the site, Sabine Vigoureux includes an unusual, handwritten remark in the margin, connected by a dotted line to the title of Dan Graham, *Two Adjacent Pavilions*, saying, "JFL n'en veut pas" (JFL does not want it), 1994033W235_001.



[Figure 42] Site *Peinture lumineuse* (Luminescent Painting), work by Takis, *La Méduse* (1980). In the background the site *Labyrinthe du langage*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0367]

installation phase. The *Licht-Raum-Modulator* by Moholy-Nagy was presented in a sort of antechamber, separated from the main space of the site by a wall, in order to protect it (and the adjoining projection space of the site *Matériau dématérialisé*) from being inundated by diffuse light from the colored neon tubes in Dan Flavin's work and the rhythmic flashing of Morellet's geometric blocks of neon lights. Because of the density of luminescent sources, the brightly glowing and nervously flickering installation by Takis was moved away from the site to an empty corner—not far away, but practically onto another path, and without a direct access path from the main site (fig. 42).⁶⁷ A light installation by Lucio Fontana, that would have required a darkened, separate space, was omitted from the selection for the site altogether.⁶⁸

67 *La Méduse* was shown in a space at the end of the *Matériel* path, between the *Creusets stellaires* site and the *Labyrinthe du langage*'s section *Mémoires artificielles* (whose reverse side we can see in some of the photos of *La Méduse*). Moving Takis's installation, which manifested the physicality of the gaseous light medium by applying various kinetic and magnetic elements, may have had the added advantage that it was now also placed into a direct relation with the astronomical images in *Creusets stellaires* which pointed to similar interstellar and intermaterial interdependencies.

68 The preparatory documents and the *Inventaire* mention Lucio Fontana's *Ambiente* (1967), a black-light installation that was to be borrowed from the Musée des Beaux Arts, Lyon, but was cancelled at a late stage, in February or even March 1985, possibly

It was a daring curatorial gesture to introduce a visually delicate work like Robert Ryman's *Midland I*, a white painted surface of 122 x 122 cm owned by the MNAM, into such a diverse and luminous environment. It seems hard to imagine what motivated the decision for this work, apparently brought into the curatorial discussion only at the last minute at the beginning of 1985, when the challenging lighting situation in the site must already have been obvious. The caption commentary in the *Inventaire* only states: "Ryman identifies the materiality of painting. He names it." This reference to painting and the form of the work itself would have made it a candidate for the sibling site, *Lumière dérobée*. Hence, placing it here can perhaps be understood as a deliberate, if obscure act of bridging between the two sites.

Presumably the motivations for such curatorial choices were quite diverse. As we can tell from the list of owners, the ready availability of the different works in Paris, or even in the collection of the MNAM, was an important, though not always decisive factor.⁶⁹ In contrast, the inclusion of Sam Moree's *Cartesian Memories* resulted from a long-established contact with the London-based gallerist Eve Ritscher with whom Thierry Chaput had already been in contact since 1982, and who also provided a number of other holographic works for the exhibition. Lyotard shared Chaput's fascination with the luminous ephemerality of holograms, and in this particular case, the work also offered a reflection on the materiality and boundaries of what constitutes a "picture." For this reason, and perhaps also out of loyalty toward Chaput's commitment to Ritscher, Lyotard defended Moree's work against Blistène's resistance, who perhaps reciprocated the challenge with the late inclusion of another radical "picture" in the form of Ryman's *Midland I*, providing another example of a disagreement between the two curators, and of their strategies for dealing with such conflicts.⁷⁰

because of the impossibility of installing it adequately; see the handwritten note by Sabine Vigoureux in her production document for the site: "pbe: où met-on le Fontana," 1994033W235_001; see also Gallo (2008, 84n5). On the *Inventaire* sheet for the site, there is an explanatory text (verso) and a caption and figure "2," but no respective illustration of this work (recto), suggesting that the work was dropped well into the production process of the catalogue.

- 69 Two works mentioned in the first list for *Peinture luminescente*, in April 1984, and not eventually shown here (Kosuth's *Five Words*, eventually in *Mots en scène*; Graham's *Pavilions*, in *Lumière dérobée*) were directly related to the Galerie Durand-Dessert, with which Blistène had an active, collaborative relationship.
- 70 Blistène clearly disengaged himself from Moree's work; in a note dated 23 January 1985 and addressed to Chaput and Délis, in which Blistène provides various technical details for the installation of works by Flavin, Kuntzel, Morellet, and others, he makes it clear that he is not responsible for Moree's work ("Sam Moree: je ne suis pas à même de vous renseigner mais je vous rappelle ici que l'œuvre se trouve liée à ce site") (1994033W223_027_bis).

Odeur peinte

In addition to the three sites dedicated to conceptual art and the two sites dealing with the representation and mediality of light, two other visual arts sites dealt with phenomena that are hard to represent visually: smell (*Odeur peinte*) and the act of trading and the exchange of values (*Négoce peint*).

The first, *Odeur peinte* (Painted scent), was again positioned quite detached from the other visual arts sites, though it was part of the same *Matière* path as *Lumière dérobée*, the path investigating the referent of a message or of a representation. Here, in *Odeur peinte*, it was the aspect of smell as one of the forms of bodily sense perception.

The selection of artworks for this site was unusually complete as early as April 1984—four out of the five works were already specified: two pieces by Duchamp (*Torture-Morte*, 1959, and *Belle Haleine, Eau de Voilette*, 1921), a still life painting by Chardin (*Le Gobelet d'argent*, n.d. / late 1750s), and a sculptural object by Kounellis (*Senza titolo [Pesons de café]*, 1969). Manzoni's *Merda d'artista* (1961) was the only work added to the list later, by September (fig. 43).

The work by Chardin would have been dear to Lyotard, who frequently mentions the artist in his writings on art as an example of sensuous 18th-century painting. The initial lending request to the Louvre asked rather generically for “a still life that testifies to Chardin’s preoccupation with the olfactory,” so it was not this particular artwork but the theme and its treatment by this artist that motivated the selection.⁷¹

The work by Yannis Kounellis was a similarly obvious thematic choice, given that here the smell was not represented but concrete. It is a sculptural work in which a series of 10 small metal scale pans are suspended, one underneath the other, from a hook in the wall, with each of the pans carrying a small pile of freshly ground coffee, to be replaced by museum staff regularly. The work was borrowed from the collection of the artist through the Galerie Durand-Dessert.⁷²

In 1961, Italian artist Piero Manzoni had made a total of 90 tins which were labeled “Artist’s Shit” (*Merda d'artista*) and supposedly contained the artist’s own feces. The relation to the theme of the site *Odeur peinte* was only tentative, since the physical smell was not present but only imaginary, and not really the work’s most important aspect. Since the late 1950s, Manzoni had

71 See the request, signed by François Burkhardt, dated 24 September 1984; follow-up letter on 12 December 1984 (CPA 1994033W669_147).

72 Durand-Dessert also arranged the loan of the piece by Piero Manzoni, *Merda d'artista*, from the collection of the artist François Morellet. Kounellis’s work was bought by the MNAM in the year of the exhibition, in 1985, AM 1985-178; see the handwritten note about the acquisition in CPA 1995025W155_002.



[Figure 43] Site *Odeur peinte* (Painted scent), visitors, plexiglass case with work by Piero Manzoni, *Merda d'artista* (1961). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0157]

realized a number of projects, also including, for instance, “Artist’s Breath,” all of which dealt with the products of the artist’s metabolism as artworks, combining discourses of body art with those of the institutional critique of the art system. In the case of *Merda d'artista*, Manzoni coupled the price of the individual tins to the price of gold, selling the tins for the price of 30 grams of gold and insisting that, in the future, they should always be traded according to the equivalent value of the weight in gold. With this reference to the art system, *Merda d'artista* could also have been in *Négoce peint*, where—next to works by Andy Warhol, Philippe Thomas, and again Duchamp—it would have added the dimension of the artist’s corporeal existence to the discourse on value creation through excretion and exchange.

However, instead of highlighting the relation between gold, money, and shit, the curators focused on the olfactory, titillating the visitor with an imaginary object smell. Here, as in some of the other works in this site, the selection appears somewhat anecdotal. We can glean a certain detachment also in Blistène’s text entries for the works in the *Inventaire* (verso), none of which focuses on (or even mentions) smell, while the short captions (recto, by Lyotard) emphatically attempt to relate the works to the topic. While *Merda d'artista* is, verso, contextualized art-historically and described as an Artaudian “supreme waste” (*déchets suprême*), the recto caption draws a more immediate connection to the site’s declared theme, describing Manzoni’s piece as “An echo of the *Paris Air* bottled by Duchamp, scentless and tasteless.”

Similarly, Lyotard reduces the conceptual play of the two works by Duchamp to the aspect of smell, a perspective that diminishes their complexity, while Blistène altogether ignores their olfactory dimension.⁷³

We get the impression that the relatively disimpassioned selection of works in the site *Odeur peinte* is due to a strategic rather than a more specific, dedicated curatorial composition. In the overall context of *Les Immatériaux*, the site is part of a longer sequence of exhibits that address questions of representation, virtuality, and simulation. Lyotard's short conceptual justification of the site in the *Inventaire* emphasizes this general, semiotic aspect of the works on display here: "The artwork represents scent [*arôme*]. It becomes scent. The raw material [*matériau*] becomes the content [*matière*] of the work. The work represents itself." The use of the term *arôme* instead of *odeur* suggests that the site *Odeur peinte* was deliberately conceived in relation to the neighboring site, *Arôme simulé*, which included a computer animation of a virtual fruit basket, echoing Chardin's painting. Together the two sites formed audio zone 20, in which a text excerpt by Jean Baudrillard could be heard, about the concept of the simulacrum.⁷⁴

Odeur peinte also formed an art-historical prelude to a series of sites that each dealt with an aspect of simulation: *Arôme simulé* (smell), *Visites simulées* (human encounters), and *Profondeur simulée* (holographic space). Each of these referred to a potential reality that was not verifiable—like the malodorous content of Manzoni's tins or, as Lyotard's caption (recto) for Duchamp's *Torture-Morte* read, "A foot, some flies, and the smell of a corny joke."⁷⁵

73 *Inventaire*, recto (Lyotard): "La violette et la violette, Belle Hélène et haleine belle = les transformations du champ olfactif," and verso (Blistène): "Duchamp, en élégante, sur une bouteille de parfum Rigaud."

74 Another indication of the strategic considerations around this site can be gleaned from one of the works mentioned in the April 1984 planning document: Gérard Titus-Carmel's *Forêt vierge / Amazone* (1971), an installation, owned by the Musée d'Art moderne de la Ville de Paris, which comprises three humidifiers emitting different smells related to the primeval forest. This work could not be realized in *Les Immatériaux* because it requires a large and separate space. It uses a technical system, though, that was similar to the one employed in the *Arôme simulé* site: the emission of individual smells for the audience to experience and compare; this site possibly even adopted Titus-Carmel's technical concept. The other proposal dropped from the April 1984 list for *Odeur peinte* was an unspecified "Baroque painting on vanity."

75 Blistène recalls convincing Lyotard that Duchamp's *Torture-morte* belonged in the site *Odeur peinte*, and remembers that the piece was then still in the possession of his family and came to the MNAM only later; Blistène, pers. comm., 8 September 2020 and 5 December 2022.

Négoce peint

Another site that addressed the problem of representing nonvisual phenomena in the visual arts was *Négoce peint* (Painted trade). It dealt with the general topic of trade and exchange, and in particular with value creation in art.

The consecutive text sketches that Lyotard noted for the exhibition concepts in April and September 1984, and then on the *Inventaire* catalogue page for the site, are exemplary for the dynamics of curatorial conceptualization. In April 1984, the still tentative circumscription of the site's title was:

Site of painted trade and the traded painting or trade in the painting or money in the painting.

The enclosed conceptual sketch focused on the conflation of representation and value:

From the painted representation of trade to the written representation of the trade of the painted representation. Value of the painting = its circulation.⁷⁶

In the rendering of the concept sketched in September 1984, there is no explicit reference to money or value, but only to trade and circulation as formative for the status of artworks:

A written and painted representation of trade whose circulation becomes (the work?) itself.—Passage from the visual to the readable pictorial. Opening up to the conceptualization of representation.⁷⁷

In contrast, the introductory text to the site in the *Inventaire* emphasizes the commercial aspect of artworks in a broader, economic perspective:

Paintings have represented commerce in all its glory and all its shame. The artist may signify that the work itself is also (perhaps above all?) an item of commercial value, subject to prostitution. Is the market of pleasures the mother of the arts? (*Inventaire* 1985)

It is interesting to note that in this last rendering of the concept, the historical dimension suggested in the first version ("from ... to") is replaced by a description that puts works from different historical periods on equal footing. A key artwork which appeared already in the first planning document was a historical painting by Quentin Metsys, *The Money Changer and His Wife* (1514), for whose provisioning the curators made major efforts. The focus of the titular characters is on the central element of the picture, a small scale, held

76 CPA 1994033W666_030, 4.

77 CPA 1994033W233_022, 6.



[Figure 44] Site *Négoce peint* (Painted trade), visitor in front of a photographic reproduction of Quentin Metsys, *The Money Changer and His Wife* (1514). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0725]

by the money changer to weigh a number of coins. The money changer's wife is seated next to him and holds a page of an open, illuminated prayer book. The painting addresses questions of weight and value, justice and equilibrium, and displays a complex set of relations between economic and religious values (see Kuhn 2015). Despite the curators' repeated attempts to borrow the original painting from the Louvre, the loan was rejected by the museum, arguing that the value of the painting and the insufficient conservational conditions in the exhibition prohibited its inclusion in *Les Immatériaux*.⁷⁸ After the loan of the Metsys painting was rejected, the curators requested Marinus van Reymerswaele's *The Two Tax Collectors* (ca. 1540) instead, but the Louvre denied this alternative loan, too. It must have been upon this second rejection that Lyotard decided to present the painting by Metsys in the form of a photographic reproduction, a fact that points to the significance of the motif over the requirement to present the original (fig. 44).⁷⁹ And it may well also be that the curators (or at least one of them) were enticed by the idea that the reason for not being able to show the original—namely, the excessive

78 See the request for the Metsys painting to Louvre-director Rosenberg, dated 6 February 1985, CPA 1995025W155_003. See also fn 28, above, on the related letter by Louvre curator Jacques Foucart to Blistène.

79 For an earlier indication of Lyotard's attitude that it was not imperative to have the original, but that a reference example would suffice—making the exhibition a collection of illustrations—see his passing reference to a work by El Lissitzky in Lyotard (2011, 375).

value and delicacy of the work—was in itself conceptually consistent with the reflections on value and circulation that the site sought to initiate.

Another work that was already on the first planning list for *Négoce peint* was Marcel Duchamp's *Obligation pour la roulette de Monte-Carlo* (1924), a hand-painted certificate which Duchamp produced in order to raise money for his scheme to win the bank at the Casino in Monte Carlo. It was borrowed for the exhibition from the collection of Jean-Jacques Lebel. While in the painting by Metsys the artistic reflection of economic value was largely symbolical, here the approach to value and its creation was concrete: The artwork is a graphic image in the style of a bond in which the artist promises a 20% yield on the price of 500 francs. The "deal" between the artist and the buyer of the artwork is not a bet on the future symbolic value of the artwork and the artist's fame, but is represented as a guaranteed investment.

Another artist whose work was discussed for this site was Hans Haacke, especially his *Manet Projekt '74*, and *Tiffany Cares*. Neither work dealt centrally with the generation of value on the art market, so they might have been dropped from the list for this reason, independent of their availability. In *Manet Projekt '74* (1974), Haacke disclosed the consecutive owners of Édouard Manet's painting *Asparagus* (1880) and the prices for which it had been traded between them. But more importantly, the project denounced the role that the banker and museum board member Hermann Josef Abs had played in the dispossession of Jews in Nazi Germany.⁸⁰ In turn, *Tiffany Cares* (1977–1978) was Haacke's sarcastic answer to an advertisement by the Tiffany luxury goods company, in which excessive wealth had been exonerated for its presumed service to society. The inclusion of either of these works would have introduced a political tendency to *Les Immatériaux* which would have deflected from the more sober, conceptual, and semiotic investigation that in the end ruled the exhibition. The same goes for another work that was under discussion in 1984, the installation *Das Kapital Raum 1970–1977* by Joseph Beuys, a major installation with multiple blackboards, film projectors, and other objects that derived from Beuys's performances and lectures on the notions of capital, value creation, and "social sculpture."⁸¹

Instead of such socially engaged artworks, the pieces further selected for *Négoce peint* were *Dollar Sign* by Andy Warhol (1981) and *Sujet à discrétion* (1985)

80 Among the artists who protested the exclusion of Haacke's project from the *Projekt '74* exhibition at the Wallraf-Richartz-Museum in Cologne was Daniel Buren. See Gronberg (1989, 345).

81 See the production notes by Délis (CPA 1995052W027_039) and Sabine Vigoureux's meeting notes (CPA 1994033W232_002). Bernard Blistène remembers that he was the one who advocated for the inclusion of the Beuys piece (pers. comm., 7 September 2020). Two other options for works that were mentioned only in the April 1984 list were a yet unspecified 16th- or 17th-century representation of "Christ driving the money changers from the temple," and a representation of "19th-century bourgeois ethics."

by the young French artist Philippe Thomas.⁸² Warhol's painting of a dollar sign that covered the entire surface of the canvas was an obvious choice, for it matched the hypothesis of the conflation of representation and value in artworks, and it did this in a gesture of "representation" that was not dissimilar to that in the painting by Metsys.⁸³

In contrast to the world-famous Warhol, Philippe Thomas was a young Paris-based artist whom Blistène had first met a year earlier, in 1983. Blistène introduced Lyotard to work by Thomas, who, as a member of the artist group IFP, had been included at the last minute in the exhibition *ALIBIS*, curated by Blistène at the MNAM in the summer of 1984.⁸⁴ Thomas's work *Sujet à discrétion* (1985) consists of three identical, framed color photographs of the sea. While one of them is unsigned, one is signed by the artist, and one is signed by the collector, the ensemble offering a reflection on the question of authorship, ownership, and creativity that formed a core theme of the *Maternité* path in which this site was presented in *Les Immatériaux* (fig. 45) (Magauer 2019).⁸⁵

In contrast to such pertinent works that served to articulate the concept of the site, two less obvious choices were a work by the baroque painter Simon Vouet, *Jeune homme faisant la figue* (n.d., ca. 1615), borrowed from the Caen Museum and possibly selected for its grotesque and transgressive motif,⁸⁶

- 82 Another work that was under discussion, the painting *Regatta/cheque No. 85* (1972) by Malcolm Morley, would have reiterated the theme of "painted money" and was possibly listed as a potential alternative to the works by Duchamp and Warhol, and perhaps only acted as a "contrast medium" in the curatorial selection process.
- 83 A series of works of the same title, *Dollar Sign*, all dated 1981 and all showing the same bold dollar sign in varying colors, had been shown at Gallery Leo Castelli in New York in January 1982, and at Galerie Daniel Templon in Paris in March 1982. Besides various large versions (229 x 178 cm), there were also smaller canvases (50 x 40 cm), one of which was included in *Les Immatériaux*. (Blistène vaguely remembers "a clear, somewhat vulgar green"; pers. comm., 11 November 2021.)
- 84 IFP (Information Fiction Publicité), whose members at that moment were Jean-François Brun, Dominique Pasqualini, and Philippe Thomas, contributed a project for the *couverture* of the catalogue of *ALIBIS* (see above, fn. 15). They are not listed among the artists for the exhibition, but there is a special three-page insert at the end of the catalogue from July 1984 (117–119), printed white on black. Bernard Blistène had contributed a text on the IFP project, "Ligne Générale," to *Flash Art* (1983/1984). See also the interview with IFP members, IFP (1984), and the IFP publicity in *Artistes*, no. 24 (December 1984).
- 85 See the concept and sketches (CPA 1994033W223_018), and the material in the Fonds Philippe Thomas, THO 20.1, Centre Pompidou, MNAM-CCI, Bibliothèque Kandinsky: "Série de photographies de la mer Méditerranée, à partir desquelles sera tirée la photographie de la mer pour l'œuvre, *Sujet à discrétion*, prises par Philippe Thomas et un photographe [non identifié] à partir d'un bateau au départ de Marseille: négatifs originaux (44 vues, 1 f. manuscrit)." The photographic documentation of *Les Immatériaux* suggests that only two of the three photos were exhibited, alongside textual information on an A4 sheet, also mounted on the wall.
- 86 In the lending request of 20 November 1984, Blistène emphasizes that the painting was described "dans un article de la revue du Louvre par Monsieur Jean-Pierre Cuzin, conservateur au Département des Peintures du Musée du Louvre" (CPA 1994033W669_011).



[Figure 45] Site *Négoce peint* (Painted trade), visitor in front of works by Philippe Thomas (right) and Marcel Duchamp (facing). In the background, suspended forklift with fake gold bars in the site *Monnaie du temps* (Currency of time). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0150]

and a sculpture by the German Dada artist Raoul Hausmann entitled *Spirit of Our Times (Mechanical Head)* (1919), which was in the collection of the MNAM.⁸⁷ In view of the conceptual consistency of the works by Duchamp, Warhol, and Thomas, and the thematic suggestiveness of the painting by Metsys, the inclusion of these two pieces appears quite puzzling. In the *Inventaire*, there are no explanatory notes by Blistène (verso), and only terse and conceptually vague notes by Lyotard (recto), accompanying the image captions. For Vouet, Lyotard wrote: "The enigma and the sense" (*L'enigme et le sens*), and for Hausmann: "The spirit of a time that is still our own" (*L'esprit d'un temps qui est toujours le nôtre*).

Perhaps this apparent dilution of the curatorial concept is itself significant here: like the site "*Infra-mince*," *Négoce peint* was located halfway down the Grande galerie, this time on the fifth path, mirroring the central position of "*Infra-mince*," halfway down the way from the *Théâtre du non-corps* to the *Labyrinthe du langage*. We saw that one of the aspects of the *infra-mince* is to act as a medium of "im-materialities," as in the composite smell of a breath. However, here in *Négoce peint* with its focus on trade, commerce, and value,

87 Hudek (2015, 81) writes that one of the subtitles considered for *Les Immatériaux* was "L'Esprit du temps."

this mediality is not physical but symbolical. The key issues here are the conditions of valuation and the question of how these conditions, enacted in a trade, can be represented. This thematic focus made perfect sense in the logic of the *Maternité* path which, in the neighboring sites, investigated questions of origin and authorship with regard to the generation of value on the financial markets (*Monnaie du temps*), the originality of building materials in architecture (*Terroir oublié*), and literary authorship and copyright (*Tous les auteurs*).

While being part of this constellation about “maternity” in the exhibition *parcours*, from the perspective of the ensemble of the visual arts sites, *Négoce peint* was one of the sites with themes related to the specific questions of conceptual art. It dealt with the status and economic value of the art object, while others focused on representation with regard to the role of language—*Ombre de l'ombre* and *Mots en scène*—the latter of which the visitors could encounter soon after seeing *Négoce peint*, a bit further down the *Maternité* path and just as they entered the *Labyrinthe du langage*.

Like “*Infra-mince*,” and more than many other sites, *Négoce peint* forms a crossing point for multiple lines of the general curatorial argument of *Les Immatériaux* around presence and absence, representation and authenticity, value and meaning. It is noticeable that *Manet Projekt '74* by Hans Haacke was considered for this site for a while, as it would have further emphasized the politics of trading in artworks. At the same time, the works by Yves Klein (*Zones de sensibilité picturale immatérielle*, from “*Infra-mince*”) and Piero Manzoni (*Merda d'artista*, from *Odeur peinte*) could easily also have been presented here. We can only speculate about the motivation for the specific composition of works as they eventually appeared in the exhibition. Was it a strategic move—perhaps by Lyotard more than by Blistène—to dilute the strong conceptual engagement with the role of the artist as author of the artwork and as the source and guarantee of the monetary value (Warhol, Duchamp, Thomas) through the inclusion of some rather more anecdotal works (Metsys, Vouet, Hausmann)?

Curating Visual Artworks for *Les Immatériaux*

Such speculations bring us back to the question of the specific correlation between the themes of the visual arts sites and the artworks selected for them. We can see that most of the themes of these sites were developed from the perspective of the specific contribution that certain artworks could make to aspects of *Les Immatériaux*. Conspicuously, the site whose theme derived more from the narrative logic and sequential necessity of the exhibition than from the artworks shown there, namely *Odeur peinte*, contained perhaps the least pertinent selection of works. With some sites, the choice was first for

the artists or for specific artworks, and the themes of the sites were actually derived from these works, such as “*Infra-mince*” (Duchamp, Klein) and *Ombre de l’ombre* (Kosuth). Artistic positions that had developed since the late 1950s, especially in the field of conceptual art, played a significant role, notably in the reference that the site *Mots en scène* made to the discourse around “dematerialization” in art. In contrast, for Lyotard the theme of light as an *immatériel* may have derived not only from his art-historical discussions with Blistène, but also from consultations with the scientific advisors. As a result, the presentation of the artworks in *Lumière dérobée* and *Peinture luminescente* was a welcome compromise between the MNAM’s wish to present works from their modern collection and Lyotard’s ambition to highlight the special, yet complementary ways in which artists researched topics of scientific relevance, as testified by the juxtaposition of these sites with various exhibits of holograms, the laser experiment in *Espace réciproque*, or the large multimedia display of *Matériau dématérialisé*.

In order to approach the question of the particular contribution that Bernard Blistène made to *Les Immatériaux* in his dialogue and collaboration with Lyotard, we should take a brief look at some visual arts contributions that were selected directly by Lyotard and that were, like Sam Moree’s *Cartesian Memories*, explicitly not handled by Blistène. The first is a work by Jacques Monory, whose four-part series *Explosion* (1973) was presented as the sole work in the site *Peintre sans corps*.⁸⁸ Given that Lyotard had written about Monory’s work as an example of postmodern painting on several occasions, and they were friends (Wilson 2013), Monory’s participation in the exhibition was a *fait accompli* even before Blistène joined the project.⁸⁹ But for Blistène, the choice of Monory was an unacceptable blunder—the quality of Monory’s paintings being controversial in the French art world at the time—and he made it clear that he wanted nothing to do with the presentation of *Explosion* in the exhibition (pers. comm., 7 September 2020).

In contrast, Monory’s works not only shaped Lyotard’s understanding of what constituted a contemporary form of “painting,” but they also influenced the

88 See Gallo (2008, 111–14); Lyotard (2013a). The work was borrowed from the collection of Adrien Maeght.

89 It is worth keeping in mind that there were other artists Lyotard had also recently written about, but whose work was not shown in the exhibition. An interesting borderline case is Ruth Francken, a Paris-based artist with whom Lyotard was in contact during the preparation phase of *Les Immatériaux* and about whom he wrote the biographical text “L’histoire de Ruth (The Story of Ruth)” (2012b); see also Lyotard (2012c). Francken had developed a series of works, *Mirrorical Return*, which comprised portraits of artists and intellectuals, including Beauvoir, Beckett, Beuys, Butor, Cage, Kagel, Lyotard, and Tinguely, in the form of collaged, layered, cut and torn photographs. One work from this series, the triptych *Jean-Paul Sartre* (1979), was not shown in the exhibition but was used to illustrate the *Inventaire* page for the site *Tous les auteurs*; see also Gallo (2008, 116).

way the philosopher thought about the position of painting in the field of the *immatériaux*. In the *parcours* of the exhibition, Monory's work was placed right next to *Peinture luminescente*, emphasizing the technical medium of painting. In Monory's case, the medium was highlighted by the juxtaposition of parts of the surface covered by regular paint with other parts that had been treated with photosensitive emulsion and were projected upon. Due to this questioning of the painter's craft and artistic authorship, the work could perhaps also have been in the *Maternité* path, but with its focus on the (absent) body of the artist, it was perhaps more appropriately placed on the path that also contained *L'Ange*, "*Infra-mince*," and *Corps éclaté*.⁹⁰

A second example of an artwork that was included in the exhibition without the direct involvement of Blistène was Catherine Ikam's video installation of a time-delay corridor, constituting the site *Temps différé*, at the very end of the exhibition, behind the *Labyrinthe du langage*. As we mentioned earlier, an appropriate work by Dan Graham was perhaps not available for the full duration of the exhibition, or Lyotard and Chaput may have been looking for a custom-made solution, one that could more easily be provided by Ikam, who had previously produced a major video installation with the Centre Pompidou's audiovisual service in 1979-80.⁹¹ Only a part of Ikam's original installation was used for *Temps différé*, but it was a part that was not exactly typical of her lifelong artistic engagement with identity and fragmentation. Instead, at this strategic position of the exhibition *parcours*, it mainly served as a demonstration of how conceptions of time and space were modified through electronic media.

Works like Ikam's did not so much complement or extend the program of the other visual arts sites as they contributed to the critical, media-aesthetic agenda of the overall exhibition. In contrast, Monory's work appeared to directly extend the conceptual framework of sites like *Peinture luminescente* and *Ombre de l'ombre*.⁹²

90 The conceptual note by Lyotard in the April 1984 document, though referring to a different painting by Monory ("*Claude, 1973, ou: x*"), also focused on the supersession of the body: "*À la place de toile, pâte et pinceau, projection du motif sur toile sensible. Élimination du corps du peintre. La facture passe dans la photo*" (2).

91 *Temps différé* showed an element of *Dispositif pour un parcours vidéo*, a larger installation project that Ikam had realized at the Centre Pompidou, commissioned by Alain Sayag of the MNAM with the assistance of Hamid Hamidi and the Centre Pompidou's audiovisual service, and exhibited from 23 January to 3 March 1980; it was subsequently shown in Charleroi (1982); La Villette, Paris, and MoMA, New York (both 1983); and the CAVS, MIT, Cambridge, MA (1985). See *Catherine Ikam* (1980) and Restany (1991, 22-31), exhibited Paris, 2-7 May 1991, and Restany (1992). See also Wunderlich (2008, 250) and Gallo (2008, 107), who compares Ikam's piece to similar works by Bruce Nauman, Dan Graham, and Fred Forest. See fig. 32 for hints at the placement of Ikam's adjacent to the *Labyrinthe du langage*.

92 Another example is the presentation of the graphics portfolio by the French artist Claude Maillard, *Matière en vertige* (1984), in the exit corridor and thus behind the site

To negotiate their different approaches, Lyotard and Blistène found a broad middle ground of works that they agreed on and that formed the spine of their collaboration. And when they disagreed about certain works, they found ways to solve these differences without discord, either by shifting works away from the shared territory (moving Monory's paintings into a different site, Dan Graham's installation into the museum's permanent exhibition), or by all but ignoring the other's choice (Blistène regarding Moree's work, Lyotard turning a blind eye on Dan Graham's). And presumably there were also other cases when one curator convinced the other to either embrace or discard a certain work.

In the seven visual arts sites, Blistène's proposals mostly drew on a reservoir of established modern and contemporary artists who today count among the canon of the modernist avant-garde and conceptual art, worthy of a museum's contribution to an experimental exhibition project like *Les Immatériaux*. Importantly, the modernist and pre-modern works added a historical dimension to the *Immatériaux* exhibition, whose general atmosphere was otherwise conspicuously contemporary, and presented these historical artworks as artistic exploration of "im-materials" *avant-la-lettre*.

However, this dimension of the exhibition was probably missed by most visitors, for whom these artworks and sites just blended in with the rest of the show. From the perspective of the MNAM, the exhibition design obfuscated both the artworks and Blistène's curatorial authorship—which became another reason for the disapproval voiced by Blistène's colleagues and peers. The scattered presentation of the visual arts sites in the exhibition made it difficult, if not impossible, to perceive this particular ensemble, even though from Blistène's perspective—as it has been reconstructed here—there was a certain level of curatorial consistency even under the condition of their actual dispersal. For others, however, these artworks appeared thrown in with a mixed bunch of projects by artists, designers, and media practitioners that populated the other parts of the exhibition. In addition, the overbearing scenography made it difficult for visitors to recognize any particular artistic quality, especially when gaged against the type of art reception that prefers a white-cube environment.

The apparently haphazard treatment of the visual artworks made it impossible to approach the ensemble co-curated by Blistène as the radical

Mots en scène. This work is not mentioned in the catalogue and appears to have been added to the exhibition at the very last moment, in February 1985. In its items, Maillard experimented with different material forms in which a text can appear: typed, in Braille, photographically reproduced, generatively modified by a computer program, etc. The work thus extended the concept of the *Labyrinthe du langage* with a reflection on the materiality of language and writing. It was perhaps added on the initiative of CCI project manager Nicole Toutcheff (see CPA 1994033W238).

postconceptual “exhibition-as-artwork” that perhaps it was. The overall scenography afforded that the *Immatériaux* exhibition could only come into view as an *œuvre* in its own right when the many other non-artistic exhibits and sites were also taken into consideration. But in many cases, these looked like scientific experiments, elaborate store front decorations, and popular multimedia displays, additionally undermining the status of the artworks which, in this context, themselves appeared as mere illustrations of curatorial or philosophical concepts. This impression was underscored by the inclusion of photographic reproductions of works by Simone Martini and Quentin Metsys. And the status of the artworks was furthermore undermined by their temporality: juxtaposing them with objects that were only temporarily in such an exhibition context (like the uniforms and work clothes), or with mere display props that would be discarded after the show ended, made it difficult to discern the artworks and objects of a more sustained value.⁹³

Lytard’s attitude was neither ignorant of these matters nor “against” art, but it instead acknowledged the changing position and role of art. This change in attitude, as embarrassing as it may have appeared in 1985 to the other MNAM curators, has since been established as a widely held postconceptual consensus. When Lyotard insisted on the inclusion of artworks, an insistence which in 1983 even convinced the skeptical MNAM director Bozo, his intention was not only to deploy the transgressive and expressive force of art for the “im-materialist” cause. The awkward status of objects from art, science, and technics, and the incoherence of the exhibits as carriers of meaning, as signs, and as mediums, was programmatic. In the interview with Blistène published shortly before the exhibition’s opening, Lyotard mentioned two main criteria for the selection of the exhibits: “First of all, we wanted to exhibit things that inspire a feeling of incertitude: incertitude about the finalities of these [postmodern] developments and incertitude about the identity of the human individual in his condition of such improbable immateriality” (Lyotard 2024, 44). This desire to instill “incertitude” was already present in Lyotard’s first concept of August 1983, and it was adopted as a general selection criterion by Chaput and his team for the other parts of the show (Chaput 1984). It is also consistent with Lyotard’s strategy of dislodging the constitution of meaning by employing the prefix “im-,” as in *Les Immatériaux* (or “in-,” as in *L’Inhumain*, the book whose chapters stem from the same period).⁹⁴

93 On the temporal dimension of exhibits, see von Bismarck (2014, 301–318).

94 See Lyotard (2015, 34–45) for his discourse during the preparation of the exhibition, in which he speaks about the concepts *immature* (immature), *incrée* (uncreated), *immédiat* (immediate), *imaîtrisable* (unrulable), *insexué/transsexué* (unsexed or trans-sexed), and *immortel* (immortal); see also the summary in Wunderlich (2008, 97–100); and the abridged version in CPA 1977001W130_009; see *Album* (1985, 16–22). It seems that the conception of the “inhuman” (*l’inhumain*) was developed by Lyotard only after the exhibition, as the double-faced figure of a dehumanization effected by the techno-logos

With regard to the artworks, this dislodging was realized by firmly integrating them into the exhibition, with the explicit intention of questioning their status. In the conversation with Blistène, Lyotard mentioned another selection criterion, which we already referred to earlier, formulated with regard to the artworks: “any art objects that may find a place next to the other elements of the exhibition will have to be compatible” (Lyotard 2024, 45).

This “compatibility” implied a form of conceptual refraction that could be read as damaging for the artworks at the time. Yet, for Lyotard, the juxtaposition of objects from such different contexts was not a matter of contrast or dichotomy, but rather a purposeful working with the semantic transitions and interactions which juxtaposition entailed. More than to other objects, he ascribed to art the task and the ability of bearing witness to indetermination (Lyotard 1991, 7). In the postmodern transformation of the techno-sciences, the arts are accorded an important task because of their particular relationship with the “question of matter, of material especially” (44). The artworks in the exhibition were thus ascribed a particular power which, however, was for Lyotard not tied to a distinct form of presentation, or framing. *Les Immatériaux* aimed at a radical reconsideration of contemporary forms of knowledge and technology, an investigation that Lyotard conceptualized as an “anamnesis,” as a “working through” of modernity that is the genuine domain of the visual arts (56).⁹⁵

It seems that Bernard Blistène not only accepted the uneasy neighborhood that Lyotard invited him into, but he also accepted the challenge to the way art operates and to the way it builds bridges between different domains of discourse and knowledge. Maybe it is time to reevaluate the personal courage that was necessary for embracing this challenge, and to acknowledge the success of Blistène’s “intervention,” a success which, by the very nature of the task, could not be anything but partial. What Blistène could do was to “intervene” in an existing scenario and to carve out, in his dialogue with Lyotard, certain aesthetic and conceptual spaces for modern and contemporary artworks. As a consequence, we may also recognize Blistène’s contribution to *Les Immatériaux* as one of the early examples of a “non-exhibition” which decisively moved away from the model of the modern white cube. In order to do this, the exhibition drew on the potential that only a diverse material base and an interdisciplinary working context can deliver.

on the one hand, and a positively connotated understanding of infancy not yet subjected to the rules and conventions of an adult “humanness” on the other (1991).

95 See also Hudek (2015, 81). For an interpretation of the role of art in *Les Immatériaux*, see Woodward (2016, 165–188).

The Architecture Sites of *Les Immatériaux*, Curated by Alain Guiheux

A Postmodern Approach to Architecture

Among the 60 exhibition sites in *Les Immatériaux*, three were dedicated to architectural themes. Entitled *Architecture plane* (Flat architecture), *Référence inversée* (Inverted reference), and *Terroir oublié* (Neglected terrain), they were curated by the architect and theorist Alain Guiheux (born 1954), at the time a curator at the Centre de Création Industrielle (CCI), the design department of the Centre Pompidou (fig. 46). Preparing these sites, which pertained to contemporary theories and practices in architecture and matched the wider conceptual framework of *Les Immatériaux*, Guiheux worked closely with the chief curators, Jean-François Lyotard and Thierry Chaput. Yet, as the archival evidence suggests, it was Guiheux who had the original ideas for these particular sites, and he was rather autonomous in their conceptual elaboration. In contrast to the distributed collaboration that characterized the curatorial work on the soundtrack, the *Épreuves d'écriture* writing experiment, or the scientific exhibition sites, and the dialogical structure of Lyotard and Blistène's work on the visual art sites, the more singular authorial role played by Guiheux offers an example of another form of curatorial practice which existed side by side with the other models in the making of *Les Immatériaux*.

The architecture sites dealt with the ways in which architecture under its postmodern condition was no longer predicated on the concepts of building and construction, and on the building materials used. According to Guiheux, architecture had become a conceptual practice whose primary media were the drawing and the model, rather than the building itself. Whereas the exhibition sites *Architecture plane* and *Référence inversée* explicated this idea, the third

site, *Terroir oublié*, offered a historical and retrospective look back at the central role that construction materials had played in modernist architecture.

Guiheux additionally proposed two sites about the significance for architecture of the media of photography and text. Neither proposal was realized, suggesting that there was a limit to how broadly Lyotard and Chaput wanted the exhibition to engage with architectural themes. Additionally, there was a realized site called *Habitacle* (Compartment), dealing with post-modern forms of habitation, in whose preparation Guiheux was not involved, presumably because it surpassed his own field of interest at the time. At the same time, there are no indications that Guiheux was involved in discussions about the exhibition's scenography, developed by the architect Philippe Délis, an impression that is affirmed by Guiheux's critique of this scenography as "representational" and ultimately "modernist."¹

Guiheux's Work with the *Immatériaux* Team

Alain Guiheux was invited to contribute to the *Immatériaux* project early in 1984, when the curatorial work on the exhibition started after Lyotard's return to Paris from the United States. Thierry Chaput and his team had already met with Guiheux on two occasions in 1982 and 1983, before Lyotard joined the project. These were in-house consultations with a colleague at the CCI during which the potential implications of architectural themes in the planned exhibition about "new materials and creation" were explored. Among the staff of the CCI, Guiheux was the most likely candidate for such an assignment, given his strongly philosophical and contemporary interests, in comparison with the more historical and modernist orientation of the chief curator of architecture, Jean Dethier, and the sociological interests of Vincent Grimaud, head of the CCI department for social innovation (fig. 47).²

- 1 See the final section of this chapter. The thesis that Guiheux was working rather autonomously is seconded by the fact that Lyotard had no particular conceptual stance on architecture prior to the work on *Les Immatériaux*. His texts about architecture and urbanism were mostly written after 1985 (Woodward 2021).
- 2 Jean Dethier was busy with a major exhibition project in 1984 (*Images et imaginaires d'architecture*, spring 1984) and did not get involved directly in *Les Immatériaux*, though he helped to establish contacts with some of the lenders, including Peter Eisenman, Rem Koolhaas, Gallery Van Rooy Amsterdam, and the Museum of Architecture in Frankfurt am Main. (The invoice for the Koolhaas silkscreen print is addressed to Dethier; see CPA 1994033W223_003.) For the discussion about architecture in the exhibition on "new materials and creation" that Chaput was planning in 1982 to 1983, prior to Lyotard's arrival, see the archive dossier CPA 1994033W223_026, which contains a concept, possibly by design historian and CCI staff member Raymond Guidot, "Quelques remarques sur le projet 'matériaux et création'" (two versions, 6–8 and 9–11, with handwritten notes by Martine Moinot in the first, and notes by Guiheux in the second). It places a strong emphasis on the design aspect of materials and takes a perspective on the handling of new materials which Guiheux would eventually critique in the audiovisual installation for the site *Terroir oublié*. What this pre-concept formulated



[Figure 47] Opening of *Les Immatériaux*, (left to right) Alain Guiheux, Philippe Délis, Xavier Délis, François Burkhardt. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0060]

Alain Guiheux had trained as an architect at the *École nationale supérieure d'architecture* in Lille. He started working for the CCI in 1982, in the department of Vincent Grimaud, after having done research at the national Institut de l'Habitat, in a workshop directed by the sociologists of urban life Henri Lefebvre and Henri Raymond (Guiheux, pers. comm., 10 June 2021).³ Guiheux's own first exhibition for the CCI would be *Lieux? de travail* (Places? of work) in summer 1986, making the sites he prepared for *Les Immatériaux* his first curatorial project at the Centre Pompidou.

as open questions about the status of materials in postmodern architecture (8, 10) would appear as affirmative contemporary answers in *Architecture plane* and *Référence inversée*. The same dossier (CPA 1994033W223_026, 58–67) also contains a report about the research by Sabine Vigoureux in March and April 1983 on different design aspects of the “matériaux et création” theme, with listed suggestions and comments by the various designers and producers who were interviewed by Vigoureux upon suggestion by design advisor Daniel Rozensztroch; on 68–72, there is a concept by Guiheux, dated 23 May 1984, for questions to be asked to Paul Virilio about his new book, *L'Espace critique* (1984).

3 In 1984, Guiheux was already working with the architect, theorist, and teacher Dominique Rouillard, with whom he later founded the agency *Architecture Action*, a project which they still co-direct today. Henri Lefebvre (d. 1991) published his last major book in 1981, *Critique de la vie quotidienne*, which includes a critique of both modernism and postmodernist architecture as it had been featured at the 1980 Venice Biennial. Lefebvre and Raymond worked with the Institut de l'Habitat (renamed Centre de Recherche sur l'Habitat in 1986), a research unit of the Centre National de la Recherche Scientifique. For Henri Raymond, see Frey (2006).

From February until October 1984, according to the calendars of Moinot and Lyotard, a series of 13 meetings were held with Guiheux (*Chronology* 2020). Given that their offices at the CCI were right next to each other, we can surmise that there were further informal encounters among Guiheux, Chaput, and the project managers. Apparently, Lyotard was present only in fewer than half of the scheduled meetings, namely at the beginning of the preparation process (February, March) and again at the end (July, August, October), suggesting that Guiheux did the actual elaboration of the sites rather independently, after having discussed the plans for the overall project at the beginning, and then presenting the results of his research and the proposals for the exhibits in the summer. The three architecture sites (as well as the site *Habitacle*) are already mentioned with their eventual titles in the concept that Chaput and Lyotard prepared in April 1984, suggesting that the basic parameters were laid out by March. In the following months, Guiheux prepared a 26-page dossier, “L’Architecture dans *Les Immatériaux*,” explaining the conceptual guidelines of the sites and suggestions for the exhibits.⁴ This dossier formed the basis for the curatorial decisions which were affirmed in the summer and then put into practice by Guiheux together with one of the project managers on Chaput’s team, Sabine Vigoureux.

Guiheux’s Conception of Architecture, *L’Ordre de la brique*

The architecture sites must be viewed in a double perspective, first from the point of view of Lyotard’s concept for *Les Immatériaux*, and secondly from that of Guiheux’s own thinking about architecture. In 1983 and 1984, Guiheux was finishing his doctoral thesis on the role of the brick in architecture, published as *L’Ordre de la brique* (The order of the brick) (Guiheux 1985). Guiheux’s book is a historical study of how the brick and its materiality have been conceptualized in architectural theories since Vitruvius, whose 1st century BC tract on architecture was highly influential, not least for Renaissance and early modern architecture. Guiheux’s analysis looks at the ways in which architectural theorists conceived of construction, the wall, and the meaning invoked by construction materials. The book takes the brick as the starting point for a more general theoretical investigation of the role that materials played in the conceptualization of architecture. Its main primary sources are theoretical texts by historical architects, but it also includes analyses of exemplary buildings and of typical ways of using building materials.

The fourth chapter, entitled “Informer” (To inform), deals with the significance of construction materials in the projection of buildings (Guiheux 1985, 165–178). The historical focus here is on the modernist period and on a number

4 See CPA 1994033W223_006, 3–31.

of modern architects for whom the qualities of building materials strongly determined the conception of the building. In an exemplary passage about Louis Kahn, Guiheux writes that “like Mies, Wright, Aalto, or Le Corbusier, Kahn could say: ‘the shapes should not in any way resemble those made with other materials. The way you have used it, the way one sees it, should make it possible to recognize that it is this material and not another that you have treated’” (193).

This analysis of the modernist approach to building materials forms the backdrop for the fifth and final chapter of the book, “Immatériaux,” whose sections directly relate to the different exhibition sites Guiheux proposed for *Les Immatériaux*.⁵ The first of these, “Maternité perdue ou le bâtiment orphelin” (Lost maternity, or the orphan building), would eventually become the basis for the site presented under the title *Terroir oublié*, which displayed exemplary building materials used by Alvar Aalto and Frank Lloyd Wright, as well as an audiovisual program of text quotations and photographs of modernist buildings. In the following sections of the “Immatériaux” chapter, Guiheux outlines how the significance of building materials withered since the 1960s, and how the architectural project is increasingly articulated through drawing (“Architecture plane” [Flat architecture]). The relationship between project and building is inverted, making the project more important than the building (“Référence inversée” [Inverted reference]).

The text of this chapter in Guiheux’s book is more or less identical to the conceptual document that Guiheux prepared for the exhibition, “L’Architecture dans *Les Immatériaux*.”⁶ According to the dating of some sections of this latter document, its parts were drafted between May and the beginning of August 1984.

Guiheux additionally prepared texts to be used for the exhibition soundtrack, including excerpts of texts by some of the architects whose work would be presented in the sites. These texts would eventually not be used, since the soundtrack of *Les Immatériaux* became a project in its own right for whose zones, comprising several sites each, the editors, Dolorès Rogozinski and Jean-François Lyotard, selected literary and philosophical texts that were less directly related to the themes of individual sites. All in all, Guiheux’s preparatory materials preserved in the archive of the Centre Pompidou are more organized and more elaborate than the materials for any other part of *Les Immatériaux*, which may indicate the effusive ambitions of a young curator,

5 The “Immatériaux” chapter (Guiheux 1985, 207–215) was not part of the original doctoral thesis but was added for the book publication.

6 CPA 1994033W223_006, 3–31. In the following, quotations are taken from the version of this text published in *L’Ordre de la brique* (1985), unless stated otherwise.

but is perhaps also due to the fact that Guiheux was already conceiving these curatorial texts as a future book chapter.⁷

The Curatorial Program of the Architecture Sites

Terroir oublié

The first site described in Guiheux's concept is called "Maternité perdue ou le bâtiment orphelin" (Lost maternity, or the orphan building); in the exhibition, it would be presented under the title of *Terroir oublié* (Neglected terrain) (Guiheux 1985, 207–208).⁸ It took a deliberately retrospective look at the "museum" of modern architecture, presenting in separate vitrines a brick from a building by Frank Lloyd Wright and a sculpted, wooden architectural element designed by Alvar Aalto.⁹ A visual display presented slides with photographs of modernist buildings, juxtaposed with short quotations by various modernist architects (fig. 48). In Guiheux's chronological narrative, this site comes first because it revisits and bids farewell to the modernist conception of materiality in architecture. The archival documents show how the text and image program of the audiovisual display were gradually narrowed down from an elaborate discourse to a set of terse, poignant statements, finally arriving at the emblematic formula coined by Guiheux: "The truth of matter, this maternity, is lost. The material is no longer." ("La vérité de la matière, cette maternité, est perdue. Le matériau n'est plus.")¹⁰

- 7 Besides the two functions of exhibition concept and book chapter, Guiheux's text may also have been used for a funding application that Chaput and Lyotard launched in May 1984. See their letter, dated 28 May 1984, to Alain Arvois, Mission d'Étude et de Recherche, of the Ministry of Urbanism and Housing, requesting financial support from the ministry for the architecture sites as well as for the exhibition architecture (CPA 1994033W223_026, 37–38), with adjoining concept about the exhibition as a whole (39–46), and the architectural elements; Alain Guiheux is mentioned as the curator who had already worked on the realization of these sites. The three-page summary document corresponds to a handwritten, undated, one-page document (CPA 1994033W241_012), probably drafted by Lyotard, which sketches an argument for how the question of the urban can be connected to the concepts of *Les Immatériaux*. The draft is written on a page with the letterhead of the Ministère de l'Urbanisme et du Logement, Mission des Études et de la Recherche, suggesting that these are notes taken in the context of a meeting with Arvois at the ministry, as instructions on how best to formulate the funding application. There were meetings of Lyotard and Arvois on 9 February and 21 June 1984; see *Chronology* 2020.
- 8 See also CPA 1994033W223_006, 4–13. "Maternité perdue" was used as the title of the audiovisual program that was presented in the site *Terroir oublié*.
- 9 Another element by Aalto, made of ceramics, is listed in the *Inventaire* catalogue but was apparently not presented in the exhibition.
- 10 CPA 1994033W223_008.



[Figure 48] Site *Terroir oublié* (Neglected terrain), behind metal mesh a plexiglass case with an architectural element by Alvar Aalto, in the background above, double screen slide projection, “Maternité perdue” (Lost maternity). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0729]

The *Inventaire* catalogue’s unbound pages, one dedicated to each of the exhibition sites, contained on their front side, recto, a key visual and a conceptual summary, generally written by Lyotard, and, on the verso side, short entries about the exhibits and their individual significance prepared by Guiheux. In his own short texts, Lyotard sought to relate the themes of the individual site to the overall concept of *Les Immatériaux* and to the *Mât* path in which each site was presented—in the case of *Terroir oublié*, it was the fifth path, *Maternité*. Lyotard writes: “A building is no longer shaped by its site and the materials of the terrain where it is built. One no longer builds, one implants. In constructing, one built in accordance with the glory or modesty of the correspondence of a culture with a mother nature. What mother is honored in large-scale architectural projects?” (*Inventaire* 1985)

It is remarkable that a site which was so explicitly retrospective of a modernist conception of materials in architecture was placed in the exhibition at all, in this postmodern setting, between the questioning of biological motherhood (*Trois mères*), of economic value (*Monnaie de temps, Négoce peint*), and of authorship (*Tous les auteurs*).¹¹ If we look at the rest of the show from the

11 On the question of materiality and value, Guiheux (1985, 40) quotes an anecdote about Frank Lloyd Wright, related by Alvar Aalto. Aalto remembers that Wright asked his audience during a lecture: “Do you know, ladies and gentlemen, what a brick is? It is a

position of *Terroir oublié*, we realize that nowhere else is *Les Immatériaux* as affirmatively nostalgic, even if this nostalgia is presented in a detached and resigned tone—a resignation that resonates with the insistent absence of the human body, theatrically staged in the *Théâtre du non-corps*, and with the opening affirmation of the ephemeral gift of life, in the Egyptian bas-relief of the *Vestibule d'entrée*.

This constellation of different readings—between modernist architecture, motherhood, and the meaning conveyed by construction materials—is suggestive of how Lyotard and Guiheux worked together. Guiheux developed a curatorial program that Lyotard then translated and adapted to the broader context of the exhibition. At times, this translation might stretch the reading of the site beyond Guiheux's own intentions, as indicated here by Lyotard's introduction of the notion of "mother nature" (*mère-nature*).

Architecture plane

An impression of the dynamics between Guiheux, Lyotard, and the rest of the *Immatériaux* team can be gleaned from the archival materials related to the site *Architecture plane* (Flat architecture) (fig. 49).¹² These include text drafts from various stages of the preparation, photocopies of potential exhibits, and lists and handwritten notes which indicate the gradual development of the site's curatorial program.

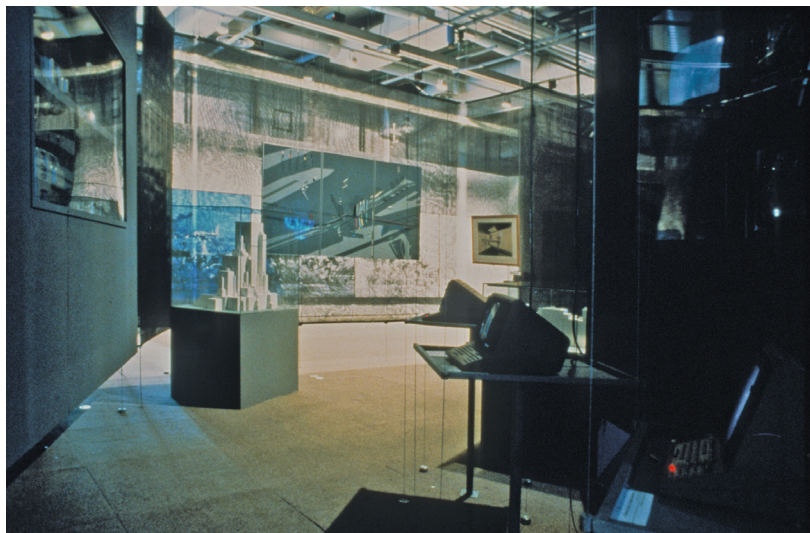
The site, which had the initial working title "Architecture tableau" (Panel architecture), elaborated the notion of an architecture whose essence lies not in the finished building but in the concept and the media of conceptualization, especially the architectural drawing and the model. In the exhibition, the site included large concept drawings by the contemporary architects Rem Koolhaas and Zaha Hadid, accompanied by a drawing by the Dutch avant-garde designer Piet Zwart, and two sculptures from the *Architecton* series of the Russian artist Kasimir Malevich.

The handwritten notes by Sabine Vigoureux, partly jotted down on draft copies of Guiheux's concept text, record fragments of a discussion between Guiheux and Lyotard about the conceptual framing and its narrative presentation in the site:

trifle, it costs 11 cents, it is a commonplace and worthless thing, but it has a special property. Give me this brick and it will be immediately transmuted into the value of its weight in gold" (Aalto, qtd. in the journal *L'Architecture d'Aujourd'hui*, no. 191, June 1977, 69).

Guiheux used a paraphrase of this quotation as a motto on the title page of his book. ("L'architecture, c'est la transmutation d'une brique sans valeur en une brique en or.")

12 See the dossier of preparatory research materials, CPA 1994033W223_003. For the concept, see Guiheux (1985, 210–211); CPA 1994033W223_006, 20–21.



[Figure 49] Site *Architecture plane* (Flat architecture) with work by Kasimir Malevich, Rem Koolhaas, Piet Zwart. In front, right, Minitel terminals in the *Labyrinthe du langage*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0303]

finish with: Zaha [Hadid] and Koolhaas—because archi[itecture] is painting, CAD [computer aided design], pure object
in the middle: Architectons by Malevich, and Mondrian (something from De Stijl is necessary)
we omit Mathieu
+ drawing by Malevich.¹³

In an earlier version, on the preceding page in the archived dossier, the attempt at building a narrative structure read like this:

“from painting to archi[itecture],” Aalto → Hadid
Le Corbu[sier] + Mathieu → Koolhaas
Aalto (and Mondrian) → Hadid, Mondrian at the entrance.¹⁴

We can imagine how Vigoureux was following the conversation, taking notes in order to keep track of the different constellations of works under discussion. Each potential exhibit was discussed with respect to the way it would relate to the others, and how it might contribute to the overall narrative and

13 CPA 1994033W223_003, 9.

14 CPA 1994033W223_003, 8. The reference here is presumably to the French abstract expressionist Georges Mathieu. A work by De Stijl artist Cesar Domela appears in the form of a photo of a constructivist assemblage (*Construction*, 1929) on the recto page in the *Inventaire*.

the meaning of the site. Among the first proposals, for instance, were abstract paintings by Alvar Aalto. Guiheux described them as counter-examples to the role of drawing in the work of Koolhaas and Hadid. The latter represented a new “reappearance of the pictorial in architecture in a form which neither Le Corbusier nor A. Aalto, who were both painters and sculptors after all, could have imagined” (Guiheux 1985, 210–211).¹⁵ Given the negation, which would have been hard and unintuitive to convey to the audience, it is not surprising to find that Aalto’s paintings were soon deselected, in favor of exhibits that would convey the site’s concept in a more affirmative and more directly architecture-related manner. About Zaha Hadid’s drawing, *59 Eaton Place, The Three Towers* (1983), Guiheux writes in the catalogue text: “The bias toward the graphic is innovative not so much in its technique as in terms of its status: the architect and her colleagues agree in regarding this type of representation as a project, so that these ‘graphical intermediaries’ further designate the lack of interest in architecture as finished object or result.”¹⁶

The text entry about Koolhaas’s triptych *Boompjes, General View* (1982) reiterates the core idea of Guiheux’s curatorial concept:

The axonometric triptych for Rotterdam is the real site of architecture. The built version would only be a representation of it using materials which, as such, disappear, a fatally inadequate and perhaps unnecessary reproduction. Taking the form of a panel [*tableau*], the architect’s drawing imposes its presence as a thing itself, negating its status as a representation. (*Inventaire* 1985, transl. modified, AB)

The critique of representation expressed in Guiheux’s texts is also taken up by Lyotard in his short introductory text on Koolhaas’s triptych in the catalogue. Lyotard broadens the perspective, away from architecture, toward the more general question of pictorial representation: “It seems that there is no distinction between an architect’s drawing and a painter’s drawing” (*Inventaire* 1985).

There is a small, significant difference in how Guiheux and Lyotard were looking at the same exhibits. While Guiheux emphasized the architectural drawing, capturing the resulting picture by the term *tableau* (panel),

- 15 The two paintings by Alvar Aalto, of which there are photocopies in the research dossier, are “32,5 x 39,5 cm, 1946–47, oil” and “63 x 79 cm, 1964, oil,” in Aalto (1970, 73, 145, respectively). The copies in the research dossier were taken from another book publication, giving slightly different dates and sizes.
- 16 Guiheux, *Inventaire*, page *Flat Architecture*, verso, n.p. The dating of Hadid’s work is controversial, because the *Inventaire* dates it “1985,” whereas most other sources date the project *59 Eaton Place* and the related drawing *The Three Towers* in 1983. The research materials contain a photocopy of the drawing taken from the journal *L’Architecture d’Aujourd’hui*, no. 233 (June 1984): 64–65. See also Hadid and Betsky (1998, 19). Hadid’s drawing was sent to Paris by the Philippe Bonnafont Gallery in San Francisco (see the DHL receipt dated 19 March 1985, CPA 1994033W238).

Lytard saw the shift from the material and constructed building to pictorial representation in the context of his own critique of representation, which he had first formulated in his 1971 book, *Discours, figure*. Lyotard therefore employed the term *peinture*, in the sense of a noninstrumental and non-representational form of making pictures:

Construction materials can be produced on demand—that is to say, for a particular project. The projection of a building on paper is now the essential component of the architectural message. The architect's drawing frees itself of the constraints of 'building' and approaches those of 'painting' [*peindre*]. A slippage of one code toward another which renders uncertain the distinction between the two messages, architectural and pictorial. (*Inventaire* 1985)

Guiheux himself would not have made this allusion to painting. It is a reference which appears only in Lyotard's texts, while all potential "painting" exhibits—by Mondrian, Aalto, or Mathieu—had been omitted in favor of a more straightforward "architectural" selection.¹⁷

Référence inversée

The theme of the third site curated by Guiheux is encapsulated in its title, which pinpoints the "inverted reference" between the architectural drawing and the building.¹⁸ The drawing is not a representation standing in for the "architecture proper" of the building; instead, the building is conceived as a possible representation of the drawing, which itself is understood as the primary site of architectural thinking. In a draft text, Guiheux puts it like this:

The activity of conception does not consist in going, in one's head, through all the corners of a future building which the drawings would prefigure. The latter lose their representative function and become pure architecture that the constructions simulate. In order to understand this inversion, we can say that ink, pencil or watercolor, photography, the balsa wood of the model, are the real materials, when the brick and the hollow block are only their representation.¹⁹

It is noteworthy that this idea was already encapsulated in a text entitled "Bâtiments d'encre" (Buildings of ink) (Guiheux 1984), which Guiheux wrote

17 In Guiheux (1985, 200), the chapter focusing on the modernist appraisal of the brick and other building materials ends with a short section about two instances where this appraisal was "buried" and matter was overcome, namely in the neoplasticist theory of Piet Mondrian and in futurism.

18 See Guiheux (1985, 208–210), and CPA 1994033W223_006, 14–18.

19 Guiheux, concept sketch, spring 1984, CPA 1994033W223_002, 3.



[Figure 50] Site *Référence inversée* (Inverted reference) with works by Peter Eisenman. In the background, right, holographic work by Doug Tyler in the site *Profondeur simulée* (Simulated depth). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0141]

before getting involved in *Les Immatériaux*.²⁰ The text takes the form of a dialogue between a student of architecture and a teacher who discuss the status of writing, design, and construction in architecture. The text argues that “architecture is a discourse” (58) and that the architect is like a philosopher. Moreover, it announces the end of matter in a formulation that points forward to the formula about the end of material in architecture which concluded *Terroir oublié*. As early as 1984, Guiheux had written: “The material no longer exists for an architect, only the meaning, the message remains” (1984, 60).

Like the concept development of the other architecture sites, the first curatorial sketches for *Référence inversée* considered a historical and narrative approach, starting with a slideshow of historical and contemporary buildings, models, and drawings by different architects. However, this idea was replaced by the decision to show only work by the American architect Peter Eisenman,

20 The archive dossier related to the architecture sites (CPA 1994033W223_026) contains photocopies of two undated typescripts of this text, version 1, 27–35, and version 2, 16–26, with handwritten additions by Guiheux in the margins. Dethier’s exhibition, *Images et imaginaires d’architecture*, opened on 8 March 1984, so Guiheux’s text must have been completed by January.

because of, as Guiheux put it, his “extreme doctrinal awareness.”²¹ The site presented three of Eisenman’s architectural models, as well as three axonometric drawings of *House II* (1969-1970) (fig. 50). In the catalogue, Guiheux quotes Eisenman: “*House II* was deliberately coded to extract it from reality. It was constructed to look like a model. In fact, in many published photos of the real building the caption says ‘Photo of the maquette of *House II*.’ The house looks like a model.”²²

Eisenman’s discourse provided the blueprint for Guiheux’s core argument of the inverted reference between concept and building. Eisenman had written: “When I turn to the making of maquettes and drawings taken as objects in themselves, or when I consider the real building as a maquette and therefore as a mere extension and not as a result, I attempt to reverse the traditional role of architecture in relation to its own process.”²³

The argument that Guiheux had developed in his historical investigation into the role of matter and construction in architecture, and whose epitome he found in Eisenman’s “doctrine,” was taken up and reiterated in Lyotard’s catalogue entry: “It’s not the ‘concrete’ building that serves as a reference for the architectural drawing, but also, or better, the architect’s plan, the elevation, the cross section that is to be ‘seen’ in the construction. The reference to the hardware [*matière*] of architecture is inverted. The building represents its representation on paper” (*Inventaire* 1985).

For Guiheux, at the same time, Eisenman’s practice highlighted a tautological aspect of the interdisciplinary exchange between architecture and philosophy:

Eisenman ‘works’ for postmodernity understood in terms quite close to the ‘immaterials,’ and it [postmodernity] exists by its will to do so. ... Since architecture thinks itself through philosophy (or any other field for that matter), tries in its own way to copy it, does not a philosophical look at architecture only look at itself? But again, hasn’t architecture, taking as its origin a theory external to itself, once again changed its site? (Guiheux 1985, 210)²⁴

The chain of references comes full circle when Guiheux, in a remark that is not in the exhibition concept but was later added to the text for the book publication of *L’Ordre de la brique*, speaks about the relationship of architecture and discourse, pointing out the significance for Peter Eisenman of Lyotard’s book from 1977 about Marcel Duchamp, *Duchamp’s TRANS/formers* (1990): “any

21 CPA 1994033W223_002, 5. See the copy of a page from the concept document of April 1984 (CPA 1994033W223_002, 2), on which the first alternative proposals for exhibits are vigorously crossed out, now underlining only Eisenman’s name.

22 *Inventaire*, page *Inverted Reference*, verso, n.p., quoting Eisenman (1982).

23 *Inventaire*, page *Inverted Reference*, verso, n.p., quoting Eisenman (1981).

24 See also CPA 1994033W223_002, 5.

statement is already potentially architecture, whether its origin is external (see the importance of *Les Transformateurs Duchamp* for P. Eisenman) or internal (a text aiming to analyze architectural postmodernity)" (Guiheux 1985, 210).

The triangle formed by Duchamp's conception of art, Eisenman's conception of architecture, and Lyotard's conception of postmodern "im-materiality," is, for Guiheux, an inheritance, a prize, and a toolbox.

Unrealized Architecture Sites

Guiheux proposed two additional exhibition sites, neither of which was realized. The first of these was called "Bâtiment parlé" (Spoken building), which would have developed further both the idea of architecture as discourse and the architectural significance of the medium of text (Guiheux 1985, 211–212).²⁵ The second was a site to have been titled "Matériel architecture" (Material architecture), which would have shown architectural photographs (212).²⁶ The conceptual argument was analogous to those of the sites *Architecture plane* and "Bâtiment parlé," this time adapted to photography. The claim was that photography didn't just represent architecture, but that it became the predominant form in which architecture existed: photography "corrects" the flaws of construction, recreating and "restoring a truth buried in the drawings" (212).

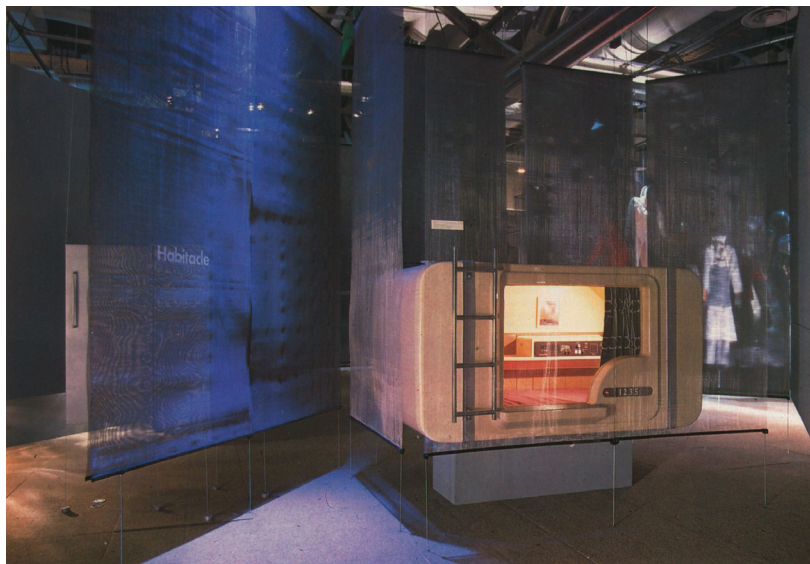
We can only speculate why these two proposals were not taken up. The short concept texts suggest that perhaps even Guiheux himself was not fully convinced of their pertinence, as his indications for how to exhibit them remained rather tentative. Moreover, whereas in the cases of *Architecture plane* and *Référence inversée* it was possible for Lyotard to draw out a conceptual argument about representation and materiality that was not limited to architecture, "Bâtiment parlé" and "Matériel architecture" appeared to be making architectural arguments which couldn't as easily be translated into general phenomena of postmodernity, and which perhaps made more sense in the context of Guiheux's book than in the exhibition.

The same is true of a section in Guiheux's concept dedicated to urbanism.²⁷ The general argument here is that city planning was no longer dependent on specific technologies, and therefore urban planning had a new freedom in

25 See also CPA 1994033W223_006, 15, 19. Guiheux and Dominique Rouillard had also made this argument for the architectural discourses of the 17th century, in a report written for the École d'architecture de Lille and submitted in June 1984: Guiheux and D. Rouillard (1984). See also the shorter treatment of the same historical argument in Guiheux and Rouillard (1987); see also Guiheux (2017a, 18).

26 See also CPA 1994033W223_006, 22. Guiheux's suggestion was to show photographs of the US-American architecture photographer Julius Schulmann.

27 See Guiheux (1985, 212–214), CPA 1994033W223_006, 25–27. For a treatment of the topic of urbanism by Lyotard, see his essays "Domus and the Megalopolis" (lecture originally held in 1987) in Lyotard (1991, 191–204), and "The Zone" in Lyotard (1993).



[Figure 51] Japanese sleeping cell in the site *Habitacle* (Compartment). In the background, right, the site *Toutes les peaux*. Photo by Stéphane Couturier.

terms of construction, communication, and infrastructure, analogous to the freedom from specific materials in architecture. Guiheux placed this section at the end of his conceptual text and left it without suggestions for exhibits. Since the question of urbanism features prominently in the correspondence with the Ministry of Urbanism and Housing about raising funds for the exhibition, it may be a theme that was brought up by representatives of the ministry, which Lyotard, Chaput, and Guiheux were struggling to integrate in order to justify the funding request.²⁸ In any case, the exhibition ultimately did not have any sites addressing urbanism.

Besides this treatment of urbanism, there is a similarly inconclusive section in Guiheux's concept on the theme of the "Habitat." Initially left empty in the draft document, the gap was presumably intended to be filled by a text dated 29 May.²⁹ In this short statement, Guiheux underscores the contemporary detachment of humans from their living environment, and claims that the

²⁸ See fn. 7.

²⁹ In the document CPA 1994033W223_006, 28, before the final three-page section on "Urbanisme," there is an empty page inserted which has only the handwritten word "Habitat" on it and a page number that places it in the sequence of the overall document. The typed document CPA 1994033W223_026, 15, is entitled "Habitat" and signed by Guiheux. In the date "29 mai 94 16 h 25", the "94" appears to be erroneous, since the text clearly fits in the 1984 context of the exhibition preparations, and parts of it were actually used by Guiheux (1985) in the "Urbanism" section of the "Immatériaux" chapter in *L'Ordre de la brique* (213–214).

habitation loses its metonymic relation to its inhabitants and their memories. Guiheux again makes no suggestion for an exhibit, so he does not seem to have been involved in the preparations of the related exhibition site called *Habitacle* (Compartment), which displayed a sleeping cell from a modular hotel, provided by a Japanese outfitter (fig. 51). Lyotard, in his catalogue text, picked up on the notion of detachment, but unlike Guiheux's more sociological argument, Lyotard focused on the prosthetic quality of the capsule: "Decline of the living space as a site of identification and enjoyment, emergence of environments calculated to provide the requisite organic functions? A prosthetic habitat for a body with no dimensions other than the purely functional?"³⁰

It would be difficult and perhaps counterproductive to try to disentangle the respective contributions Guiheux and Lyotard made to the conceptualization of the architecture sites. Guiheux clearly brought to the conversation his own ideas about the status of construction materials in architectural theory, while Lyotard tested the conceptual framing of the *Immatériaux* project on the architectural ideas and potential exhibits that Guiheux proposed.³¹ Guiheux acknowledged the debt that the "Immatériaux" chapter of his book *L'Ordre de la brique* owed to Lyotard, and it is likely that the invitation to contribute to *Les Immatériaux* gave Guiheux the chance to develop his own thinking about postmodern architecture in a way that might not have been possible otherwise.³² Moreover, for a young architectural critic, it must have been exciting to be given a first chance to exhibit works by contemporary architects like Zaha Hadid, Rem Koolhaas, and Peter Eisenman, at a moment when the concept of deconstruction was becoming an important topic in contemporary architecture—spurred not least by the much-discussed competition entry by Jacques Derrida and Peter Eisenman for the architectural design of the Parc

30 Lyotard, *Inventaire*, page *Compartment*, recto, n.p. More than 10 years later, Guiheux was the author of a book and exhibition catalogue, *Kisho Kurokawa, architecte* (Guiheux 1997), which included an extensive treatment of Kurokawa's modular architecture designs from around 1970. The publication coincided with the donation by Kurokawa of a number of drawings to the collection of the Centre Pompidou in 1997 (Guiheux 1997, 64–65). In 1979, Kurokawa had made a mentioned but not selected proposal for the Beaubourg site (Guiheux 1997, 58).

31 Martine Moinot's meeting notes of 20 and 21 March 1984 (CPA 1994033W223_026), eight and four pages long respectively, suggest a very animated and extensive discussion between Guiheux and Lyotard of the themes to be addressed in the architecture sites. The conversation appears to have meandered quite considerably, but many of the ideas that would form the core of the three realized sites seem to have been mentioned, as well as the ideas for the unrealized sites "Bâtiment parlé" and "Matériel architecture." Chaput's brief notes of a meeting with Guiheux on 25 April mention four sites ("Référence inversée," "Terroir," "Bâtiment parlé," "Archi plane"), with hints that the program for these sites was evolving, but not yet completed.

32 Guiheux's (1985, 8) acknowledgement for the final chapter: "Ce dernier chapitre doit beaucoup à J.-F. Lyotard alors Commissaire général de l'exposition 'Les Immatériaux' au Centre Pompidou, et qui nous a permis que nous y réalisions les 'sites' architecture."

de la Villette in 1985.³³ But Guiheux's text "Bâtiments d'encre," written before the first conversations with Lyotard took place, shows how his core ideas for the sites were already in place: "If drawing is nowadays architecture, then architecture is drawing, and to make a project is to construct a real building; to construct a building is to draw it" (Guiheux 1984, 61).

Just as for the museum curator Bernard Blistène who worked on the visual arts sites, for Alain Guiheux, the collaboration with a senior philosopher like Jean-François Lyotard was a unique early-career opportunity. Blistène and Guiheux brought their specialist knowledge of modern and contemporary art and architecture into the dialogue and helped Lyotard to articulate his ideas around postmodernity through the selection and presentation of certain exhibits.

Guiheux's Review of *Les Immatériaux*

It is noteworthy that as part of the concept for the architecture sites, and as the final section of the "Immatériaux" chapter in his book, Guiheux formulated a critique of the exhibition architecture developed for *Les Immatériaux*. Under the section title "Ne pas mettre en scène" (Don't stage), Guiheux wrote that the scenographic solution chosen by Philippe Délis and Lyotard sought to convey a feeling of vagueness and insecurity (Guiheux 1985, 214).³⁴ The representational mode of this architecture, which was designed to resemble what it was supposed to mean and which thus displayed its function, was denounced by Guiheux as a residue of the modernism that he was trying to get away from. He pleaded for freeing the appearance of architecture from a specific meaning, and argued for a completely generic scenography that would refute any form of representation.

This critique would later be echoed in a remark by Guiheux about the scenography for his own first exhibition at the Centre Pompidou, *Lieux? de travail* (1986): "There is no connection between the architecture and the theme of the exhibition, but the factory space in the modern definition and the visits to robotic workshops were important, as was the impact of cybernetics and

33 See Derrida and Eisenman (1997) and the exhibition catalogue Johnson and Wigley (1988). A similar architectural program was presented later at the Ars Electronica Festival of 1994, which ran under the title of "Intelligente Ambiente—Intelligent Environment" and included a thematic focus on "Architecture and Electronic Media"; see Gerbel and Weibel (1994). It featured contributions by Peter Eisenman, COOP Himmelblau ("The Medium as Construction Material"), Zaha Hadid, and Toyo Ito, as well as Paul Virilio's text "The Overexposed City [La ville surexposée]," which had crucially influenced Lyotard's thinking about *Les Immatériaux* in the winter and spring of 1984; see Lyotard (2015).

34 See also CPA 1994033W223_006, 27. Délis and Guiheux, together with Christian Girard and Patrick Canel, founded the urban research group, ADRET, in 1982; see Délis et al. (1994, 210).

computer science" (Guiheux 2012, 66).³⁵ In this exhibition, realized in the year after *Les Immatériaux*, Guiheux appears to have tried to avoid the mistake that he thought had been made by Lyotard, Délis, and Chaput. In his own exhibition, Guiheux also drew the consequences from other, more positive lessons he had learned from *Les Immatériaux*: the exhibition *Lieux? de travail* had no fixed route for the audience to follow, but offered an open space in which any sense of spatial distinction was negated. Moreover, Guiheux sought to avoid representational exhibits by using multiple TV monitors and video projections, which are generic scenographic elements per se.³⁶

The work on *Les Immatériaux* remained an important point of reference for Alain Guiheux throughout his career as an architect, theorist, and curator. The concept text he had written for the architecture sites, which became the final chapter of the publication of his doctoral thesis, was republished more than 25 years later in Guiheux's programmatic book, *Architecture dispositif* (2012). Here it appears as the first chapter in a volume that collects texts which formed part of the architectural, curatorial, and conceptual practice that Guiheux and Dominique Rouillard developed under the label of "Architecture Action" starting in the 1990s. The work for *Les Immatériaux* appears here as a starting point of Guiheux's theoretical trajectory, and as a project which left its traces in the scenography of several of his future exhibitions. The text is now illustrated with images not from *Les Immatériaux*, but from other, later exhibition projects by Guiheux, suggesting that he perhaps felt a stronger sense of authorship of these exhibitions, but also that the ideas expressed in this early text resonated with the later projects.³⁷

In the introduction to *Architecture dispositif*, Guiheux emphasizes the aspect of architecture turning away from construction and the physical building, and toward the project, the idea. He concludes with a set of references to the post-modernist theories that have influenced his practice:

35 "L'Architecture est une exposition," in Guiheux (2012), 61–66; the essay was first published in *Archithèse*, March 1996.

36 Personal conversation with Alain Guiheux, Paris, 10 June 2021.

37 *Les Immatériaux* is not mentioned in the essay about the relationship of architecture and exhibition, "L'Architecture est une exposition" in Guiheux (2012), which refers to Guiheux's exhibition projects *Lieux? de travail* (Centre Pompidou, 1986), *L'Invention du temps* (Cité des Sciences et de l'Industrie de la Villette, 1989), *Pierre Chareau* (Centre Pompidou, 1994), *La ville: Art et architecture en Europe* (with Jean Dethier, Centre Pompidou, 1994), *Archigram* (Centre Pompidou, 1994), and *L'Art de l'ingénieur* (Centre Pompidou, 1997). Rubió (2000), published in a small book edited by Guiheux about recent acquisitions for the architecture collection, deals with the postmodern dematerialization of architecture with regard to transparency and informatization; it includes a short section about *Les Immatériaux* (73–74), but the exhibition is referenced only in very general terms, and the focus is then placed on the artworks of Marcel Duchamp and on the discourse of virtuality as it emerged in the 1990s.

To “do a project” consists in deciding on its rules of engendering, on its system of project, when the beliefs and the discourses of truth have vanished. Jean-François Lyotard had perceived at that time the end of the grand narratives and the pursuit of the quest of the new, of the invention, but had not seen that postmodernity was the cultural logic imposed by late capitalism, which has been shown by Frederic Jameson and David Harvey. The analyses of Gilles Lipovetsky and Alain Ehrenberg have described the transformations of the subject. Postmodernity has taught us that we must invent our questions. (Guiheux 2012, 9)

Retrospectively, Guiheux embraces a sociological perspective of postmodernity that he saw lacking in Lyotard, and that instead connects to Guiheux’s earlier association with Henri Lefebvre and Henri Raymond. But at the same time, Guiheux embraces the conceptual program of *Les Immatériaux* for his own curriculum vitae. He prefaces the “Immatériaux” chapter with a short editorial note:

Published in *L'ordre de la brique* (Liège, Mardaga, 1985), the text presents the “Architecture” section of Jean-François Lyotard’s exhibition “Les Immatériaux” held in 1985 at the Centre Georges Pompidou. There, French philosophy replaces linguistics—the model of the sixties to the seventies—as the source of projects. The exhibition announces the development of reflexive architecture in a period where the architect’s drawing has become autonomous from the production. (Guiheux 2012, 11)

Guiheux took the three architecture sites as a pivotal point in the development of—at least his own—thinking about architecture. A similar combination of biographical and architecture-historical aspects is also present in a passage in Guiheux’s introduction for the catalogue of the Centre Pompidou’s architecture collection, whose constitution he had organized since the early 1990s. In this text of 1998, Guiheux distinguishes his own understanding of postmodern architecture from that promoted by Charles Jencks and other Anglo-American critics, highlighting his own work on *Les Immatériaux* and the conceptual work that had ensued in the form of a seminar and a symposium at the Centre International de Philosophie, to which Lyotard had invited him.³⁸

Finally, Lyotard is also an important reference in an essay that Guiheux wrote in 2017, on the occasion of the fortieth anniversary of the opening of the Centre Pompidou, a text which is a critical appraisal of the CCI and the Centre Pompidou in general. In this essay, entitled “De Pompidou à Georges” (From Pompidou to Georges), Guiheux points to a discrepancy between the founding

38 See Guiheux (1998), 15n1. There were two seminars on architecture and philosophy held by philosopher Sylviane Agacinski along with Alain Guiheux at the Centre International de Philosophie in 1984–1986, as well as a symposium, “L’Architecture en question,” in October 1985, whose proceedings were published as a special issue of the *Cahiers du CCI* in 1987 under the title, “Mesure pour mesure. Architecture et philosophie.”

concept of the Centre and the creation of the luxury rooftop restaurant, and argues that the Centre Pompidou failed to live up to its promise of a communal art center. Instead, he claims, even before the 1990s, it sold out to the art market, fostering the social divide that it was originally meant to bridge:

There was indeed a cultural recovery that took place with Beaubourg, perhaps a brief modern fervor, in any case an interlude where an open society would slip in for a few more months. In the short time between the opening of the Center in 1977 and the publication of *The Postmodern Condition* in 1979, which Jean-François Lyotard transformed into an exhibition, *Les Immatériaux* (1985), we like to confuse the prodigious attendance figures of Beaubourg with the effect of the tourist flagship that is being set up, a super-sign at the heart of the distractive itinerary of tour operators. (Guiheux 2017b, 99)³⁹

Guiheux suggests that the CCI had the greatest potential for forming a cultural interface, but that its rather tame treatment of design, architecture, and media disappointed the hopes for what one of its departments called “social innovation”:

But apart from *Les Immatériaux*, it is perhaps an exhibition at the National Museum of Modern Art (MNAM), *Hors limites: l'art et la vie, 1952–1994* [Out of Bounds: Art and Life, 1952–1994], which, while remaining in the register of art history, will refer to the way in which the era transforms itself and us, where the change of era and the change of our perceptions meet. (101)

Guiheux thought that *Les Immatériaux* was one of the main achievements of the CCI, and a landmark in the development of the Centre Pompidou. In 2017, of all the exhibitions presented by the Centre over a 40-year period, Guiheux highlighted only two: *Magiciens de la terre* (1989), for having drawn the attention to the imminent globalization of the art world, and *Les Immatériaux*:

The exhibition *Les Immatériaux* by Jean-François Lyotard was an opportunity to deploy a reflection on postmodernity, but can we say that the experience of the exhibition was a determining factor, if not through its homogenizing scenography and the distribution of sound through headphones, which was being used for the first time? The reflective exhibition has therefore nothing obvious ... except perhaps always through the “experience,” this word so dear to the marketing people, which takes place there? But who would be interested today in the redevelopment of a reflection on the future of the exhibition? (Guiheux 2017b, 115)

Guiheux has remained consistent in his critical assessment of *Les Immatériaux* as an important exhibition project which did, however, have some conceptual

39 See also the references to Lyotard's *Duchamp's TRANS/formers* (1990a) and *The Postmodern Condition* (1984), in Guiheux (2017a, 19).

flaws and which did not avoid the problems of its time. For Guiheux himself, it was both a starting point and a touchstone of his career as an architect and an exhibition curator.

The Unselected Projects and Works

La zone des pas-choisis

This chapter deals with a number of projects and items that were planned or discussed at some point during the preparation of the exhibition, but that were eventually not shown in *Les Immatériaux*. We have already encountered examples of such unselected sites, projects, and works in the previous chapters, where we looked at the curators' deliberations and their consequent decisions for or against certain proposed exhibits. Some of these items were outright rejected, while others just did not make it into the final selection or were replaced by other items deemed more suitable. And yet other projects proved to be unrealizable for technical, financial, or practical reasons. Together, these *projets pas-choisis* form a sort of exterior "shadow zone" which provides an alternative, *ex negativo* view of what finally became *Les Immatériaux*.

Some of these unrealized projects for sites and exhibits nevertheless influenced the conceptualization of the exhibition, constituting for a certain time during the preparation phase part of the potential for what the exhibition might become. For the visual art sites, the installations by Lucio Fontana (*Ambiente spaziale*, 1970) and Yannis Kounellis (*Untitled (Marguerite de feu)*, 1969) are illustrative examples. They give a hint of what *Les Immatériaux* was not but could have been, opening up a "variantological" perspective, to use Siegfried Zielinski's concept, of the paths that were taken and those not taken (Zielinski 2019). Reviewing these two pieces invites methodological reflections on how items temporarily considered during the preparation process contribute to the

shaping of the overall exhibition concept, without eventually being presented to the audience.

The following analysis distinguishes between unrealized *sites* that would have taken a position in the conceptual matrix of the *Immatériaux* project and unrealized *works* or *exhibits* that were perhaps deemed as insufficiently strong items to articulate a certain conceptual idea—or that could not be realized for technical, financial, or other pragmatic reasons. Moreover, we need to differentiate, as far as the archival evidence allows, between projects or items that were researched and seriously considered by the team and only then deselected for certain reasons, and those other projects which were proposed to the curators by artists or external partners without prior solicitation—projects whose concepts are kept in the archive but which were never seriously considered and probably left no significant traces in the exhibition. We must also remain aware that some projects only seemed to disappear, while in fact they turned into something that was realized in another form or under another name. Thus, the projected site *BioKit* becomes *Trois mères*, and the *Site des couleurs* becomes *Petits invisibles*—taking on a somewhat but not entirely different shape than had been anticipated.¹ And the proposals made before Lyotard's arrival by Roger Laufer and his research group of experimental writers and language artists had been abandoned by the autumn of 1983, but nevertheless formed an important springboard for conceptualizing the *Labyrinthe du langage*.

One might think that these unchosen projects form a sort of “repressed unconscious” of *Les Immatériaux*, but we should be careful with such a diagnosis. The consideration and deselection of these projects by the curatorial team is documented in the administrative archive, the memory site of

1 There is a larger number of such unrealized projects, sites, or works that are documented in the archive; they will here be referenced more comprehensively only in the footnotes, whereas the main text of the chapter will highlight a smaller number of cases from which conceptual conclusions can be drawn to evaluate *Les Immatériaux*. A general overview of the various planned exhibits can be gleaned from the following documents: a list of all sites under consideration in April 1984 (CPA 1994033W666_030), two documents with site descriptions from around September 1984 (CPA 1994033W233_022, 1994033W666_034), Philippe Délis's research materials and the sketches collected during the working sessions in August and September 1984 (CPA 1995052W027), and the first draft of the catalogue texts, presumably written late in 1984 (CPA 1994033W666_033). The more general projects that were planned to accompany the exhibition and that remained unrealized, presumably for technical and financial reasons, included an electronic card that would have allowed visitors to record their trajectory through the exhibition (see the draft press release of 1 December 1984, CPA 2009012W006_009); a cassette tape edition of the exhibition soundtrack (see draft press release, and the information from August 1984 about the planned project in CPA 1994033W230_002_a), and an international teleconference (see cooperation proposal dated 10 May 1984, CPA 1994033W669_323, the factsheet dated 14 June 1984, 1994033W227_002, and the letter of 13 December about the cancellation, 1994033W669_134).

the institution, where the decision-making processes and sometimes even the precise reasons for the rejection remain visible. The archival traces indicate that these projects and their deselection were part of the conscious process of making *Les Immatériaux*. In her handwritten notes for planning various sites and exhibits, the project manager Sabine Vigoureux uses a terminology which differentiates between “secure objects,” “objects not yet obtained,” “abandon...,” and “refused” (*objets sûrs, objets non-encore obtenus, abandon..., refus*).² This classification highlights the preliminary and shifting status of individual items, which was indicated not least by the ellipsis after “abandon,” representing a hesitation which protracts the moment of actually letting an item go. This classification also suggests that not all projects that didn’t make it into the final show were outright rejected. Instead, we can observe a differentiated field of possibilities in which the inclusion of some items is already certain, while others have been envisaged for inclusion but not yet secured. Some are decisively refused after consideration, while others are slated to be abandoned out of practical necessity or conceptual determination. The fact that this process of decision making was considered part of the curatorial process was also reflected in the *Album* part of the exhibition catalogue. On a double page with the facsimiles of four project factsheets for the *Labyrinthe du langage*, one of these is crossed out with a large red X (in this case deselecting a device that would have displayed the voice pitch), causing this type of negative decision making to be transparent to the exhibition and catalogue audience as well (*Album* 1985, 46–47).³

Two Projects Not Shown for Practical Reasons

Two art projects on the production lists of exhibits throughout 1984 which were apparently being considered until late in the process in the overall conception and selection of the exhibition’s elements are Edmond Couchot’s interactive installation *La Plume* and Yannis Kounellis’s work *Untitled (Marguerite de feu)*.

The installation *La Plume* (The feather) was conceived by the French theorist and artist Edmond Couchot and realized together with the artists Michel Bret and Marie-Hélène Tramus. It invited the exhibition visitor to blow into a microphone, following which a virtual feather, represented on a computer screen, would float upward as though it had been blown for real. This interaction

2 CPA 1994033W235_001, 17–18.

3 On these handwritten factsheets, *Labyrinthe du langage* project manager Nicole Toutcheff also noted the “probability of presentation,” distinguishing in two cases between “depends on the financing” and “certain.” An archive box with material dating back to the preparation of Chaput’s first project in spring 1983 contains a sous-dossier, marked “*La matière dans tous ses états, partie non-sélectionnée*,” which must have at some point also collected the “unselected” project (1994033W225, dossier “Immatériaux / Divers”).

would happen in real time, offering visitors the experience of a response between their own, breathing bodies and the virtual feather. Planned for the site *Images calculées* (Calculated images), this installation was already mentioned in the first comprehensive production list of April 1984, and it even appears on the *Inventaire* catalogue page for the site *Images calculées*.⁴ However, the installation was not shown in the exhibition. In February 1985, a month before the exhibition's opening, Chaput asked Couchot whether the installation could be realized yet. It was then withdrawn, presumably by Couchot and Bret themselves, at the last minute when it became clear that it would not be possible to obtain a sufficiently powerful computer that would be able to process the real-time interaction.⁵

We can assume that both Chaput and Lyotard really wanted this installation to be shown in the exhibition. It would have elucidated the new technological possibilities of a more or less intuitive interaction between human and computer, a form of interactivity that Lyotard was both critical and curious about. In a text first presented in October 1985, Lyotard would critique this type of interaction determined by calculation, in favor of an aesthetics of "passibility," in the sense of an experience that happens when something is given, or donated (Lyotard 1991, 110–111). But the disquieting experience of computer-based interaction was no doubt something that he would have welcomed, and throughout 1984 the prospect of including this installation must have been an important aspect of imagining the exhibition.

This was also the case with regard to the artwork already discussed in the context of the "*Infra-mince*" visual art site. *Untitled (Marguerite de feu)* (1969) by the Greek artist Yannis Kounellis is a black sheet-metal flower with a small gas-fired flame in the center. It would have been displayed as an example of ephemerality, juxtaposed with a slide projection by Giovanni Anselmo and the leftovers of Yves Klein's performance *Zones de sensibilité picturale immatérielle* (1959), and in correspondence with Duchamp's seminal notes about the notion of the ultra-thin (*infra-mince*). In this ensemble, Kounellis's piece would have added the element of fire to the light, air, and sound as the "im-material" supports of artworks. However, primarily for the rather mundane reason of the fire hazard it posed, the work had to be withdrawn at the beginning of 1985.⁶

4 See CPA 1994033W666_030, 8 ("Site des images réelles. Le contact avec l'image sur écran récepteur (un souffle) déplace l'image (neige), Couchot"), and *Les Immatériaux, Inventaire*, n.p. ("Sur visu graphique d'un ordinateur présentation interactive en temps réel d'images de synthèse: plumes qui tombent, s'entassent et s'envolent au souffle du visiteur").

5 Jean-Louis Boissier relates that the installation premiered three years later, at the exhibition *Image Calculée*, which Boissier realized at La Villette in cooperation with Thierry Chaput and Philippe Délis.

6 See chapter 5.

The loss this posed for the curators can be gleaned from the fact that Lyotard mentions this work in an interview published by the Centre Pompidou's *CNAC Magazine* on the occasion of the exhibition opening:

The sites dedicated to visual arts are about something essential in contemporary art: artists are more interested in time than space. It is no longer a question of representing what is in space, but that there is something that cannot be represented. ... When Kounellis fires up gas bottles, what does he mean? That the flame is his material. Could there be a more dematerialized material than the flame? It exists only in the moment. Adorno said: "The greatest of all arts is that of Chinese pyrotechnists." A work of art that is not part of anything, that disappears without a trace, without a museum. (Lyotard 2020, 74)⁷

Attentive readers of the *CNAC Magazine* may have wondered why Lyotard would refer to a work that was not in the exhibition. And we can speculate whether Lyotard would have felt the absence of the *Marguerite de feu* from the site "*Infra-mince*" like the sensation of a phantom limb.⁸

Bringing the Concept into Focus by Rejecting Projects

Other unrealized projects indicate shifts in the conceptualization of the exhibition, first in the wake of Lyotard's assignment as chief curator in the summer of 1983, and then during the elaboration of the curatorial concept in the course of 1984. This was the case, for instance, with regard to the site *Matériau dématérialisé*, about which Chaput had already talked with the science writer André Portnoff in 1982. The site was supposed to deal with the raw materials of industrial production and the new materials that could be made from them. Contacts were established with oil and mining companies, and in April 1984, Portnoff was formally commissioned, as a representative of the French Society of Engineers and Scientists, to develop a scenario for the audiovisual production of the site. However, in September 1984, instead of Portnoff, the filmmaker Philippe Puicouyoul, who worked for the Centre Pompidou's Service audiovisuel at the time, was given the task of producing the photo and film footage and the scenography for the site. With hindsight, Portnoff's proposal seems to have still been infused by the more "modernist"

7 Lyotard (2024, 147) still remembered the *Marguerite de feu* in an interview about *Les Immatériaux* conducted 12 years later, on the occasion of the 20-year anniversary of the Centre Pompidou.

8 The same was perhaps also true for Lucio Fontana's installation *Ambiente* (1967), a blacklight space planned for the site *Peinture lumineuse*, which was mentioned in the *Inventaire* catalogue but could not be presented appropriately due to its spatial and lighting requirements; see above, chapter 5.

slant of Chaput's original plan for the exhibition, as it affirmatively portrayed the different industrial materials, their new derivatives, and products.⁹ In contrast, seconded by Lyotard's critical and "postmodernist" reading of these developments, and assisted practically by Chaput, Puicouyoul designed a site which did not so much portray new materials as it aestheticized the techno-scientific making of "im-materials."

The choice of Puicouyoul as producer also testifies to the tendency to look for collaborators close to the CCI, either in the form of colleagues, acquaintances, and friends of team members or professionals who were physically close to Paris. This choice had pragmatic reasons in some cases; for instance, in order to be able to service the computer equipment for the *Épreuves d'écriture* writing experiment, its authors had to be based in the Paris region. And in other cases, we can surmise that regular direct and personal contact was conducive to the evolution of projects in step with the gradual elaboration of the overall exhibition concept.

One of these contacts was the Uruguayan artist and performance curator Hector Vilche, with whom Chaput had been in touch since 1982 as a representative of the Taller d'Amsterdam theatre group. The Taller group had presented a performative environment at the Centre Pompidou in 1979, combining a spatial installation with periodic live interventions.¹⁰ There were meetings with Vilche both before and after Lyotard's arrival, leading to a proposal that must have been submitted to the *Immatériaux* curators at the beginning of 1984.¹¹ According to photographs preserved by Vilche, his "study for a 'Mise en Scène' [for the manifestation] 'Les Immatériaux' at the Centre Georges Pompidou" was a spatial environment which would have been animated by performers during the exhibition. The model showed two large-scale sculptures of human figures lying on their side and next to each other, with gateway-like openings at the hips and legs for visitors or performers to pass into the space left open between the two figures; judging by the photos of the plaster and cardboard model, these reclining figures would have been approximately 20 meters long (Vilche, n.d.).

In a letter dated 10 May 1984, Lyotard made an effort to explain at length the reasons the proposal by Taller no longer suited the conception for what would

9 For the conflict-filled departure of Portnoff from the project, see CPA 1994033W669_446 (Portnoff's concept), 1994033W669_195 (letter by Chaput), 1994033W669_405 (letter by Portnoff), and 1994033W241_003 (withdrawal of ELF Aquitaine as project sponsor).

10 Taller d'Amsterdam, *Cronus 11, La Cité transparente*, Centre Pompidou, 6 June–9 July 1979.

11 The *Chronology* records meetings with Vilche, without Lyotard, on 27 January, 9 May, and 3 October 1983, and meetings with Lyotard on 22 December 1983 and 19 December 1984; see CPA 1994033W232_002_g, 13, for Sabine Vigoureux's notes of the meeting on 27 January 1983. Chaput and Moinot went to Amsterdam for an encounter with Taller in March 1983; see 1994033W240.

soon become the *Théâtre du non-corps*.¹² It will be quoted extensively here, because it elucidates the conceptual process that the curators were involved in during those months.

Lytard first established what he and Vilche had talked about during their meeting the previous December:

The general hypothesis of the event, as you know, is the immaterialization of the constituents of the communicational structure (be it knowledge, society, expression, etc.) through the use of new technologies. What then becomes of theater, whose irrefutable principle is the “material” presence (here, now) of the thinking body (or ‘blooded thought’, as Herbert Blau puts it), whether taken as material, matrix, matter, etc.?

This introduction was followed by a statement on the new parameters according to which these conceptual considerations should now be articulated:

It seemed to us that Artaud’s reflexive approach and Beckett’s staging, under the guise of the so-called ‘theater of the body,’ had elaborated and manifested the essence of this question.

The paradoxical status of the human body as necessarily present and absent would have both pragmatic and conceptual consequences:

As you know, we’ve decided to give this paradox a prominent place, situated after the entrance chamber. This decision meant that the site-zone of the theatrical body would have to be permanently occupied. We therefore had to dispense with the use of actions and actors, necessarily temporary, to show what we wanted. So we turned to a space-time setting without performance, in the mode of a diorama.

Abandoning the idea of the presence of live performers thus had a pragmatic, curatorial aspect in that it afforded a solution that would work for the entire duration of a three-month exhibition. More importantly, however, it was the conceptual decision to highlight the absence of the human body which implied the rejection of Vilche’s proposal, since his proposal essentially hinged on the presence of the bodies—in the form of the scenographic sculptures, the performers, and the exhibition visitors: “We’re well aware that, by deferring the presence of the thinking body, this ‘solution’ eliminates the demands of the theater, at least in this particular setting.” As consolation, Lyotard offered the possibility that live performances might eventually find their place in other parts of the *Immatériaux* project, in which case the Taller group would again be contacted.

12 The following quotations are taken from CPA 1994033W669_324; on the same day, a letter with the same text was sent to the theatre and multimedia artist Pierre Friloux, about whose proposal nothing is known at present.

It is hardly a coincidence that Sabine Vigoureux's meeting notes taken on the same day, 10 May, document a conversation among the curatorial team about the project for the *Théâtre* site, in which the basic parameters explained in the letter to Vilche were laid out. These meeting notes are also where the name of Jean-Claude Fall appears for the first time—the actor and theatre director who would soon be commissioned with the production, together with scenographer Gérard Didier, of the dioramas for the *Théâtre du non-corps*.¹³

The archival evidence of the conversation with Hector Vilche about the project envisioned by the Taller group is incomplete, but we are perhaps justified to speculate whether the overbearing, monumental presence of the human figures in his model may in fact have strengthened the conviction that the human body should instead be removed altogether from the postmodern scenario of the theatre at the entrance to the labyrinth of the *Immatériaux* exhibition. Vilche's proposal would thus have had an impact, even if that negative impact meant that his project itself would not be realized.

Choosing the Less Dramatic, Less Politically Charged Exhibits

Whenever Lyotard and Chaput had to choose directly between specific options, they displayed a tendency to select the less dramatic, less politically charged alternatives. This was the case, for instance, with regard to the site *Habitacle*, which was intended to show how notions of the home and housing became less related to the organic and cultural aspects of the body, and became more about an "environment calculated to accommodate certain functions."¹⁴ Besides the sleeping cell from a Japanese capsule hotel that would eventually be exhibited in this site, the curators also considered whether to show a small-scale anti-atomic bunker (*abris anti-nucléaire*).¹⁵ Both of these "capsules" would have underpinned the claim that housing and living were no longer considered mainly as cultural practices, but were now focused on the functional inhabitation of a prosthetic environment. Yet, the anti-atomic bunker would have reminded people of the health hazard against which it would protect, and would have connotated the political and military threat, felt strongly in the mid-1980s and this late period of the Cold War. The bunker option therefore disappeared from the listings by the end of the year,

13 See CPA 1994033W232_002_e; see also Vigoureux's notes on the same topic taken two weeks earlier, on 25 April, 1994033W232_002_d.

14 CPA 1994033W666_030, 4.

15 See CPA 1994033W233_022, 3. For the correspondence early in September 1984 with the company that would have provided the bunker, see CPA 1994033W230_005, including a detailed plan of the dimensions.

in favor of the Japanese sleeping cell, which referred instead to the everyday economic aspects of tourism, labor, and the restorative function of sleep.¹⁶

A similar consideration may have led to the eventual deselection of a sensory deprivation chamber (*caisson de privation sensorielle*) which was planned for the site *Deuxième peau*, and is still mentioned in the *Inventaire* catalogue, but in the end was not presented in the exhibition. It would have made sense to show such a chamber—usually a two-meter long container filled with water and accompanied by technical appliances for the regulation of temperature, light, and sound—as an example of the artificial extension of the human skin, and it would have resonated with other exhibits, such as the skin samples presented in *Deuxième peau* and the protective clothes shown nearby in the site *Toutes les peaux*. There may have been technical and security concerns that led to its deselection, not least the danger of bringing hundreds of liters of water into a museum gallery. But for the politically aware philosopher Jean-François Lyotard, and for those visitors who would have recognized this inconspicuous device, it would also have been associated with the *camera silens* experiments which the German police had conducted on imprisoned leftwing terrorists in the mid-1970s, a politically charged association that is difficult to ignore once the connection has been made.¹⁷

A third deselected example was meant for the *Ration alimentaire* (Food ration) site which presented basic food components in a common household fridge, and in the *Inventaire*, a photograph of astronauts' food packages. In contrast, the archive preserved a series of photographs of Survival Food Units (*unités alimentaires de survie*) which were prepared as illustrations for the catalogue but not used. These would have been associated with more critical and dangerous circumstances, as is suggested by a report about the scientific research on such survival units and other measures to be taken in hostile situations, published by the French Ministry of Defense in 1979, where explicit reference is made to the Algerian War and the challenges to soldiers fighting and surviving under conditions of extreme heat (Ministère de la Défense 1979).

Examples like these suggest that the curators deliberately chose exhibits that did not address dramatic or overtly political issues. It is a pattern that we also see elsewhere, for instance in the visual art sites, where the inclusion of works by such artists as Hans Haacke, Joseph Beuys, Christian Boltanski, or Vito Acconci would also have brought a political bias and an ideological edge into the exhibition.¹⁸ With the exception of the images related to the Holocaust in the site *Nu vain*, the curators steered clear of such challenges which would

16 See CPA 1994033W666_033, 27.

17 See Lyotard's remark, made in late 1978, about the experiments with sensory deprivation in the Cologne-Ossendorf prison, in Pomarède (1978, 153). See also Arndt and Moonen (1995).

18 See chapter 5.

have diverted the visitors' attention away from the everyday quality the new, postmodern phenomena that the subdued scenography sought to present in a cool unexcited way.

Projects Related to Biological and Biogenetic Issues

When Lyotard and Chaput met with scientific advisors to discuss current trends in science theory in the winter and spring of 1983-84, the scientists were invited to suggest sites that would reflect some of the paradigmatic shifts that, according to Lyotard's diagnosis, formed part of the "postmodern" transformations in science and technology. As we saw in chapter 3, the scientists took advantage of this opportunity to different degrees and with varying success. For example, the two proposals made by the mathematician Pierre Rosenstiehl—one for a site on the design and production of computer chips, and one that would have shown a real-time visualization of computational processes—both remained unrealized. In contrast, the chemist Paul Caro was very active, developing concepts and scenographic proposals for several sites, seven of which were eventually realized.

Only one or two of Caro's suggestions did not come to fruition. One was for a site on the theme of *Les Incommutables* and would have illustrated the principle of commutation, according to which (in mathematics as well as in linguistics and physics) the meaning or result of an utterance or event is independent of the temporal sequence of signs.¹⁹ While the notion of time pinpointed here was deemed highly important by Lyotard and became one of the core themes of his discourse on *Les Immatériaux*, the ideas for the form that this site might take remained vague and, presumably, ultimately unconvincing. On one occasion, Caro proposed to illustrate the topic by showing phenomena that did not tolerate commutation without changing their meaning—an *ex negativo* argument that is never easy to convey in an affirmative medium like an exhibition. On another occasion, the suggestion was to explain the phenomenon in the form of a scientific research poster.²⁰ Given Caro's self-advocacy, it seems likely that he himself abandoned this proposal in favor of other projects which he perhaps deemed conceptually more pertinent or more likely to be successful with the audience.

Among the deselected or unrealized sites documented in the archive, we find one large bloc which is related to another scientific advisor, the microbiologist Jean-Pierre Raynaud. They all deal with aspects of biology, such

19 See CPA 1994033W666_030, 3, and the consecutive versions of the proposal by Caro in CPA 1994033W666_006 (24 January 1984), CPA 1994033W666_003, 1-2 (24 February 1984), and CPA 1994033W666_010, 3 (20 March 1984), the latter being the most elaborate of these. The project is not mentioned in the meeting on 14 May 1984, and not in the list of September 1984 (CPA 1994033W233_022).

20 See CPA 1994033W666_010, 3.



[Figure 52] Refrigerator with foodstuff, site *Ration alimentaire* (Food ration). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0738]

as procreation, living matter, and food. These themes did feature in the exhibition, in the sites *Trois mères* (Three mothers) and *Langue vivante* (Living language), dedicated to procreation and DNA research, and the three rather humble presentations of the food-related sites *Ration alimentaire*, *Mangeur pressé*, and *Précuisiné* (fig. 52). But these stand in rather stark contrast with the large number of proposals that were being discussed during the spring of 1984.²¹ They included a site called *Biokit*, about genetic code, cells, fecundation manipulation, and the “recomposition” of life; *L’ordinateur vivant*, about organisms as living, nondigital computers; a *Site des champs excités*, about how electromagnetic fields acted upon both macro-environments like astrophysical systems and microbiological cells alike; and a *Site de la sonde cancéreuse*, about the fusion of ephemeral and non-ephemeral cells with the goal of determining the genetic code of a fetus.

Some of these sites were proposed not by Raynaud, but by scientific colleagues Raynaud had recommended to the CCI team. These included molecular biologist Pierre-André Cazenave and the biologists of development and reproduction Louis-Marie Houdebine and Jean-Pierre Gautray. The phrasing in the concept documents show the attempts to adapt and translate

21 See esp. CPA 1994033W666_030.

the phenomena discussed, for instance, by Houdebine, an expert on lactation, to the conceptual framework of *Les Immatériaux*. The proposal for a site about the temporal manipulation of lactation cycles reads:

Site of the hours of lactation, or of programmed lactation. The matrix of milk secretion is a hormonal system that can be controlled. Cow giving milk during working hours.²²

And another one about the different forms in which milk can appear:

Site of metamorphoses of milk. The message “milk” spreads and is captured as: condensed milk, butter, cheese.

The goal of such sites would have been to show the technoscientific capture of biological processes and their conceptualization as semiotic translations, which can be compared to the information processing of computers.

The site named *Biokit* persists longer than most of the others mentioned in the planning documents. *Biokit* would have addressed life as something that can be made and changed; however, the site’s concrete realization remained “yet to be defined” (*site encore à définir*) until well into the autumn of 1984.²³ At the end of the year—with the exhibition opening only three months away—the title had been changed to *Les trois mères*, but it is still not clear what will be shown here, and it is still a “*site encore à définir*.”²⁴ It is not clear whether Raynaud or one of his colleagues had a role in selecting the image of a pregnant woman’s body by the artist Annegret Soltau and the chart of different forms of human procreation which were eventually shown in this site. The theme addressed here certainly resonated with other ideas discussed in spring 1984, in this case with Jean-Pierre Gautray:

Site of genetic (or hormonal) engineering. A sterile woman is made fertile by injecting synthetic growth hormones and stimulating the pituitary gland with a pulse pump to induce ovulation.²⁵

Les Immatériaux might have been a very different exhibition if a larger number of these biological projects had been realized, resulting in a stronger presence of the theme of living matter which, more than two decades later, became an important trope in neo-materialist as well as in media- and science-theoretical debates (Hauser 2020). However, for the moment, we can only speculate about these contingencies. It is not clear from the archival evidence why most of

22 CPA 1994033W666_030, for this and the following quotation.

23 CPA 1994033W666_034, 21.

24 CPA 1994033W666_033, 47. See also the notes by Philippe Délis which indicate, on three consecutive sheets, the transformation of the concept from *Biokit* to *Trois mères*, 1995052W027_056. In the *Inventaire*, the site is still called *Les trois mères*, but it was eventually presented in the exhibition as *Trois mères*.

25 CPA 1994033W666_030, 6.

these plans were abandoned, leaving only the sites *Trois mères* and *Langue vivante* in the final lineup. There is also no indication whether there were any discussions of the ethical dimensions of such projects and the bio-techno-scientific approach they represented, which conceptually blended female human and animal bodies with the technical operation of machines.

Similarly, for the theme of food, there is a striking contrast between the number of proposals listed in the April 1984 long list, and the three modest sites that were eventually realized, namely *Mangeur pressé* (Hurried eater), *Ration alimentaire* (Food ration), and the *Précuisiné* (Pre-cooked) part of the site *Précuisiné – préparlé*. In an extensive series of slides projected onto a suspended tabletop, *Mangeur pressé* showed the ways that a family table might be laid out for different types of meals. And both *Ration alimentaire* and *Précuisiné* addressed the question of nutritional codes and food processing by presenting small assortments of foodstuff, in a form that Lyotard called deliberately “ridiculous” (Lyotard 2024, 115).

Upon closer inspection, the unrealized proposals on the theme of food, which all appear to derive from Jean-Pierre Raynaud, are themselves rather straightforward variations on the notion of the artificiality and techniques of processing food. Thus, the *Site de l'objet consommable non identifié ou de l'OCNI* (Site of the unidentified consumable object, or UCO) would have dealt with the techniques of “grading, cracking, and recombining” different foodstuffs, while according to the April 1984 document, the related *Site du génie bio-alimentaire* (Site of the bio-alimentary genius) addressed the “same question” (*même question*), by looking at the control of fermentation and enzymatic processes.²⁶ The food conservation techniques of irradiation, explosive puff drying, and freeze drying (lyophilization) were suggested for a site called *L'aliment fixé* (Fixed food), while malnutrition should have been the theme of a *Site de la pléthore alimentaire* (Site of alimentary overabundance). None of these sites had a concrete scenographic idea. Instead, the documents mention audiovisual, photographic, or video presentations. The suggestion of these rather generic exhibition media may have been one of the reasons these proposals were not developed further, and why in the end the ensemble of *Mangeur pressé*, *Ration alimentaire*, and *Précuisiné* triangulated a terrain that would, in another variation, also have been addressed by the proposed *Site du basic cooking*: “Code for the culinary message? No region, no season, cafeteria, boulangerie, etc. The fridge instead of the table. And ‘local’ cooking as a complement.”²⁷

When the April 1984 document was put together, it may have been too early to make a stricter selection from Raynaud’s proposals, or it may have appeared opportune at that moment to compile a longer rather than a shorter list of

26 See CPA 1994033W666_030, 2. For the site *O.C.N.I.*, see Claude Fischler in Théofilakis (1985, 80–86).

27 CPA 1994033W666_030, 10.

optional sites. In any case, these projects must have seemed relevant enough to be discussed further, but their repetitiveness and the lack of convincing scenographic ideas may have resulted in their being dropped from the lists. In the team of project managers at the CCI, we see different forms and intensities of engagement. Catherine Testanière, who was responsible for the food-related sites, may have prioritized other obligations over the difficult task of helping Raynaud develop scenographic concepts for his scientific topics. Between the different scientific advisors, there was a striking difference in the advocacy they developed. Caro's projects were not necessarily more relevant than those proposed by Raynaud and others, but Caro nevertheless pushed for the realization of his sites throughout the spring of 1984 with great insistence. Meanwhile, Raynaud was less active and delegated his agency to colleagues, who may have felt even less inclined to pursue these projects for an exhibition whose purpose may not have been immediately evident to them.

Grands Invisibles

One of the unrealized projects that were expected, until the end of 1984, to be in the exhibition, and thus influenced the image that the curatorial team had during the preparation phase of what *Les Immatériaux* should become, was a site called *Grands Invisibles* (Large Invisibles). It would have been made up of two parts, *Grand invisible I: soleil* and *Grand invisible II: terre*. The double site was conceived by the scientific advisor and astrophysicist Michel Cassé and would have combined live satellite images of the universe (*soleil*) with satellite images of the Earth's surface (*terre*). It was one of only two sites proposed by Cassé, the other one being the site *Creusets stellaires*, which combined a text about the astronomical history of the universe and the Earth with images of different star systems.²⁸

Cassé took a great personal interest in the project for *Grands invisibles*, which dealt with a theme that occupied the astrophysicist throughout his career, and which, as the April 1984 concept summarizes, would have allowed visitors to "see the invisible in a live-satellite transmission."²⁹ Cassé established a contact with the CNES space research center and tried, together with Thierry Chaput, to obtain the necessary technical equipment through a collaboration with the Meudon Observatory and the new science center of La Villette. Even though technical and institutional difficulties had already been identified by May 1984,³⁰ the site can be found in all the main planning documents until January

28 See chapter 3.

29 Minutes of the meeting with the scientific advisors, 20 March 1984, CPA 1994033W666_009, 2. See also Cassé (1985), esp. section "L'œil solaire et le regard universel" (63–66); and Audouze, Carrière, and Cassé (1988).

30 Minutes of the meeting with the scientific advisors, 14 May 1984, CPA 1994033W666_013, 2.

1985.³¹ In fact, it is the only unrealized site that is still mentioned in the central documents at this late stage of the planning process, highlighting its conceptual significance and the expectation that was put on it.³²

In the first full draft of his texts for the *Inventaire* catalogue, Lyotard writes in response to the ideas developed by Cassé during the meetings of the scientific committee:

Large invisibles.—The visible is but a narrow band in the spectrogram of radiation. Cosmic messages exceed what the human eye can capture. The sky is better read on a screen than seen. But images can be reconstituted from digital data ...

By relay from an external antenna, quasi-direct retransmission on screen of satellite images of the Earth's weather; on a loop projector, scientific decoding of the images.³³

It is hard to imagine how the radical aperture of the cryptlike exhibition space with live images from space might have changed the overall perception of *Les Immatériaux*, and what the unexpected absence of these images meant for the curatorial team. Maybe it was for the best that the modernist "overview" of *Grands invisibles: terre* failed, since it would have represented the possibility of a superhuman controlling gaze which the exhibition otherwise sought to critique, rather than affirm—unless the curators could have found a way to disperse and blur this overview, as they did in the dispersion of views in the site *Surface introuvable* or in *Profondeur simulée*.

What we know, though, is that the site *Grands invisibles* resonated beyond the exhibition. Cassé's cosmological narrative, recounted in the site *Creusets stellaires*, about the birth and death of stars like the Sun deeply impressed Lyotard, leading him to write about it in his essay "A Postmodern Fable" (1992). When in 1986–1987 Lyotard was preparing the book that would be published as *L'Inhumain. Causeries sur le temps* (1988), he was considering a variety of titles for this volume of collected texts, among which were "Discours sur les matières" (Discourse on matters), "Technologie et art" (Technology and art), "L'écriture et les machines" (Writing and the machines), "Les automates et le temps" (The Automats and time), "Technologiques" (Technologies), and finally "L'inhumain. Causeries sur notre un temps gris/sur la mégapole" (The

31 See, for instance, CPA 1994033W666_030, 7; the sketch of the spatial distribution of sites and zones (ca. August 1984), 1994033W234_003, reprinted in *Album* (1985, 24–25); Délis's plan, dated 12 November 1984, reproduced in the *Album*, 58–59; and the architects' production lists, dated 17 January 1985, CPA 1995052W026_011.

32 CPA 1994033W666_033, 32.

33 CPA 1994033W666_033, 32. See also the earlier version of this summary at 1994033W666_030, 7, and the notes by Délis, *soleil*, 1995052W027_035; *terre*, 1995052W027_036.

Inhuman. Chats about our a gray time/about the Megalopolis).³⁴ In an earlier phase of this search for a suitable title, Lyotard was also considering “L’après-soleil” and “L’après-terre” (After the Sun, After the Earth), from which he derived as a momentary preference, “Après la terre.”³⁵ This alternative constellation of Sun and Earth derived from Cassés’s double site, and reminds us of Lyotard’s fascination with the theme of the end of the Sun, expected to be inevitable after five billion years.

Cooperation with IRCAM

The exhibition project that the CCI initiated in 1981 was originally intended as an interdepartmental collaboration involving all the departments of the Centre Pompidou. However, the focus that Chaput’s team placed on design issues meant that by the end of 1982, the MNAM had distanced itself from the project, and relations with the BPI and IRCAM remained tentative.

This situation changed with the arrival of Lyotard, who soon spoke with the directors of all three departments, seeking their cooperation and support. This initiative began with a conversation with IRCAM director Pierre Boulez, and then continued with other members of staff and artists working at the music and sound research center.³⁶ It was soon decided that IRCAM would contribute a series of concerts—a program which was realized during the exhibition period, but more or less independently of the CCI, and made only tentative conceptual links with the *Immatériaux* project.³⁷

In contrast, several co-productions considered for presentation in the exhibition proper proved more difficult to set up. This was partly due to institutional differences between the CCI and IRCAM, and the lack of advocacy for a strong presence of IRCAM in the *Immatériaux* project. Moreover, the projects that IRCAM suggested were expensive, and not always thematically suitable—like the project proposed in 1983 by the French composer Nicolas

34 Bibliothèque littéraire Jacques Doucet, Fonds Jean-François Lyotard, JFL 58.

35 The handwritten note puts it like this: “L’après-soleil/-solaire, L’après-terre. Après la terre.”

36 See the dossier CPA 1994033W230_002_d, which comprises brief handwritten notes by Martine Moinot of a meeting with Todd Machover on 10 October 1983 (p. 7), accompanied by a document from 19 May 1982 about a project by IRCAM for the Centre Pompidou which appears to have informed the thinking of IRCAM for their contribution to *Les Immatériaux* (8); handwritten notes by Moinot taken during a meeting with Machover on 5 November 1983, containing an extensive report on the conceptual ideas aired at IRCAM for the contribution to *Les Immatériaux* (2–6); minutes of an internal IRCAM meeting by Pierre Boulez, Todd Machover, and Arlette Stroumza, on 1 December 1983, airing conceptual considerations, especially regarding the “immateriality” of new supports, like waves, electricity, and lasers (1).

37 See CPA 1994033W666_020 for an early proposal for the concert program, and the flyer produced for the concert series, organized under the title *Sons et voix* (Sounds and voices). See Broeckmann (2020).

Frize, which would have included several choirs with a total of 900 singers, positioned on the outside balustrade of the various floors of the Centre Pompidou, interacting musically and in real time with a computer.³⁸ This proposal was not specifically made for *Les Immatériaux*, but was something that Frize had wanted to do for a while.

Two installation projects proposed by IRCAM seemed more appropriate. One of these was an interactive sound space, *Son = Espace*, that the British artist and composer Rolf Gehlhaar eventually realized in the exhibition site *Musicien malgré lui* (Inadvertent musician). The other installation project proposed by IRCAM was a collaboration of the US-American composers George Lewis and David Behrman, entitled *Kalimbascope*, which would have allowed the exhibition visitors to interact with an automatic composition and music-generation system.³⁹ Lewis and Behrman's goal was an "interactive musical composition," accessible to anyone so they could "approach the very personal and new perspective of making music interactively with a computer 'partner.'" The computer was conceived as a companion (to perform "with"), not as a tool (to play "on"). Visitors would have been invited to sing or speak into a microphone, or to pluck on a *mbira* or kalimba, triggering computer-generated synthesizer sounds. Lewis and Behrman suggested putting these interfaces into several plexiglass booths, equipped with loudspeakers and a computer monitor showing animated graphical analyses of input and output data.

The *Kalimbascope* project was planned for the *Maternité* exhibition path, which dealt with questions of authorship and the dispersion of origins. It would have constituted a site to be called *Pré-composé*, which was intended to be combined with *Précuisiné* and *Préparlé* (Pre-cooked-Pre-spoken): "In fields as different as music, food or language, the pre-program allows the users to identify themselves as authors."⁴⁰

Yet, while the project is mentioned in the lists of planned sites in April and in the summer of 1984, it is no longer there in the catalogue drafts of December 1984.⁴¹ The estimated preparation period of six months may have proven

38 See CPA 1994033W230_002_e.

39 See the proposal dated 17 July 1984, revised 28 September 1984, CPA 1994033W230_001, on which the following description is based, and the diagrams and hand-drawn sketches by Lewis in 1994033W230_002_b. As a reference example for the sounds generated, the concept mentions George Lewis's *Rainbow Family*; a recording of a live performance of this work at IRCAM in May 1984 is available at Lewis (2018).

40 CPA 1994033W666_034, 21.

41 See CPA 1994033W666_033, 48. See also the dossier 1994033W230_002, drafted by IRCAM presumably early in August 1984, with an overview on the status of the various projects that were being discussed at that moment: George Lewis (to be simplified); David Wessel, *Piano Blues* (proposal for delivery date pending); bande-son, directed by Gérard Chiron (Snowman and Machover proposed to use existing IRCAM productions; a footnote mentions the intent to commercialize this as a cassette edition and addresses the question of revenue and royalties); the "4X" (question of how to exhibit the computer

more decisive than the project's advanced technical requirements and high costs. At the end of September, when the updated concept was submitted, there was barely a six-month period available until the exhibition opening, and this ambitious production schedule would have looked risky to anyone experienced with these kinds of technical commissions. Moreover, Lewis and Behrman proposed the kind of seated interaction in booths which *Les Immatériaux* made a great effort to avoid in favor of the visitors walking and standing in open spaces. And additionally, the acoustically closed booths would have reneged on the individualized, roaming sound system of the headphones.

Given the progress that Gehlhaar as well as Couchot and Bret appeared to have made on their interactive projects, it may well be that this one was abandoned out of a combination of practical and curatorial considerations.⁴² Thus, of the envisaged triple site on the *Maternité* path dedicated to pre-programming, only the double site, *Précuisiné-Préparlé* remained.

The Shadow of the Shadow of Colonialism

A project that stands out even among the rather diverse set of unrealized sites and projects in the imaginary *zone des pas-choisis* is described in a proposal entitled "The Algerian Women" (*Les Femmes algériennes*).⁴³ The five-page document proposed an extensive program, including examples from mostly contemporary literature, music, painting, and cinema. It appears to be a rare, unsolicited proposal made for the exhibition. Its author, Hadmut Holken, had come to Paris as a German student of literature and media. Holken worked as a freelancer for the SERPEA media agency which provided IT and Minitel services for *Les Immatériaux*, which is presumably how she knew about the planned exhibition and its concept.

The project took its cue from painted portraits of Algerian women. The paintings were compared to the portrait photographs of women in Algeria from around 1960 by photographer Marc Garanger, who had been commissioned by the French colonial administration at the end of the Algerian war of liberation. Garanger's photographs showed the unveiled faces of the portrayed women. Besides suggesting paintings and films to be shown alongside the portraits, Holken's project also proposed a number of literary texts to be distributed through the headphone system. These texts would discuss the cultural experience of Algerians in Algeria, and of North African migrants

for real-time sound synthesis developed by IRCAM); according to this document, only the project by Rolf Gehlhaar, whose production was anticipated to take 10 weeks, wasn't posing a problem.

42 For the status in August 1984 of the IRCAM-related projects by Gehlhaar, Lewis, and others, see CPA 1994033W230_002_a.

43 See CPA 1994033W669_451.

to France, taking the perspective of the disempowered and the poor and describing their “struggle for authentic cultural (Algerian) liberation, ... and also [their] struggle against the overly abusive system of the Islamic world and of masculine predominance.”⁴⁴

The concept makes explicit reference to the *Mât* system and proposes how the site might be situated in the conceptual matrix devised by Lyotard—suggesting that Hadmut Holken had access to the concept of April 1984 when she wrote this text. In it, she combines a critique of the modernist perspective on media technologies with a plea for the significance of art, and the aesthetics and accessibility of the traditional media of art:

Will the new technologies save humans and nature? And do they really make the human the master of nature? ... Isn't this a Western determinism which exacerbates the already immense divide between rich countries and poor countries in the global competition for power? ... Will the future of humans really pass through the translation of messages on the new supports (limited language), or does the truth reside rather in the translation of messages by traditional means (unlimited language)? Are we really going toward a better society ..., toward the abolition of injustice in this world, as the thinkers of the Frankfurt School had hoped? Isn't it rather the painters, the authors, the musicians, the photographers (and filmmakers) who prepare this path?⁴⁵

This was directly addressed to Lyotard, who on reading it perhaps agreed with the analysis, and the affirmation of artistic practice or, as he would have said, *écriture*, though with less certainty about the achievability of these goals. But the artistic examples of Holken's proposal barely matched the postmodern sobriety of the other exhibits, and its engaged emancipatory rhetoric was something that the curators deliberately tried to avoid.

Holken must have submitted her proposal in late April or early May 1984. On 22 May 1984, Lyotard and Chaput co-signed a letter of rejection, a date which indicates that the proposal was immediately considered a nonstarter, even at this stage in the curatorial process when many questions were still open. Their carefully and respectfully worded letter suggests that the curators had a clear sense about the outer limits of what might yet be considered for the exhibition, affirming that this proposal lay outside of this perimeter:

It seems to us that this site, while of great interest in its own right, wouldn't fit in directly with the issues governing the exhibition, that it would upset the overall balance, and that the very question you intend it to bear witness to, and whose importance we recognize, would run the

44 CPA 1994033W669_451, 3. For Garanger's portraits, see Garanger (2002).

45 CPA 1994033W669_451, 4-5.

risk of not being understood. That's why we have to give up the idea of collaborating with you on this project in the present context.⁴⁶

It turned out only later that the programmatic absence of the human body affirmed in the Beckettian dioramas of the *Théâtre du non-corps* was, in fact, in the end counteracted by a number of "pictures of people," such as the image of a deportee in a concentration camp in the site *Nu vain*, the morphing bodies of singing and dancing pop musicians in *Corps chanté*, the collaged and sutured bodies in *L'Ange*, and the multiple pseudonymous portraits in *Matricule*. These latter photos, some borrowed from the collection of the Musée de l'homme in Paris, are in fact formally similar to the photos of Algerian women by Marc Garanger.

The site *Matricule* (Registration), proposed by Paul Caro, dealt with the principle of unique identification codes: by typing a sequence of numbers, the visitors could bring up either the photo of a specific geological formation or the portrait of a person. These latter photos, of which about 80 are preserved in the archive, were apparently taken from various sources and show people from different continents and cultures, and from different periods of the 20th century.⁴⁷ It is elucidating of the concept of *Les Immatériaux* that this type of image, resonant of a *Family of Man* spirit⁴⁸ and symbolic of the regimes of colonialism, would only enter the exhibition as examples of the abstracted, highly modernist understanding of monadic individualism represented in Caro's site. It ran counter to the gesture of a pre-modern affirmation of substance that the exhibition made in the case of the site *Nu vain*, with regard to the fate of the human body and the human soul, and in the case of the site *Terroir oublié*, with regard to a residual materialism in architecture. Had this understanding of materiality, substance, and place also been applied to the photographic portraits in *Matricule* and *Les Femmes algériennes*, it would have afforded an acknowledgment of the reality and contemporaneity of these people under the postmodern condition. But *Les Immatériaux* stopped short of this realization in order to underscore its own "in-human" agenda.

In the background of *Les Immatériaux*, behind the layers of metal meshes and the shadows they cast, there are also other indications of the absent presence of colonialism. There is, for instance, the past of CCI director Jacques Mullender as a colonial officer in Africa in the 1940s and 50s, where he acquired the gung-ho attitude and experience of large-scale urban

46 CPA 1994033W669_320.

47 For the analysis that Moinot and Caro made of the diversity and representation of individuals from different cultures and periods represented in their selection, see CPA 1994033W229_012.

48 For the 1955 exhibition *Family of Man*, see Sandeen (1995). For a passing comment by Lyotard on its pedagogical form of presentation, see Pomarède (1978, 155).

construction projects which got him his position at the CCI in the 1970s, and which helped him to raise the first ministerial funding for the project that would eventually become *Les Immatériaux*. There is also the research into synthetic materials and plastics which led the CCI team to the petrochemical industry and to the sources of raw materials explored by ELF Aquitaine, including gas at Lacq, in the south of France, and oil in the Algerian and Tunisian Sahara desert, at Edjeleh, Hassi-Messaoud, Hassi R'Mel, and in Gabon.⁴⁹ There is the Egyptian relief which opens and concludes the exhibition, and whose religious foundation lies in a mystic African polytheism. There is the Egyptian scribe, the *Scribe accroupi*, which Marc Denjean took as the model for the sculpture in the *Labyrinthe du langage*, where it served as a nostalgic signifier of old writing techniques in the face of new, automatic technologies of storytelling. Both the relief and the figure of the scribe were available for display in Paris in 1985 because, almost two centuries earlier, the Napoleonic conquest of Egypt and the following colonial enterprise enabled the looting of cultural artifacts for the benefit of European museums.⁵⁰

Liotard was anything but blind to these dimensions of the project. He had taught in Algeria in the early 1950s; he actively supported the Algerian struggle of liberation in the 1950s; and he lived and worked in an environment—at the university, the CCI, and the Centre de Philosophie International—where the French colonial legacy was a difficult part of personal histories and political identities for almost everyone. Importantly, Lyotard's experience in Algeria not only formed his political awareness ("I owed and I owe my awakening, *tout court*, to Constantine"), but the debacle of French colonialism also crucially informed his critique of the modern narratives of enlightenment and emancipation, and thus motivated the conceptualization of the "postmodern condition."⁵¹ When in spring 1984 Lyotard and the team were putting together the list of authors for the *Épreuves d'écriture* writing experiment, he made an effort to enlist the writer Pierre Guyotat who was known for his drastic literary treatment of the Algerian War. Guyotat must have said yes, or at least maybe, first, and only later declined, which is why his name remained on the list of

49 See research materials in CPA 1994033W232_003.

50 Of the Egyptian bas-relief, on loan from the museum in Grenoble, Lyotard (2024, 125) says explicitly that it was brought to France by Napoleon. The figure of the *Scribe accroupi* came into the Louvre from the collection of the Egyptologist Auguste Mariette, who "discovered" it in 1850; Mariette was named an adjunct curator of the Egyptian museum of the Louvre in 1855.

51 See Onur Erdur (2024), "Hoffnungslose Widersprüchlichkeit: Jean-François Lyotard," in *Schule des Südens Die kolonialen Wurzeln der französischen Theorie* (Berlin: Matthes & Seitz), 54–75. See also Jean-François Lyotard (1989), "Le nom d'Algérie," in *La guerre des Algériens: Écrits 1956-1963* (Paris: Galilée); Bamford (2017), chapters 2–4; Claire Pagès, "Jean-François Lyotard's Marxism, in *Socialisme ou Barbarie and the Algerian War*," in Bamford and Grebowicz (2022, 99–110).

authors during the experiment in autumn 1984, a ghostly presence that also haunted some of the other authors.⁵²

Rather than being “absent,” we can perhaps best imagine these people and things, the rejected and unrealized projects, and the paths not taken in *Les Immatériaux*, as things that have “fallen between the folds,” where they persist even if they are temporarily invisible, or go unnoticed for a while, and then return.

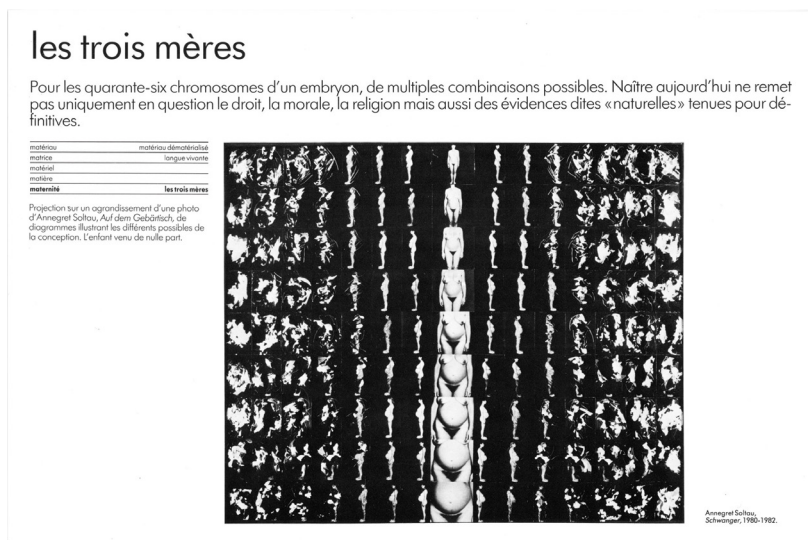
52 See remarks by Dan Sperber, *Épreuves* (1985, 18), entry SPER. 186, 27 NOV.

Exhibiting Things

Exhibitions, Exhibiting, Exhibits

The last chapters of this book approach the exhibition *Les Immatériaux* from a different angle. After the preceding analyses dedicated to the curatorial process and the selection of exhibits, we now look at the exhibition from a more general perspective, in an attempt to understand the place that *Les Immatériaux* marks in the histories of exhibitions. After a short, theoretical characterization of the particular exhibition format of *Les Immatériaux*, we approach the issue in two steps: first in chapter 8 by looking at the exhibits, the things presented in the exhibition, and their framing by certain scenographic choices; and then in chapter 9 by looking at the exhibition as a whole and how it has been viewed retrospectively by its curators and by various art historians and commentators.

Too often, the name "*Les Immatériaux*" has become the signifier of an abstract phenomenon whose meaning is not rooted in the exhibition displayed at the Centre Pompidou in 1985, but rather in a complex of ideas derived from, or projected onto, Lyotard's writings and conceptual thinking, enriched by various rumors about an exhibition of which little was known. Such a limited and distorted perspective is a fate that *Les Immatériaux* shares with many other exhibitions. It is a feature of the discourse on historical exhibitions which gives reason for concern. What are commentators speaking about when they make statements about an exhibition, its particularities, and its relations to historical circumstances? There is certainly room for a more abstract, theoretical discourse on exhibitions which remains somewhat detached from the factuality of specific shows. But to what degree should analysis



[Figure 53] *Inventaire* catalogue page for the site *Trois mères* (Three mothers) with reproduction of work by Annegret Soltau, *Schwanger* (1980–1982). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou / VG Bild-Kunst, Bonn.

and interpretation be grounded in the physical exhibition? And what status should we accord the rumors and misunderstandings that exist about certain exhibitions and affect current views of them?

As an example of such misunderstandings, take the artwork by Annegret Soltau, *Schwanger* (1980–1982), a tableau which shows a grid of 135 photographs (arranged in 9 lines of 15 images, total size 156 x 186 cm), depicting the artist's standing naked body in the progressive stages of pregnancy. The evocative tableau was at one point planned for presentation in the site *Trois mères*, but was eventually used only as an illustration on the respective page in the *Inventaire* catalogue (fig. 53). Due to the incomplete photo documentation of the exhibition, the tableau was later thought to have been shown not in *Trois mères*, but in *L'Ange* (Wunderlich 2008, 131; Gallo 2008, 115; Hui 2019, 241).¹ However, it was not used in either of these two sites, but only appeared as a catalogue illustration.

Nevertheless, we must recognize that such misunderstandings about Soltau's work had a lasting effect on the meanings ascribed to these parts of the exhibition. For example, it was falsely assumed that the site *L'Ange* sought to address the concept of the pregnant female body—which it didn't—or that the

1 Among the other persistent misunderstandings about *Les Immatériaux* are the (counterfactual) absence of exhibition labels and the (often inflated) number of computer screens.



[Figure 54] In the foreground visitors in the site *Précuisiné-Préparlé* (Pre-cooked-Pre-spoken), in the background the site *Trois mères* (Three mothers) with vertical photographic panel of artwork by Annegret Soltau, *Auf dem Gebärtisch II* (1980). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet / VG Bild-Kunst, Bonn. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0218]

INDICATIONS	TECHNIQUE	GROSSESSE	GÉNÉTIQUE ENFANT	STATUT LEGAL
Couple normal	naturelle	maternelle	père mère	●
Sterilité maternelle	insémination artificielle donneur sperme	maternelle	donneur sperme mère	● paternité contestable
Sterilité par obstruction des trompes	fécondation in vitro (FIV)	maternelle	père mère	●
Sterilité mère par absence d'ovules, ménopouse	fécondation in-vitro après préparation hormonale ou dans utérus de donneuse d'ovule	maternelle d'emblée ou secondairement (début chez donneuse)	père donneuse d'ovule	● problème juridique
Sterilité couple par incompatibilité génétique ou immunologique	FIV après don d'embryon	maternelle	donneur sperme donneuse d'ovule	● problème juridique
Sterilité mère par lésion de l'utérus et absence ovaires	Insémination d'une volontaire par sperme père	utérus de location	père mère d'adoption	● maternité contestable (accouchement)
Sterilité mère par anomalie de l'utérus, ovaires normaux	FIV ovule mère par sperme père embryon déposé dans utérus location	utérus de location	père mère	● problème juridique maternité contestable (accouchement)
Père décédé	insémination artificielle avec sperme paternel congelé	utérus mère	père mère	● paternité contestable si 300 jours après décès
Mère décédée	FIV avec embryon congelé	utérus tante ou grand-mère	père mère	● problème juridique maternité contestable
Sterilité mère par obstruction des trompes	FIV avec demi-embryon congelé, FIV chez une autre femme avec l'autre moitié	1) utérus maternel pour demi-embryon 2) utérus étranger pour l'autre	jumeaux vrais nés à plusieurs années d'intervalle chez des couples différents	● problème juridique pour le second
Sterilité couple	adoption	utérus étranger	couple donneur d'enfant	●
Couple normal	adultère 10% des nourrissons dans les maternités	maternelle	père adultère mère	● paternité contestable
Clonage paternel	FIV avec clonage (androgéniste)	utérus de location	génétique paternelle seule	● problème juridique
Clonage maternel	FIV avec clonage (gynogénèse)	maternelle	génétique maternelle pure	● problème juridique
Clonage étranger	FIV avec substitution ou génome parental d'un génome étranger	maternelle	étrangère	● problème juridique
Anomalie génétique	FIV avec introduction dans l'embryon de gènes étrangers	maternelle	gènes étrangers père mosaïque génétique mère (chimère)	● chimère
Substitut total à la grossesse	FIV	couveuse (utérus artificiel)	père mère	● problème juridique

[Figure 55] Table listing various modes of human conception and the resulting legal status of offspring. Projected onto the photographic panel in the site *Trois mères* (Three mothers). Centre Pompidou Archive. [CPA 1994033W224_025_1]

female experience of pregnancy, of becoming a mother, was prominent in the site *Trois mères*—which was also not the case; instead, the latter site favored a more abstract representation of types of human procreation in a scenography that all but negated the presence of the female body (fig. 54, 55).

Misunderstandings like these actively contribute to the way an exhibition is interpreted and to the folklore that is handed down about it. The latency of such misunderstandings can be immense, and in some cases, they will superpose the facts for decades.² Moreover, as the previous chapter about the unselected projects has shown, even for the curatorial team the exhibition was composed not only of the things which were physically present, but also included things that were there as “phantoms” and as semantic potentials which continued to resonate with the exhibition despite their physical absence.

The hypothesis of these two chapters is that *Les Immatériaux* was exceptional both in the way it presented its individual exhibits and as an exhibition, as an event and presentation in general. These two aspects are complementary, but it is useful to distinguish between them.³ On a methodological plane, the following is also an attempt to show how the articulation of both aspects—the treatment and presentation of the exhibits and the overall image that an exhibition conveyed—should form the basis of any informed discussion about exhibitions.

Characterizing an Exhibition Such as *Les Immatériaux*

Exhibitions usually have a variety of different actors and audiences, ranging from curators, artists and other contributors, through the collectors, owners or agents of exhibits, institutional contributors (e.g., exhibition organizers, PR and educational staff, technical and general staff, institution leadership and patrons, project and institutional funding bodies), to visitors, media audiences, and professional critics. Even though the sheer number of actors makes it practically impossible to analyze all aspects of their networked agency, it is useful to keep in mind the multiple ways in which the roles and practices of these different actors and groups interlace, how they are addressed, constructed, and contested.

- 2 In a parallel case, the book about an even more famous exhibition at the Centre Pompidou, *Les Magiciens de la terre* (1989), published 25 years after the exhibition, is a testimony to the difficulty of dealing with such misunderstandings; see Cohen-Solal and Martin (2014).
- 3 For an analysis of the exhibit types and overall scenography, see Wunderlich (2008, 33–48).

The emphasis of the present study has been on the actors and their “making” *Les Immatériaux*, that is, on the active contributors to the exhibition. We have seen that evaluating these contributions requires an expanded notion of curatorship which, most basically, refers to a curatorial subject or constellation of contributors through whose agency the content of an exhibition is selected, presented, and maintained. A general distinction can be drawn between *authorial* approaches, where a single person acts as the curator; *distributed* forms of curating, where the curatorial agency is enacted by a number of people working more or less independently; and *collective* forms of curating, where several people work together, sharing research and decision making. A broad notion of “the curatorial” furthermore encompasses curatorship as a constellation of human and nonhuman actants (von Bismarck 2022).

As the earlier chapters of our study demonstrate, such a differentiated approach is essential to the analysis of the curatorial structure of *Les Immatériaux*. The exhibition was not organized by a singular, authorial curator but was developed in a hybrid collective and distributed structure in which multiple people took decisions about specific parts of the exhibition, with the different actors participating in a multiplicity of dialogical processes (including Lyotard, Chaput, Blistène, Guiheux, Counot, Moinot, Toutcheff, and others). In a substantial number of projects, the actual exhibit was determined by contributing artists and external advisors (like Boissier, Terrier, Caro, Cassé, Denjean, Chabert/Philibert, Boucher, and others). Moreover, there were different actors and different forms of agency, depending on the project phase and timescale that we take into view—whether it be the initial fundraising period in 1979 to 1981, the different phases of conceptualization before and after Lyotard’s engagement in 1983 to 1984, or the period of the actual exhibition in 1985 and its retrospective reception.

Given the present study’s focus on the curators and contributors, a thorough analysis of the audience lies beyond its scope. Suffice to say here that the *public function* is essential to any form of exhibition, or any place of public display, showing unique or typical objects and artworks, archival or documentary items. As such, exhibitions can also be sales rooms or sites of advertising and social representation. In other cases, they offer a discursive space, a space of discussion, social encounter, and exchange, a space of learning and education, or even a playground. And yet other exhibitions are sites of experimentation and research, taking the form of workshops or laboratories.⁴ Among these

4 There are multiple suggestions for such classifications of exhibitions; see, e.g., Ludger Schwarte (2019, 83), who distinguishes between exhibitions in three areas: economic (consumer fairs, art fairs), didactic (historical and technical exhibitions), aesthetic (cultural spectacles, art exhibitions). See also the summary overview in Locher (2002). Another set of analytical criteria can be gleaned from the introduction to Altshuler (2013)—where they are, though, not elaborated systematically—including (1) the formal purpose of the exhibition, (2) its form of content presentation, (3) its curatorial

variants, *Les Immatériaux* was primarily a place of public display. Its main research dimension lay chronologically before the exhibition period and was limited to the internal circles of curators, producers, and advisors. The show itself offered only limited opportunities for discourse and encounter. In fact, the main scenographic elements of a labyrinth of small spaces, the prevalent darkness, and the headphone-based audio program deliberately subverted a collective and discursive experience of the exhibition in favor of the visitor's individual and isolated encounter with the exhibits.⁵

Exhibiting

The exhibits in *Les Immatériaux* comprised a wide variety of things: artworks, scientific samples, and architectural models, but also everyday objects and scenographic displays. Each of these types of exhibits—and the media in which they were conveyed—constructed a different type of knowledge, through the variety of relationships between the contexts from which they were taken, and the sometimes more, but often less contextual ways in which they were presented in the exhibition. This radical diversity of exhibits sets *Les Immatériaux* apart from many other exhibitions which use a more homogeneous set of thing-types in order to make the individual exhibits, their constellations, and the exhibition as a whole legible. Many exhibitions are designed to articulate an overall theme which is laid out in a comprehensible narrative or an otherwise logical sequence, in which the exhibits represent a particular topical position or theme, or illustrate a factual claim. In contrast, the logic according to which the exhibits “speak” in *Les Immatériaux* changes all the time. They are there as authentic documents, symbolical representations, artworks, scenographic illustrations, and so on, all displayed as equals and without relational explanations that would suggest dominant items or interpretations. The functional clothes in the site *Toutes les peaux* are examples of how the human body can be protected in hostile environments, while the three uniforms in *Indiscernables*, though materially similar to those protective suits, are theatrical costumes used to illustrate an abstract mathematical concept. In such a semiotically diverse neighborhood, artworks like Giovanni Anselmo's and Thierry Kuntzel's in “*Infra-mince*” or Joseph Kosuth's in *Ombre de l'ombre*, easily appear as though they were illustrations of various concepts of visibility, rather than artworks in their own right. They are recognizable as “originals” only in the way that the abstract foodstuff in *Ration alimentaire* or the holograms in *Homme invisible* are also really there, showing themselves. The radicality of this curatorial approach lies in the fact that it deliberately

structure, (4) strategy and program, (5) the status, relation, and agency of the individual exhibits, as well as (6) the type of scenographic program employed, and (7) the roles accorded to its various actors and audiences.

5 On the public function of exhibitions, see Bal (1996), and Bismarck (2022); see also Schwarte (2019, 85, 90) and Draxler (2019, 47).

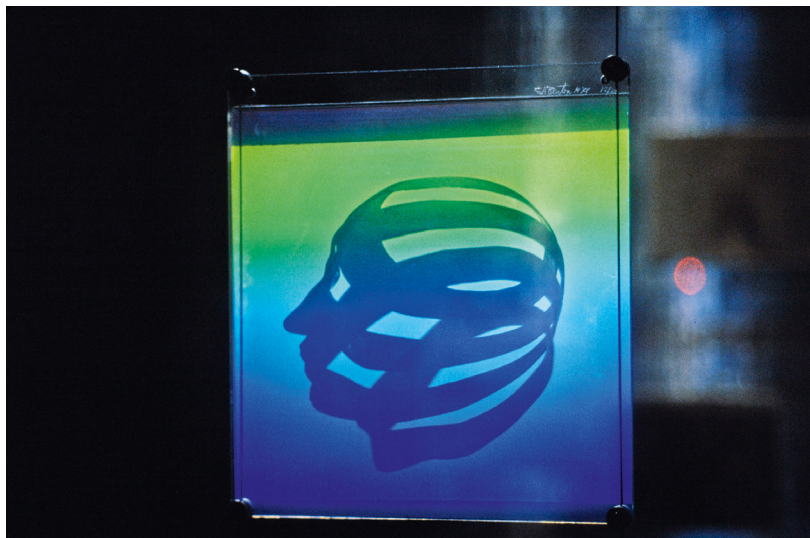
transgresses the borders of object types and turns every exhibit into a thing whose significance is decoupled from its established context.

The effect was particularly recognizable with regard to the artworks in the show. Among the exhibits were the classical and avant-garde paintings in *Lumière dérobée* and *Négoce peint*, which were identifiable as coming from museum collections and whose status as autonomous artworks would have been beyond doubt—had they not been juxtaposed by the photographic reproductions of Quentin Metsys's *Moneylender and His Wife*, and Simone Martini's *Annunciation*. Such juxtapositions signaled that the other exhibits were not necessarily on display as authentic and original paintings but perhaps were only shown as representations of their pictorial content. This precarious status of artworks and things was the theme of contemporary artworks like Philippe Thomas's *Sujet à discrétion*, Joseph Kosuth's *One and Three Shadows*, or Ian Wilson's *There Is a Discussion*, whose very presence and visibility were tried in this challenging environment.

The hybridity of exhibited things and their scenographic arrangement tested not only the status of artworks as autonomous objects but also the epistemological status of the scientific exhibits, scenographically framed by, for instance, artistic speculation, playful interaction, and conceptual obscurity. Many of the mimetic exhibits oscillated between representation and object, like the photos in *Trace de trace*, the macroscopic images of paper printed on sheets of that same paper in *Surface introuvable*, the projected photographs of clothes in *Vite-habillé*, and the holograms, whether representational (*Homme invisible*) or concrete (*Profondeur simulée*). The paradigm of representation and object was in fact the theme of the sites *Architecture plane* and *Référence inversée* where it was elaborated in a scenography which turned the architectural models and drawings, normally ancillary media of the design process, into things with an autonomous, meta-representational status.

In exhibition theory, this duality of the thing itself and its meaning in the context of the exhibition has been captured by Mieke Bal (1996) in the concept of a "double exposure." It highlights the fact that the presence of the object and the message associated with it are both given at the same time, their obvious difference opening up a field of multiple and heterogeneous meanings. The act of exhibiting always comprises the showing of something, the association of meaning with it, and the public character of this exposition.⁶ Expanding on this theme, Ludger Schwarte has argued that in the act of exhibiting, the exhibit is tied into a narrative, while at the same time resisting that narrative. The foundation of this resistance is that the double exposure decouples the exhibited thing from the epistemic, moral or political order and from the

6 See also Werner (2019, 9–41), esp. 32. In Tristan Garcia's discussion of the same phenomenon, the philosopher has highlighted the dyad of "singularization (and aestheticization)" versus "generification (and epistemization)" (Garcia 2019, 186).



[Figure 56] Site *Homme invisible* (Invisible Man), holographic work by Stephen Benton, *Rind II* (1977). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0777]

aesthetic schema into which it had previously been logged (Schwarte 2019, 85, 90).⁷

While this is a principle that concerns any form of exhibition, it can also serve to explain why the presentation of things in *Les Immatériaux* was deemed by many visitors to be confrontational and confusing. The exhibition arrangement juxtaposed everyday objects and materials, like the foodstuff in a small household fridge (in the site *Ration alimentaire*) with medical skin samples (in *Deuxième peau*) and protective suits for surviving in hostile environments (in *Toutes les peaux*) on the one hand, and the extremely reduced living environment of a modular sleeping cell (in *Habitacle*) on the other. This hybrid constellation, readable as a scenario of postmodern human existence, was further framed by the laser-based, scientific experiment of a Fourier transform, testifying to the brittle atomic structure of physical materials, and the holographic representations of a human head that wasn't a human head, and an infinite space that wasn't a space (in *Espace réciproque* and *Homme invisible*) (fig. 56).

Moreover, the exhibits in *Les Immatériaux* were seldom specific, but rather exemplary or even generic; they wouldn't say, "this!" but rather, "something like this!" The casual use of photographic reproductions of artworks underpinned this tendency: it wasn't essential to show originals, since even the

7 On the epistemological ambiguity of exhibits, see also Meyer-Krahmer (2019).

original would only be a representation of a meaning, of a principle exhibited in the constellations of the respective sites.

It has occasionally been suggested that *Les Immatériaux* was not an exhibition, but that it was itself conceived as an artwork (Gallo 2008, 70–80; Glicenstein 2014, 211–212; Hudek 2015, 90). Lyotard pointed out that the way the exhibition “manifested” its content was not determined only by the theme, but was the result of a comprehensive and integrated conceptual and formal approach to the presentation and its scenography, an approach that in itself served to constitute the meaning of the exhibition as a whole, and that—we might add—also tested and expanded the meaning of *exhibiting* as a cultural form. In his interview with Blistène, Lyotard said: “I’m not bothered about asking myself whether I have the right to call myself an artist. I simply feel that there are things that can be done at the level of the physical articulation of the exhibition (*monstration*), and we’ve decided to try to do them” (Lyotard 2024, 45).⁸

In two parallel, unrelated attempts at defining what it means “to exhibit,” the philosophers Ludger Schwarte and Tristan Garcia have recently come to similar conclusions. Importantly, they both distinguish “exhibiting” from the notions of “communication” and “showing” (in the sense of the Greek *deixis*). Schwarte (2019, 86) emphasizes that the devices of display are not primarily there to communicate a hypothesis, a narrative, or a specific content, but that they instead serve the “suspension of communicative and perceptive conventions”: “If it is an exhibition and not a propaganda show, it is deliberately left to chance whether a communicative situation arises. When exhibiting, both the addressee and the categorical affiliation of what is presented, as well as the purpose of the whole, are in principle indeterminate.”

Tristan Garcia seconds this critique of the exhibition as a form of communication: “the act of exhibition is not at first *image*, *representation*, or *signification* (even if it may become so), but *putting into presence*: to exhibit means to deal *first* with presence—which may be the presence of signs—and not meaning” (Garcia 2019, 193 n7).

For both Garcia and Schwarte, this presence of the exhibited thing is predicated on the absence of the exhibiting subject. This is also why both believe that exhibiting has to be distinguished from showing (*deixis*), which requires the co-presence of subject and object. Schwarte puts it like this:

Exhibiting is different from showing because it contains no pointing gesture, it establishes no deictic relation. The exhibited object is neither a

8 See also Lyotard (2024, 125). On the notion and efficacy of the “artistic exhibition,” see Schwarte (2019, 89, 93). Perhaps it would be useful for this debate to consider *Les Immatériaux* not as an “artwork,” but more precisely as “work,” *œuvre*, in the sense proposed by Blanchot (1955, 12).

trace nor a signpost. What I exhibit does not point to something, nor do I exhibit something to someone. Exhibiting initially implies a two-figure relation: I exhibit something. For exhibiting to succeed, I have to leave something to itself for a while in a public place. Something is released from my power and protection. Exposed. Exhibiting something therefore means above all: exposing it. To risk something. To surrender it. To exhibit something is to submit it to trial, to temporary appropriation, to uncontrolled use. (2019, 87)

The “exposition” and solitude of the thing, and the absence of the exhibiting subject, are fundamental principles of the exhibition. Garcia similarly ties this thought to a critique of the deictic understanding of exhibiting. In the exhibition, Garcia writes, the thing is not simply shown, but

I do something so that the thing *will be shown by itself again*, after I have gone. Therefore, though I must absolutely be present to be able to *show*, I may and I must (in time) become absent to be able to *exhibit*. ... What was previously shown now shows itself. So, what is exhibited is not *what was shown*, but *what shows itself*, because that will have been carefully conceived and called to the attention of an audience, in such a way that it no longer has to be shown in order to be able to appear. (2019, 184)⁹

Things

But how to conceptualize this “being left to itself” and the suggestion that the exhibited thing “shows itself”? What Garcia (2019, 189–190) hints at as “a partial transfer between subjectivity and objectivity” for exhibitions is a characteristic feature of what Michel Serres described as “quasi-objects” (Serres 1982, 224–234).¹⁰ This notion has been picked up occasionally in the context of the theorization of things, which are alternatively understood as context-specific “boundary objects” (Star and Bowker 1999) and “epistemic things” (Rheinberger 2001), or as functionally specific “hybrids” (Latour 1993), or vital-materialist “assemblages” (Bennett 2010).¹¹

- 9 See also Garcia (2019, 185). A broader philosophical inquiry of the theme of exhibiting would have to refer to the status of “language games” and phrases as Lyotard discusses them in *The Postmodern Condition* (1984), and then extensively in *The Differend* (1988).
- 10 My focus here is on the conceptualization of things from a philosophical perspective. There is a parallel debate about “things” understood as museum objects, which seems less pertinent here given that *Les Immatériaux* was certainly not a museum in which the exhibits would tend to relate to memory and specific, if diverse, meanings; see Korff (2007) and Brown (2015).
- 11 See also Daston (2004), and the discussions of things as commodities, or objects of consumption, in Baudrillard (1996) and Appadurai (1986). Jane Bennett (2010, ch. 2, “Assemblages”) primarily describes assemblages which are put together purposefully, intentionally, where the elements and their forces work together under the guidance of “human intentionality.”—Another reason for drawing on Serres (1982) here is that

Unlike those other thing types, however, Serres's concept seems more suitable to the theorization of exhibiting pursued here. The quasi-object is qualified as "quasi" because it is not an object in the usual sense of something that is existentially and intentionally dependent on a subject. Instead of being a thing that depends on a subject whose object it is, the quasi-object transforms the subject-object relationship. Serres does not give a clear-cut definition but rather circumscribes and illustrates the theory of the quasi-object with a number of examples. The most pertinent of those for our present discussion is that of the ball used in a game:

A ball is not an ordinary object, for it is what it is only if a subject holds it. The ball isn't there for the body; the exact contrary is true: the body is the object of the ball; the subject moves around this sun. Skill with the ball is recognized in the player who follows the ball and serves it instead of making it follow him and using it. It is the subject of the body, subject of bodies, and like a subject of subjects. Playing is nothing else but making oneself the attribute of the ball as a substance. The rules are written for it, defined relative to it, and we bend to these rules. (Serres 1982, 225–226; transl. modified, AB)

The exchange of positions is transparent and voluntary, and it is an exchange that not only reconfigures the positions of subject and object, but it also serves to constitute a collective which encompasses the different players who minister the quasi-object according to the matrix of the rule-set:

This quasi-object that is a marker of the subject is an astonishing constructor of intersubjectivity. We know, through it, how and when we are subjects and when and how we are no longer subjects What must be thought about, in order to calculate the "we," is, in fact, the passing of the ball. But it is the abandon of the "I." Can one's own "I" be given? There are objects to do so, quasi-objects, quasi-subjects; we don't know whether they are beings or relations, tatters of beings or ends of relations. (227; transl. modified, AB)

The undecidable question of whether the quasi-object is a form of "being" or of "relating," whether it is a real material thing or a relation between things, echoes the "double exposure" of exhibits (Bal 1996), their dual nature of being there as themselves and as the carriers of meaning.

It is suggestive to conceive the things in an exhibition as quasi-objects which destabilize the relations between subjects and objects, between visitors and exhibits—and between curators and projects (fig. 57, 58). For Serres, the

it in fact predates the theories of things which have developed in the 1990s and 2000s and which can be seen as a subset of New Materialism. The staging of things in *Les Immatériaux* can thus also be interpreted as an early instance of the subsequent, interdisciplinary approach to things (as raw material, as matter, as hardware, as topic).



[Figure 57] Visitors in the site *Jeu d'échecs* (Chess game). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0309]



[Figure 58] Functional clothes in the site *Toutes les peaux* (All kinds of skins). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0417]

construction of a “we” is an essential function of the quasi-object, but it seems that in *Les Immatériaux* there was a deliberate effort to obscure, maybe even hinder such a collectivizing dimension of the exhibits.¹² Nevertheless, the exhibits can be called quasi-objects which set the rules of the encounter and turn the visitors into the objects of the things. The exhibits addressed the visitors and forced them to respond to questions like the following:

Which of the protective suits in the site *Toutes les peaux* will I wear? What danger is waiting for me?

Which of the individuals in *Matricule* will I be? Or will all of these identifiable exist, while I remain unaddressable and lonely, like an invisible and unknown planet?

Will my exhibition visit, my temporary presence, diffuse into the statistical data screens of *Variables cachées*?

Who will be the person wearing the projected clothes in the site *Vite-habillé*? Which role will I play? Which visitor-exhibit will I become?

There was yet another element of the scenography of *Les Immatériaux* which pushed both the exhibits and the visitors further into the direction of this switching of subject–object relations, namely the audio track. The headphone system transmitted the voices of anonymous others, projected like an internal monologue straight into the ears and minds of the visitors:

“... I gave up before birth...” (Samuel Beckett, zone 3, *Théâtre du non-corps*)

“... but this is not my body ...” (Dolorès Rogozinski, zone 4, *L'Ange*)

“... you exist because it is written in its code ...” (Stéphane Mallarmé, zone 12)

And in audio zone 14, visitors heard the full acknowledgement of the inverted relationship of subject and object, of visitor and exhibits, in the words of Maurice Blanchot:

Within my reach is a world. I call it world, like dead, I will call the earth nothingness. I call it world because there is not any other possible world for me. I believe, like when one advances toward an object, that I render it nearer, but it is the object that understands me. The object, invisible and outside the being, perceives me and supports me in the being. Itself unjustified chimera if I were not there, I can discern it, not in the vision I have of it, but in the vision and the knowledge it has of me. I am seen. I destine myself under this sight to a passivity that, instead of reducing me, makes me real.¹³

12 For Lyotard’s interrogation of the notion of “We,” developed in several contributions in the early 1980s, see especially *The Differend* (1983).

13 *Les Immatériaux, Route: Zones et sites* (1985), 10, audio zone 14; quoted from Blanchot (1976, 124–125). A striking number of the texts used for the soundtrack derive from the

Such quasi-agency of the exhibits was no accident. During the preparation of the exhibition, a year before its opening, Lyotard remarked that the objects themselves would seem to speak to the visitor through the headphones: “someone addresses [the visitor] and this someone, what is more, may be a person out of a painting, may be a piece of a machine, may be the site itself” (2015, 65). If, as Tristan Garcia posits, “to exhibit” means to reveal, and to ensure that in an exhibition, “everything shows itself” (2019, 192), we can see here how in *Les Immatériaux* this auto-exposition of the exhibits was aided and augmented by the deliberate curatorial gesture of the audio program.

Excursus on the Anamnesis of Matter and Things

A few weeks after the opening of *Les Immatériaux*, during a seminar organized in the Centre Pompidou on the occasion of the exhibition and dealing with “the notion of matter [*matière*] in contemporary philosophies,” Lyotard made a comment which deserves a close rereading in the context of this discussion of exhibited things.¹⁴

Toward the end of his talk, entitled “Matter and Time,” Lyotard spoke about how the new technologies signaled a new blow to “human narcissism” after the displacements of anthropocentrism associated with Copernicus (the cosmos), Darwin (life), and Freud (sense). The “techno-sciences,” Lyotard said, teach the contemporary human that the complexification of mind is not a genuinely human domain, but is a quality of matter itself; the human is neither origin nor result of this technical complexification, but is rather its “transformer” (*transformateur*), understood in the sense of a quasi-technical interface:

This view can cause joy or despair. ... Perhaps it [i.e., this view of the human as transformer] is enough, in all sobriety, to give us reason for thinking and writing, and a love of matter. Matter in our effort makes its anamnesis. (Lyotard 1991, 46; transl. modified, AB)¹⁵

Surrealist tradition, including Borges, Paz, Carroll, Kleist, Beckett, Artaud, Michaux, and Blanchot. For the status of the exhibit in Surrealism, see Brown (2015, 79–124).

- 14 Lyotard held his talk on 26 April 1985, on the third of three evenings of a seminar series organized by Christian Descamps under the overall title “Architecture/ Science/ Philosophie.” The other two evenings dealt with the modern and the postmodern in architecture (24 April) and the notion of the proof in contemporary science (25 April); see *CNAC Magazine*, March–April 1985, 15. The text of Lyotard’s lecture was included under the title “Matter and Time” [*Matière et temps*] in the essay collection *The Inhuman* (Lyotard 1991). The handwritten manuscript preserved in the Bibliothèque Littéraire Jacques Doucet is dated 26 April 1985.
- 15 “La matière en notre effort fait son anamnèse” (in original French, *L’Inhumain* [1988], 55). The English translation of the phrase in *The Inhuman* (1991, 46) is “performs its anamnesis,” a phrasing which is here avoided, given Lyotard’s critique of the notion of “performativity” in *The Postmodern Condition* (1984).

This is an astonishing claim about the epistemological status of the exhibits. The short closing sentence encourages us to look not only at the efforts of Lyotard and the extended curatorial team toward *Les Immatériaux*, but to consider matter itself, and the things inside and outside the exhibition galleries, as bringing about the meaning that could be gleaned from this experience and experiment.

In his writings, Lyotard uses the term “anamnesis” frequently, yet he deliberately avoids providing a clear-cut definition of the term. We will therefore try a heuristic reconstruction, in order to offer an interpretation of what it might mean for “matter to make its anamnesis.” An important set of references comes from a text published, like the aforementioned lecture, in 1988, in the book *L’Inhumain (The Inhuman)*. A year after *Les Immatériaux*, Lyotard participated in a symposium organized by Bernard Stiegler, where he spoke about anamnesis and technical media in a lecture entitled “*Logos and Techné, or Telegraphy*” (Lyotard 1991, 47–57; French original, *L’Inhumain* 1988, 57–67).¹⁶

Lyotard derives the concept of anamnesis from Freudian psychoanalysis and, in particular, from Sigmund Freud’s description of psychoanalytic techniques. In a text from 1914, to which Lyotard occasionally refers, Freud distinguishes between the three techniques of remembering, repeating, and working through (*Erinnern, Wiederholen, Durcharbeiten*). From these, Lyotard takes *Durcharbeiten*, perlaboration (working through), as a cue for the anamnestic process in which something that has been forgotten is brought back and worked through, against the resistance of the unconscious (1946, 135–136). This emphasis on the resistance against remembering derives from Freud, as does the trope that anamnesis often has to search for something that has not been forgotten because it actually never became conscious. Freud uses the example of a childhood experience which was not understood at the time and which was therefore not consciously registered, something that would be understood or become meaningful only later, *nachträglich* (129).

Lyotard repeats this thought in different variations, applying it especially to the mnemonic or retentional faculties of the new electronic media: “The point [of anamnesis] would be to recall what could not have been forgotten because it was not inscribed. Is it possible to recall if it was not inscribed?” (Lyotard 1991, 54). But the anamnesis that Lyotard has in mind searches not only backward in time, but also sideways and forward. As he comments in 1994:

Anamnesis works over the remains that are still there, present, hidden near to us. And with regard to what is not yet there, the still to come (*l’â-venir*), it is not a matter of the future as such ... but that which is still awaited with incertitude: hoped for, feared, surprising, in any case

16 On the notion of anamnesis, see also Lyotard (2004), Tomiche (2016), and Gaillard (2019, 11–23).

unexpected. It will come; but the question is: what will come? ... If there is an enemy (the obscure primitiveness of the [Lacanian] Thing, indifferent perhaps, a power both threatening and cherished), that enemy is inside each one of us. The labor of “working through” is to find the idiom that is least inappropriate to it. (2020, 157–158)

In Lyotard’s usage of the concept, the anamnesis works against a resistant force, but it also brings forth a resistance, a resistance based in writing (*écriture*), and directed against the effects of techno-science which Lyotard identifies as “breaching” and “scanning” (*frayage, balayage*). In his 1986 lecture, he says: “We envisage this writing as passing or anamnesis in both writers and artists (it’s clearly Cézanne’s working-through) as a resistance (in what I think is a non-psychoanalytical sense, more like that of Winston in Orwell’s *1984*) to the syntheses of breaching and scanning. A resistance to wily programs and coarse telegrams” (Lyotard 1991, 56–57; transl. modified, AB). Lyotard made the comment about matter making its anamnesis in the context of the claim that the human is a mere transformer of meaning—a realization that should, as he said, “give us reason for thinking and writing, and a love of matter” (46).

Thinking and writing are here to be understood in the sense of various forms of reflexively engaging with the world. Lyotard recognizes in this extended understanding of writing “the uncontrollable contingency of *Écriture*” (1992, 91), and affirms that, in his view, the necessary form of anamnestic resistance is offered “only ... [by] writing, itself an anamnesis of what has not been inscribed. For it offers to inscription the white of the paper, blank like the neutrality of the analytical ear” (1991, 56).

This anamnesis by *écriture* is a form of self-reflexion enacted in literary and philosophical writing, as well as in science and the visual arts—all of which form important aspects of the exhibition *Les Immatériaux*. In the texts accompanying the exhibition, Lyotard made no comments about which of the exhibits or sites might actualize such an auto-anamnesis of matter in particular; we can therefore only speculate, and attempt a translation.¹⁷ In this attempt, we focus here on the aspect of the “surface,” a theme that frequently features in Lyotard’s writings on aesthetics and that forms a key feature of the sites *Surface introuvable*, *Trace de trace*, and *Corps chanté*.

The site *Surface introuvable* (Elusive surface) showed different views of a topographical map and its paper support: a three-dimensional relief representing the territory of France, a foldable map made of paper, and the same paper before the map was printed on it (fig. 9). In addition, there were

17 Part of such a speculation could also be the historical question of whether what Lyotard said in April 1985 could perhaps only be said at that moment, during *Les Immatériaux*, and whether things were already different when a year and a half later, in October 1986, he delivered the “techno-materialist” talk, “*Logos and Techné, or Telegraphy*” (see Lyotard 1991, 47–57).



[Figure 59] Visitor in the site *Trace de trace* (Trace of a trace), anonymous photographs from *Evidence* (Larry Sultan and Mike Mandel, 1977). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0742]

microscopic images of the paper taken with an electron microscope and the visual output of a rugosimeter, which measured the roughness of the paper surface. Each of the exhibits was the same size. The site highlighted the fact that there is no surface per se, and that depending on the tools, the scale, and the distance of the observation, the seemingly flat paper support of the representation can appear as porous and complexly profiled as the territory it represents. The auto-anamnesis of matter can here be understood as an effect of the comparative reception of the different instances of map and paper, oscillating between surface and relief, absolute flatness and porous depth.

The site *Trace de trace* (Trace of a trace) explored the relationship between light and trace as they manifest on the photographic surface (fig. 59). *Trace de trace* presented a selection of photographs extracted from police archives, documenting the locations where accidents and crimes had taken place. The photographs derived from an exhibition and book project by Mike Mandel and Larry Sultan, called *Evidence* (1977). The “surface-effect” pinpointed in these forensic documents, created by the chemical reactions effected by light touching the surface of the film, is a semiotic “superficiality”: what these images show, the intention with which they were made, and what they signify, all of these semiotic dimensions are subject to interpretations that

cannot escape the fundamental ambiguity of the photographic trace.¹⁸ As exhibits, these photographs constitute a critical interrogation not only of the photographic medium, but also of the actuality of the past events whose material traces these images document.

As a third example, the site *Corps chanté* (Sung body) included several video monitors playing an edited program of music videos in which the images of the singing and acting bodies of the musicians were electronically manipulated, revealing these images to be synthetic. The representations of the human bodies are simulations, surfaces mapped onto shapes without substance.¹⁹ The video compilation *works through* the different aggregate states of bodies as they appear thanks to the new media which call into question the distinction between the living and the simulacral. Again, the exhibit can be taken to offer an anamnesis both of the fate of the human body under the postmodern condition and of the electronic medium in which it manifests. The surfaces of the body and the technical medium act as “transformers” in this perlaboration.

This short sequence of exhibits can give us a sense of what Lyotard meant when he said, a few weeks into the exhibition period, that “matter in our effort makes its anamnesis”: the effort of presenting and viewing the exhibits instantiates the complexification of matter—in the present example, with regard to the aspect of surface—which surpasses the control of either the curators or the visitors, both of whom become witnesses of an anamnesis that matter performs upon itself.

In the months after the exhibition, Lyotard reminisces about the collaboration with the core team members at the CCI, and broadens this notion of anamnesis to cover not only individual exhibits but the exhibition as a whole. He recounts the weekly team meetings and says:

That secret emotion when one of us brought to a meeting (as one brings a dream to the analyst) some new idea, some principle of exploration, a way of arranging things, a sketch for one of the sites or the discovery of some pertinent object. It could be a detail or an overall idea, since no one was particularly responsible for the thing as a whole. ... But the real preparation takes place first and foremost in the field of sentiment, in search of lost time—I mean the world in which we live. This anamnesis

18 On the question of the ambiguous authorship of images, see also the site *Peintre sans corps*, where the four canvases of the work *Explosion* (1973) by the French painter Jacques Monory are partly painted by hand and partly covered through a technical process of photographic reproduction.

19 See also the morphing of fruit and vegetables in the computer-animated film *Gastro-nomica*, projected in the site *Arôme simulé*.

demanded by the exhibition in return made it seem like a friend to you, unbearable to others, undecidable in the eyes of most. (Lyotard 2021, 5)²⁰

This type of anamnesis is hardly the laborious and painful struggle against unconscious repressions that Freud's patients had to work through. It is much closer to the digging and dreaming that Walter Benjamin deals with in the short texts of *Berlin Childhood around 1900*, where the slumbering childhood memories are occasionally and unexpectedly revealed.²¹ Here forgetting is not associated with trauma and unconscious repression; the looming drama is that of the future—that is, the present and its imminent catastrophes—and the dominant sentiment is a longing for the past. The work of remembering is laborious, and like the digging and documenting of the archaeologist, it should be done carefully and patiently. It is also a source of enjoyment—not dissimilar, perhaps, to Lyotard's good-humored comment that the realization of the human as a mere "transformer" should inspire "thinking and writing, and a love of matter."

Related to Benjamin's metaphor of archaeological excavation is a paradoxical figure of thought that also infused Lyotard's notion of anamnesis, namely the disclosure of a yet hidden future (Benjamin 2002b). Lyotard occasionally captures this unhinging of time, this a-chronicity, in the Freudian term of *Nachträglichkeit*, but also in the more open, Benjaminian phrasing of "you don't know it until later," "*dies weiß man erst später*" (Lyotard 1992, 135).

Another dimension of the notion of "matter making its anamnesis" resonates with both Benjamin and Freud as well as with the emergent notion of the "inhuman" in Lyotard's thinking at the time. The anamnesis marks the departure from the framework of consciousness. Lyotard conceptualized the human as a "transformer"—involved in a transformation that was the result of "the uncontrollable contingency of *Écriture*." He saw this transformation

- 20 Lyotard continues: "Yes, we certainly worked! But the secret of the exhibition is that it worked on us. Each one of us differently, singularly, but it worked on us all. It worked on us as a horizon works on the navigator, or as words as yet unwritten work on the writer. ... Claude Simon said ... [that] the profession of writer ... consists in trying to start a sentence, continue it, and finish it. For us, the exhibition was the difficulty of this sentence, and the horizon of words, of sites, lighting, and colors that called it forth. (Such was our presumption, that it was calling us.) An indeterminate form, conceptually elusive, toward which only sentiment, when interrogated, spied upon (this is the anamnesis), purged, cleansed of interests fantastic and otherwise, can lead the way, by revealing which means will fail to translate it. A singular fidelity, a probity in regard to something indeterminate."
- 21 Lyotard explicitly referred to Benjamin's texts as a source of inspiration in a talk about the notion of resistance in George Orwell's novel *1984*, entitled "Ligne de résistance," lecture delivered on 3 October 1984, published in French in the CCI's journal *Traverses* (no. 33/34, 1985), and included in 1986 in the French edition of *The Postmodern Explained* (Engl. 1992). See, for instance, Benjamin (2002b, 395–396). For a reflection on the methodological foundations of such "digging," see Benjamin (2005, 611).

as enacted in the encounter with matter, a *matière* whose self-reflexive anamnesis evolved without the conscious work of a human subject but on the affective surfaces constituted by the *visiteur.e.s-transformateur.e.s* and their experiences of confusion and inquietude.

Encountering the Things of *Les Immatériaux*

This notion of the anamnesis of matter emerged for Lyotard while preparing the exhibition in 1984, a process which increasingly brought things and their efficacy into view. Toward the end of that process, in conversation with Bernard Blistène, Lyotard admitted:

The exhibition also has another theme that hopes to legitimate the “monstrous neologism” of the term *immatériaux* ...: that, quite obviously, all the progress that has been made in the sciences, and perhaps in the arts as well, is strictly connected to an ever-closer knowledge of what we call, in general, objects (which includes objects of thought). (Lyotard 2020, 80)

For Lyotard, this realization resulted from his cooperation with the team and consultations with the scientific advisors. The joint research became a radical questioning of the existence of such things, and of matter itself:

Analysis decomposes these objects and allows us to perceive that, ultimately, they are objects only at the human scale: at the level of their constitution, they are complex agglomerates of tiny packets of energy, of particles that can't possibly be grasped as such. Ultimately there's no such thing as matter, all that exists is energy; and there is no longer any such thing as materials in the old sense of the word, i.e. objects that put up resistance to some project that seeks to divert them from their primary finality. (Lyotard 2020, 80)

The curators of *Les Immatériaux* tried to steer clear of the art-theoretical discourse on “dematerialization” (Lippard 1997; Morris and Bonin 2012) on the one hand and of an understanding of things as commodities on the other (Baudrillard 1996). Instead, a central part of the curatorial and didactic program of the exhibition was to convey to visitors the condition of the uncertainty of matter and to draw their attention to the consequences. Asked about the selection criteria for the exhibits, Lyotard affirmed: “So what were our criteria of selection? ... First of all, we wanted to exhibit things that inspire a feeling of incertitude: incertitude about the finalities of these developments and incertitude about the identity of the human individual in his condition of improbable immateriality” (Lyotard 2020, 83).

We must acknowledge that this was only Lyotard's own understanding of the exhibition project, which must be distinguished from the experience of the visitors, and from the approaches of other curatorial contributors. The

scientific advisor Paul Caro, for instance, sought to explain to visitors certain theoretical concepts. He suggested scenographic solutions for his sites which would be both evocative and legible. In contrast, the CCI's architecture curator Alain Guiheux wanted the exhibits to precisely articulate and illustrate a given theoretical hypothesis. And project manager Nicole Toutcheff understood the entire exhibition as an integral, alternative image of reality; commenting on the efficacy of the exhibits and how they contributed to the *œuvre* of the exhibition, Toutcheff said: "For me, the work is born of the need to transpose 'reality.' Objects are used to recreate another reality. And this transposition is attempted throughout the exhibition" (in Théofilakis 1985, 19).

Regarding the audience, it is impossible to retrace what visitors actually experienced when meandering through the gallery spaces. What we can say, though, is that the individual sites and exhibits addressed and interpellated the visitors in particular ways. Where they appeared as independent artworks (for instance, in *Peinture luminescente*, *Lumière dérobée*, *Odeur peinte*, *Mots en scène*) or as audiovisual narratives (*Théâtre du non-corps*, *Corps chanté*, *Matériau dématérialisé*, *Creusets stellaires*, *Terroir oublié*), the exhibits invited a contemplative reception and constructed for the experienced visitor of exhibitions a more or less stable, binary object-subject relation. In contrast, the interactive displays (*Toutes les copies*, *Visites simulées*, *Musicien malgré lui*, *Vite-habillé*) and everyday objects (*Ration alimentaire*, *Habitacle*, *Toutes les peaux*) required a form of active engagement and identification with the exhibits. The didactic displays of the sites conceived by Caro (including *Surface introuvable*, *Matricule*, *Variables cachées*, *Espace réciproque*, and *Irreprésentable*) demanded to be read and understood—a cognitive approach marked not least by the projected *dérouleur* texts explaining aspects of the sites' themes—and positioned the visitors as subjects of instruction. And then there were sites which appeared to be based on the very absence of exhibits, isolating the visitors into a precarious and self-reflective position (*Galerie d'entrée*, *Nu vain*, "Infra-mince," *Trois mères*, *Temps différencié*).

Each of these different exhibitionary modes was in itself comprehensible. However, the way in which they were sequenced in *Les Immatériaux* afforded a permanent destabilization, forcing visitors to constantly switch position. The superimposition of the main scenographic elements (metal meshes, lighting, soundtrack) onto the individual exhibits crucially determined the visitor experience. These elements served to single out the visitors, to isolate them, and to address each visitor as an individual. The scenographic elements interpellated the visitors and prevented them from either disengaging ("this has nothing to do with me") or taking a superior attitude ("I know what all of this is about"). Instead, their gaze was guided and focused by the lighting, they were intimately spoken to through the headphones, and they were reminded by the semitransparent, suspended walls that there were other visitors close by, but

that in their “here and now,” they were alone, sequestered in their own experiential bubble.

In comparison with many other exhibitions, the spatial and scenographic program and design of *Les Immatériaux* was exceptional by any standards. It shunned the usual museal sequence of separate spaces and the integrated and neutralized dispositive of the white cube gallery. Instead, it employed an open plan design where the exhibition space and scenography were relatively independent from the built architecture, and where the overall labyrinthine layout was combined with walls and exhibits that were suspended above the floor and with interactive, visual and sonic elements like the soundtrack, lighting, and distributed Minitel terminals.

Viewed in an exhibition-historical perspective, the unconventional approach to exhibiting was not dissimilar to some avant-gardist experiments of the 1920s and 1930s, even though here the exhibits were often drawn from more homogeneous contexts; the abstract paintings in El Lissitzky's *Kabinett der Abstrakten* (Hannover, Germany, 1927) or the presentation of industrial design items in the exhibition *Machine Art* (MoMA, New York City, 1934) come to mind (Marshall 2012).

In a different way, such homogenization also took place in the exhibitions developed in the 1950s by members of the UK-based Independent Group (including Laurence Alloway, Richard Hamilton, John McHale, and Victor Pasmore), which focused not on artistic production but on contemporary culture. In the exhibition *Man Machine and Motion* (Newcastle, 1955), items from a wide variety of contexts were presented in the form of systematically sized photographic reproductions and in a gridded display architecture. A year later, in *This Is Tomorrow* (London, 1956), the participating artist groups each employed a different form of display, but this diversity was separated into distinct sections, each sub-exhibition readable according to its own scenographic rules.²²

Another historical exhibition that prefigured elements of the way *Les Immatériaux* presented its exhibits was *documenta 5* (Kassel, Germany, 1972). The curatorial team around Harald Szeemann selected not only modern and contemporary artworks but also exhibits from different contemporary and popular cultural contexts which were shown in different sections of the exhibition, each with their distinct forms of display. This diversity of experiences was further expanded through a program of live performances, interventions, and installations (Nachtigäller et al. 2001).

22 See Kevin Lotery (2020) and Crippa (2016). Perhaps *This Is Tomorrow* came close to the “over-exposed” version of *Les Immatériaux* that Lyotard imagined in March 1984 (Lyotard 2015, 55–59).

But it was a series of exhibitions of the Surrealist movement which, in retrospect, resonates most strongly with the exhibitionary strategies of *Les Immatériaux*. These included the diversity of exhibits in the *Surrealist Exhibition of Objects* (Charles Ratton Gallery, Paris, 1936) and the *First Papers of Surrealism* (New York City, 1942), where Marcel Duchamp's installation of strings deliberately manipulated and, in fact, hampered the viewing access to the individual exhibits. The *International Surrealist Exhibition* (Galérie Beaux-Arts, Paris, 1938) presented a mix of artworks, makeshift displays, dressed-up manikins, and presentation techniques which both guided and impeded the viewing experience, perhaps coming closest to the radicality of the scenographic impositions of *Les Immatériaux*—with the proviso that in the *International Surrealist Exhibition*, even amid this drastic mix of exhibited things, visitors knew that everything came, in one form or other, from members of the Surrealist movement (see Filipovic 2016, 90–114; Görgen 2011, 252–263).²³

In contrast, it was hard for visitors to comprehend where the things in *Les Immatériaux* were from, what the exhibition was about, or what the guiding principles were for the selection of its exhibits. The exhibition did not showcase a specific artistic or cultural practice, or an art historical constellation such as a specific movement. *Les Immatériaux* was a thematic exhibition which assembled a large variety of exhibits from different artistic, cultural, and scientific contexts, but unlike other such exhibitions, its theme was based on an idiosyncratic theoretical concept whose neologistic title obscured expectations rather than directing them. The items exhibited did not come from one cultural field, from one disciplinary or discursive context, or from a recognizable group of artists; instead, they seemed to be coming from everywhere at once. Equally challenging may have been the fact that in terms of the exhibition's temporal structure, everything in *Les Immatériaux* appeared to be contemporaneous,²⁴ and logged into a radical Now that was co-present with, and constituted by, the visitors of the day.

The art theoretician Helmut Draxler has proposed the concept of “the exhibitionary” to highlight a self-reflexive quality of exhibits which are not so much dissolved into a new context, but whose presentation shows how such contexts engender the status of the exhibits in the first place. They are

23 Compare also the “dynamic labyrinth” of the 1962 exhibition at Stedelijk Museum Amsterdam, *Dylaby*; see Sandberg (1962) and Burleigh (2018).—At the beginning of the first *Manifesto of Surrealism* (1924), André Breton highlights the uncertainty of objects: “Man, that inveterate dreamer, daily more discontent with his destiny, has trouble assessing the objects he has been led to use, objects that his nonchalance has brought his way, or that he has earned through his own efforts, almost always through his own efforts.” Quoted from Seaver and Lane (1972, 3). See also André Breton, “Surrealist Situation of the Object” (1935), in Seaver and Lane (1972), esp. 257.

24 Perhaps with the rare exception of the deliberately retrospective presentation of (pre-postmodern) modernist architecture in the site *Terroir oublié*.

understood not as the “positive” representatives of a meaning or value, but rather as agents of a “negative didactics (*Vermittlung*) which elucidates an exhibition’s medial, social and symbolical dimensions” (Draxler 2019, 61).²⁵ Such a negative didactics defies conceptual clarity and easy legibility, but rather aims for “a systematic slippage of mediation and for the opening of a space in which the different dimensions of experience could be related to each other” (61).

Draxler discusses the exhibitionary with reference to Walter Benjamin’s concept of “exhibition value” (*Ausstellungswert*), which marks the transformation of artworks from the pre-modern objects of ritual with a primary “cult value” (*Kultwert*) to objects which are destined to become exhibited, a status that suspends them, as we might say here, between commodity and quasi-object (Benjamin 2003).

We see how everyday objects under the sign of the exhibition value become exhibitable like artworks and mark the exhibition as a place of encounter with exceptional, exposed things, replacing the sites of pre-modern rituals. The “sacralizing” presentation of the exhibits in *Les Immatériaux* can be understood as an implicit reference to this shift, and as its postmodern questioning: against any hopes for a return of cult value, the exhibition asserts a radical proliferation of exhibition value.

It is, however, not the exhibit that is called into question, but the visitor who is there to witness and evaluate something, but without being given criteria and a yardstick by which to determine the value. Draxler writes:

The exhibition value condenses the paradoxes of the modern question of value, namely that values always presuppose normative horizons, but at the same time always have to be procedurally produced, that values can only be gained in comparison, but aim at something incomparable, and finally that they always appear to be lost and yet are only conjured up in the moment. (2019, 47)

Both Draxler and Benjamin primarily discuss cultural sites like art exhibitions and the cinema as being where the exhibition value poses its crucial challenge—namely, that it is based on “a value system that does without a fixed value, that only knows value categorically as controversial” (Draxler 2019, 48). But *Les Immatériaux* shows that this decontextualization and unhinging can affect any type of thing which is exposed and left to show itself. These are quasi-objects like Michel Serres’s ball, but they come without a rule set that could bring about at least some form of intersubjective meaning. And they come as a multiplicity, proposing a game of football with any number of

25 Draxler derives the notion of the “exhibitionary” from Tony Bennett (1995). Draxler’s own focus is on contemporary art, but it seems reasonable to expand his approach also to a diverse exhibitionary project like *Les Immatériaux*.

balls.²⁶ They effect an unhinging which is not subjective but “quasi-objective,” meaning that the re-evaluation is brought about by the exhibits, which are themselves decoupled from the matrix and its rules.

What’s more, the scenography detracts the individual exhibits from such evaluation and scrutiny, fostering instead an atmosphere of nebulous camouflage. The category of the “exhibitionary,” qualifying the reflection on the conditions of exhibiting and the contextual construction of meaning, here does not apply to individual exhibits or sites but only to the exhibition as a whole. In *Les Immatériaux*, only the exhibition value of the exhibition is at issue, not that of the individual exhibits. And this exhibition value is, finally, not a quality of the exhibited but a function of the visiting quasi-subject.

26 Draxler (2019, 53–54) develops these ideas further in the framework of what he calls an “aesthetics of truth” (*Wahrheitsästhetik*). It may well be that there is overlap here with the impact that the discourse of Lyotard’s book *Le Différend* (1983) had on *Les Immatériaux*.

Les Immatériaux and the Histories of Exhibitions

Framing *Les Immatériaux*

Les Immatériaux is regarded by many critics as a particularly significant moment in the history of exhibitions of the 20th century.¹ The US-American art historian Bruce Altshuler, in his seminal volume *Biennials and Beyond—Exhibitions That Made Art History, 1962–2002*, lists *Les Immatériaux* among his selection of 25 exhibitions from those four decades “that made art history.” The basic tenets underpinning such canonization and selection are, of course, highly problematic—half of the exhibitions selected by Altshuler took place in Europe, another third in the USA, the remaining three in Havana, Cuba; Beijing, China; and Sao Paulo, Brazil. But despite such cultural bias, Altshuler’s selection points to the fame that *Les Immatériaux* continues to hold.

Altshuler lauds the fact that *Les Immatériaux* staged “a complex investigation as an exhibition,” and that it thus “anticipated the participatory and discursive aspect of many future exhibitions” (2013, 215).² Moreover, “*Les Immatériaux* culminated the interdisciplinary exhibition program of the Centre Georges Pompidou” (215), whereby Altshuler gestures toward both the innovative original concept of this cultural institution, opened in 1977, and the exhibition series curated by the director of the Centre’s Musée National d’Art

1 The ideas for this chapter were first discussed during two workshops at the ZKM, Karlsruhe, “Interdisciplinarity in Curatorial Networks” (February 2023) and “Methodologies of Researching Historical Exhibitions” (March 2023). I thank our host, Livia Nolasco-Rozsas, and the other participants for their generous feedback and the liberal exchange of ideas.

2 For a similar overview of 30 “exemplary” 20th-century exhibitions, see Klüser and Hegewisch (1991).

Moderne, Pontus Hultén, from 1977 through 1981, marking Paris as the hub of modernism in the first half of the 20th century.

Another influential voice fostering the legacy of the exhibition has been the Swiss curator Hans Ulrich Obrist (see esp. Obrist 2014, 157–162).³ Historically, *Les Immatériaux* marks for Obrist one of the first instances of reflection on the emergence of digital culture, investigating “the consequences of the shift from material objects to immaterial information technologies, ... from modernism to postmodernism” (Obrist 2014, 157). He calls *Les Immatériaux* a crucial early example of the interdisciplinary articulation of art and science in an exhibition, crucial for his own work as a curator (158). Obrist also highlights that *Les Immatériaux* was the first instance in the history of 20th-century philosophy of a philosopher discovering “the exhibition as a medium for thought and experimentation” (159).

Providing a third example of such retrospective recognition and affirming the relevance of the exhibition for the history of contemporary philosophy, the German art and culture historian Monika Wagner mentions *Les Immatériaux* in an encyclopedia entry on the aesthetic concept of “material,” calling it a unique exhibition which pinpointed postmodern debates on the crisis of materiality, and a harbinger of the philosophy of New Materialism (2001, esp. 867, 870, 882).

This chapter deals with the different places in history that have been accorded to *Les Immatériaux*, and proposes a critical methodology for discussing such claims, as well as offering more general conceptual considerations on researching exhibitions and writing their histories.

A first glance at the art-historical literature about *Les Immatériaux* gives an impression of the diversity of contexts in which the exhibition has been discussed. Like Altshuler, Antonia Wunderlich (2008) highlights how *Les Immatériaux* exemplified the early transdisciplinary program of the Centre Pompidou, and explains how it related to the 1980s boom of museums in France, preceding the opening of the Paris-based science center La Villette, Cité des Sciences et de l'Industrie (1986) by only one year. In contrast, Francesca Gallo (2008) focuses on the contemporary and media art in *Les Immatériaux*, pointing out predecessor exhibitions like *Cybernetic Serendipity* (ICA, London, 1968) and *Electra* (Musée d'Art Moderne, Paris, 1983), both of

3 Obrist (2014) contains factual mistakes (Chaput was *not* the “director” of the CCI; 157) and notional imprecisions (a translation of “Les Immatériaux” as “The Non-Materials” takes the ambiguous edge off Lyotard’s proposal; 157). Obrist also states that “*Les Immatériaux* was a large experiment about virtual reality and about the exhibition as a work of art” (159), a claim that should remind us that an object of historical reflection is always also what a certain author wants that object to be; this type of projection is certainly part of the exhibition’s history—and perhaps part of any exhibition that people feel inclined to speak about in retrospect.

which prominently featured technology-based art. In another vein, Antony Hudek's suggestion (2015) of a conceptual genealogy for *Les Immatériaux* mentions a number of references proposed by Jean-François Lyotard himself; these include the Paris *Salon* of 1767 and its review by Denis Diderot, the notion of an "over-exposition" derived from Paul Virilio, as well as conceptual artworks and exhibitions by the artists Marcel Duchamp, Jacques Monory, and Daniel Buren, about whom Lyotard had written prior to his engagement in the *Immatériaux* project. Similarly, and introduced here as a final example in this initial review of historical references, John Rajchman (2009) emphasizes the role that *Les Immatériaux* plays with regard to post-Kantian aesthetics, placing it in a historical matrix that includes the exhibition practices of Alexander Dörner and El Lissitzky in the 1920s, the debate on the "dematerialization of art" around 1970 and Kynaston McShine's exhibition *Information* (MoMA, New York City, 1970), André Malraux's "imaginary museum," and Daniel Buren's artistic investigation of the exhibition concept.

We will look at some of these suggested genealogies in greater detail later in this chapter. For the moment, we can see how diverse the references are, and how the types of references suggest different ways of telling the story of *Les Immatériaux* in institutional, art historical, biographical, or philosophical contexts. There is, then, no singular answer to the question about the specific "place" of *Les Immatériaux*, or any other exhibition, in the history of exhibitions, whether such a "history" is conceived in the form of a linear genealogy or as a network of relations. Instead, any such evaluation is determined by the specific conceptual, historical, and narrative framing employed in a particular analysis.⁴ In a more general methodological sense, the framing is a question of the correlation between a research method and the type of knowledge it can generate. A critical approach to exhibition histories therefore necessitates, first, an elucidation of the specific questions that lead to a certain lineage or network constellation and, second, transparency about the motivations for setting these specific frames of reference.

The present volume as a whole studies *the general history* of a particular exhibition, in continuation of the historiography of *Les Immatériaux* begun by Wunderlich, Gallo, and Hudek. In contrast, this particular chapter discusses *the genealogy* of a particular exhibition, here focusing on other exhibitions to which *Les Immatériaux* has been, or can be, related.⁵ We discuss this topic both in order to consider exhibition-historical genealogies for *Les Immatériaux* and to offer methodological suggestions for the historiography of exhibitions. As such, the chapter can be understood as a contribution to the historiographies

4 For a discussion of the "metahistorical," narratological, and historiographical aspects of writing history, see White (1973).

5 Alternatively, such a genealogical approach could instead investigate a particular exhibition, or a set of exhibitions, with regard to a theme other than the history of exhibitions, like the history of communication media or the history of philosophy.

of exhibitions in general, a nascent field of study which requires a broad and synoptic approach to the development of the exhibition format in general, and of its characteristics and types.⁶

Suggestions for Genealogies of *Les Immatériaux*

The first genealogical references that scholars of *Les Immatériaux* have suggested for the show were put forward in a rather tentative and preliminary fashion, like Antonia Wunderlich's institution-historical reference to the development of the French museum landscape in the 1980s and the position of *Les Immatériaux* between the waning interdisciplinary program of the Centre Pompidou, and the imminent foundation of the science center of La Villette (Wunderlich 2008, 21–29). Because Wunderlich's study focuses on the content and internal structure of *Les Immatériaux*, genealogical references take no prominence in her argument. The same can be said of Francesca Gallo's book, which mainly explores the aspects of contemporary and electronic media art in *Les Immatériaux*, leading her to point to a number of other exhibitions that dealt with the relationship of art and technology—*Cybernetic Serendipity* (1968), *Electra* (1983), and the 42nd Venice Biennial (1986) (Gallo 2008, 157–167). And Bruce Altshuler's terse commentary on *Les Immatériaux* as one of the exhibitions “that made Art History” employs its genealogical references to point backward in time, to Pontus Hultén's series of interdisciplinary exhibitions at the Centre Pompidou about modernism's “capitals” of art—*Paris–New York* (1977), *Paris–Berlin, 1900–1933* (1978), *Paris–Moscou, 1900–1930* (1979), *Paris–Paris* (1981)—and to gesture forward to a period in which artists like Philippe Parreno and Pierre Huyghe will conceive of the exhibition as a work of art in its own right, and exhibitions will be taken as a form of artistic practice or as a discursive form of research and inquiry (Altshuler 2013, 215).

A more deliberately genealogical argument was put forward by Antony Hudek (2019) who suggests a whole series of instances in the history of exhibitions which led toward *Les Immatériaux* and its unique scenography, devised by Philippe Délis. These include the CCI's architectural and sociological exhibitions on the theme of the city (1977–1983); André Malraux's concept of the *Musée imaginaire*; Pontus Hultén's scenographic concept for the first presentation of the MNAM collection in 1977, his exhibitions about the capital cities of modernism (1977–1981), and Hultén's previous exhibitions in Stockholm, Amsterdam, and New York City, as well as the first temporary exhibition of the MNAM at the Centre Pompidou, *Duchamp* (1977), curated by Jean Clair. By offering these exhibition-historical references, Hudek does not so much spell out a substantiated genealogical argument as he seeks to suggest

6 See, for instance, the Afterall Exhibition Histories series (Cologne: Walther König), which constitutes both a set of monographic publications and an evolving argument about how histories of exhibitions can be written.

examples from which the scenographic conceptualization for *Les Immatériaux* may have emerged: for example, the first, nonlinear presentation of the MNAM collection with its multiple paths (Hudek 2019, 62–63), or the temporal proximity of Jean Clair’s *Duchamp* exhibition at the MNAM and Lyotard’s publication of *TRANSformateurs DUchamp* (both in 1977) and certain formulations in his *The Postmodern Condition* (originally published in 1979) (Hudek 2019, 64–65).

The most elaborate genealogical argument about *Les Immatériaux* to date has been developed by Daniel Birnbaum and Sven-Olof Wallenstein in the “Exhibitions” chapter of their book *Spacing Philosophy: Lyotard and the Idea of the Exhibition* (2019, 25–64). Birnbaum and Wallenstein see *Les Immatériaux* as part of a historical lineage of exhibitions which address the core issues of modernity and the relations between art, technology, consumer capitalism, and perception. Birnbaum and Wallenstein argue that this exhibitionary constellation first culminated in the World Exhibitions of the 19th century and its most significant 20th-century episodes include El Lissitzky’s “demonstration spaces,” the non-exhibitions of Conceptual Art, Lippard and Chandler’s curatorial project on “dematerialization in art,” and Daniel Buren’s artistic practice—not least in his critical contribution to *Documenta 5* (1972). The goal of this genealogical presentation is, first, to explain how *Les Immatériaux* was, crucially, a critical engagement with the spatial aspects of the postmodern condition. Secondly, Birnbaum and Wallenstein seek to analyze the conceptual framework in which Lyotard, after *Les Immatériaux*, was thinking about an exhibition whose theme would have been resistance.

We will return to speculations about such a follow-up exhibition later in the chapter. For the moment, suffice to say that while Hudek proposes a lineage that is primarily constituted by exhibitions which took place in the institutional framework of the Centre Pompidou and are associated with Pontus Hultén, Birnbaum and Wallenstein suggest a sequence of precursory exhibitions which strongly engages the question of the commodification of art. It should be noted that Lyotard and Chaput either ignored these precursors or openly rejected such a lineage in their own curatorial discourse, in which they explicitly counterpose *Les Immatériaux* to the World Exhibitions, and distinguish the notion of the “im-materials” from the art-theoretical trope of “dematerialization.” Finally, Lyotard and Chaput organized an exhibition which included Daniel Buren not as an artist but only as a catalogue author. These contradictions don’t necessarily undermine Birnbaum and Wallenstein’s hypotheses, since Buren may have chosen not to participate in *Les Immatériaux* precisely because the show resembled his own artistic strategies to a degree that left no room for his practice, which usually works by affirming an aesthetic difference from its context. Instead, from these contradictions

we can take the encouragement to read *Les Immatériaux* not only *with* but also *against* Lyotard's own theorizations.

A third genealogical hypothesis for *Les Immatériaux* has been put forward by art theoretician John Rajchman, for whom the exhibition marks a critical moment in the history of aesthetics. Rajchman (2009) proposes analyzing *Les Immatériaux* as an exhibition that partly continues and partly interrupts an art history of engaging the contemporary, referring to examples like Alexander Dörner and El Lissitzky's experimental exhibitions of the 1920s, and gesturing toward Alfred H. Barr's modernism and Conceptual Art, to André Malraux and Daniel Buren:

we might then imagine *Les Immatériaux* as an extravagant staging of a peculiar moment ... in the history of aesthetics after so-called "modernism," yet before the "contemporary" configuration of biennials that was already taking shape in the 1990s, within and against which the question of a new "history of exhibition" now itself arises. (Rajchman 2009, n.p.)

Rajchman associated this "contemporary" paradigm with the practice of artists like Pierre Huyghe and Philippe Parreno, and exhibitions like Hou Hanru's *Cities on the Move* (1997), Philippe-Alain Michaud's *Images on the Move* (2006), and—rather more controversially—Jean-Hubert Martin's 1989 exhibition at the Centre Pompidou, *Magiciens de la terre: "Les Immatériaux* marked the beginning of a reflection on the question of how the 'contemporary' itself forms part of interactions across borders irreducible to the grand nineteenth-century division of 'modernity' and 'tradition'" (Rajchman 2009).

Rajchman interlaces the exhibition history argument with a hypothesis on the history of post-Kantian aesthetics:

Perhaps such a history [of an exhibition] is not one thing, governed by a single logic or narrative but, on the contrary, [is] vital precisely because it intersects with many others. This at least is what is suggested in my little contemporary fable of *Les Immatériaux*: how this exhibition can now be seen as a point of intersection for different histories going off in numerous directions. We might therefore consider 1985 not simply as a date in the field of exhibitions, but also in theory and research, and hence for that presentation of "ideas" of, and in, art which for two centuries after Kant came to be known as "aesthetics." (2009, n.p.)

It is noticeable that all three hypothetical genealogies reviewed here—those suggested by Hudek, Birnbaum and Wallenstein, and Rajchman—are based on theoretical considerations. They do not argue on the basis of archival evidence—none of the referenced curators or exhibition projects are mentioned in the various archived documents and statements by Lyotard or

Chaput, prior to the exhibition's opening—but they instead develop theoretical and speculative narratives which claim plausibility through some form of conceptual or aesthetic proximity.

An important methodological question is how the place of an exhibition like *Les Immatériaux* can be mapped in relation to other exhibitions and historical developments. Are such mapping exercises predicated on connoisseurship in the histories of art or philosophy, or should such relations be ascertained through archival evidence, biographical interference, or discourse analysis? On what basis can such claims be made that specific exhibitions influenced or even prefigured *Les Immatériaux*, or that other, later exhibitions were influenced by *Les Immatériaux*? How can we qualify the *relations* in such a constellation? Is it necessary to prove that another exhibition had been seen and critically considered by one of the interlocutors? Which types of causality are taken into consideration—correlation, influence, resonance, correspondence, similarity, or certain degrees of contrast and negation?

Because questions like these cannot be answered conclusively, we also cannot expect to arrive at a definitive genealogical description or constellation; instead, we can only formulate different readings of the historical contexts which led to sometimes different, sometimes similar narratives, encapsulated in the various constellations represented by “Rajchman’s list” or “Birnbaum and Wallenstein’s list,” and so forth.

Other such lists or genealogies are conceivable, and the following examples are mentioned here to expand the horizon of the investigation, even if we cannot follow all of these possible pathways. One of these lists could take its cue from the reflection on the effects of technological change on culture, manifesting in such diverse fields as media, art, science, technology, design, and architecture, an approach which would put *Les Immatériaux* in a constellation with *This Is Tomorrow* (1956), *9 Evenings: Theatre and Engineering* (1966), *Cybernetic Serendipity* (1968), *The Machine at the End of the Mechanical Age* (1968), *Ars Electronica* (since 1979), *Electra* (1983), and *Mémoires du futur* (1987).⁷

7 Scientific advisor Paul Caro saw *Les Immatériaux* in a related historical context: On 24 July 1984, Caro wrote to Lyotard to report on experiments that he had made, presumably for the site *Espace réciproque* (about the visibility of illuminated threads). He ends with an encouraging remark which suggests that, for the time being, Caro sees his active engagement in the project as concluded: “Good luck with your fascinating enterprise, and not too many resignations! There is much to be said for your plan of the ‘fibers’ [i.e., presumably, the *Mât*-paths]. You are really operating at the frontiers of art, science, technology, philosophy, and you may be solving a problem that the New York avant-garde artists faced in the early 1970s (I’m referring to the failed EAT ‘experiment[s] in art and technology’). Best wishes to you and with all my regards. I dare not wish you a good holiday!” See CPA 1994033W669_433. In a table showing a production overview by audiovisual producer Martine Castro, the word “*fibres*” relates to the “*mât*-paths” (1995052W026_002).—The comparison with the work of the E.A.T. network was, apparently, not a perspective that was relevant for Lyotard or Chaput, who involved

Another such proposal might relate *Les Immatériaux* to the nexus of post-conceptual art exhibitions around 1970, including *Anti-Illusion-Procedures-Materials*, *Op Losse Schroeven*, *When Attitudes Become Form* (all three in 1969), *Information, Software, Between Man and Matter—Tokyo Biennale '70* (all three in 1970), and *Documenta 5* (1972). This comparison seems justified not least because of their general conception of the exhibition as site of production, the integration of the preparatory process in the display, and the occasional treatment of the catalogue as an independent, parallel space of the manifestation (Rattemeyer 2010).

Or one could look more specifically at the Surrealist exhibitions of the 1930s and 1940s mentioned in chapter 8 (*Surrealist Exhibition of Objects*, 1936; *International Surrealist Exhibition*, 1938; *First Papers of Surrealism*, 1942), or at the exhibition projects of the UK-based Independent Group of the 1950s (*Growth and Form*, 1951; *Parallel of Life and Art*, 1953; *Man Machine and Motion*, 1955; *This Is Tomorrow*, 1956), with their analytical and deconstructive approach to a cultural moment, the mixing of high and low culture, the use of photographic reproductions, and their particular forms of engaging the public (Lotery 2020; Crippa 2016). It was the goal of the exhibitions of the Independent Group to spark discussions about the contemporary cultural condition, and like *This Is Tomorrow*, but three decades later, *Les Immatériaux* can perhaps be understood as such a time capsule.

What Did Chaput and Lyotard Think an Exhibition Is, in 1983?

All of these genealogies focus on the exhibition's concept and content. A different, yet equally legitimate alternative would be to take a biographical approach and look at the particular experience of exhibitions that key actors like the curators, Jean-François Lyotard and Thierry Chaput, brought with them when they worked on *Les Immatériaux*. A theme that is frequently discussed with regard to *Les Immatériaux* is the question of what an "exhibition" is in the first place. We can therefore ask what Thierry Chaput may have thought was actually his task when he first took the assignment, in 1981, to prepare a "manifestation" about "new materials and creation." And we can ask what Jean-François Lyotard thought was requested of him when he was approached by CCI director Paul Blanquart in May 1983 to collaborate on the project for an exhibition.

Thierry Chaput had worked for the CCI since 1975, and had organized several small-scale exhibitions with diverse themes, including time measurement,

the scientists as advisors only; there were no documented attempts to initiate active cooperations between artists and scientists.

labor conditions, pinball machines, and disabilities (*La mesure du temps*, 1979; *Travail sous conditions*, 1979; *Billes en tête. L'imagerie du flipper*, 1981; *différences/indifférences? Handicaps et vie quotidienne*, 1981). He had the experience of attending the large exhibitions organized by his senior colleagues, the curators of the CCI, on design and architecture, including the highly elaborate show on cartography, *Cartes et figures de la terre* (1980), a collaboration with the MNAM. And while still a student, Chaput may also have seen the earlier exhibition *Matériau technologie forme*, which was shown at the CCI's pre-Beaubourg location, the Musée des arts décoratifs, in 1974. This exhibition had already posed the questions of materiality, technology, and aesthetics, which were then also addressed in Raymond Guidot's first concept for an exhibition about "new materials and creation," drafted in 1981. Moreover, Chaput would also have seen Pontus Hultén's exhibitions about the capitals of modernism, which would have helped Chaput to understand the ambitions and expectations of scale that came with the project of an interdepartmental exhibition for the Centre Pompidou's fifth floor.

Yet, before 1983, Chaput was barely familiar with artistic experimentations with new technologies, an aspect that would become important for *Les Immatériaux*. He first personally encountered the fledgling international media art scene of the 1980s at the *Computer/Culture* festival in Chartreuse de Villeneuve-lez-Avignon, in July 1983 (Jean-Louis Boissier, pers. comm., 20 November 2014). Through his contact with the artist, curator, and teacher Jean-Louis Boissier, Chaput had been aware since 1982 of the preparations for the exhibition *Electra*, whose opening at the Musée d'Art Moderne de la Ville de Paris in December 1983 Chaput visited with his team of project managers.⁸ Many of the artists who would contribute to *Les Immatériaux* had previously contributed to *Electra*, but this exhibition's art-historical approach to the impact of electricity on 20th-century art made it a countermodel—both to the exhibition that Chaput conceived prior to June 1983, and to the one he then went on to curate together with Lyotard.

Jean-François Lyotard himself had no prior experience in curating exhibitions, but he was highly familiar with both historical and contemporary art, as well as with contemporary experimental film and music. His contributions to art theoretical and art critical discourses had been published in exhibition catalogues and in international art magazines like *October* and *Artforum*. He wrote extensively about the artistic practices of key 20th-century artists such as Daniel Buren and Marcel Duchamp, and he was friends with contemporary artists including Jacques Monory and Ruth Francken.⁹

8 Chiefly curated by Frank Popper; see *Electra* catalogue (Popper 1983). For a retrospective comparison of both shows, see Popper (1988).

9 For Lyotard's engagement with the arts, see the six volumes of Lyotard (2009–2013); Coblenz and Enaudeau (2014); Jones and Woodward (2017).

In 1972, Lyotard went to see *Documenta 5* in Kassel. This edition of the exhibition series of contemporary art was curated by Harald Szeemann together with a number of collaborators and advisors, including Bazon Brock and Jean-Christophe Ammann. It marked a decisive break from the earlier, more conservative presentations of international contemporary art, and moved toward a radically conceptual approach, presenting a diverse set of exhibits which included examples from popular and visual culture, advertising, covers of the German weekly *SPIEGEL* magazine, and religious devotional images, all shown in a variety of unusual formats which manifested the exhibition not as a space of display, but as a site of social interaction (Nachtigäller et al. 2001). In the book *Pacific Wall* (1979), Lyotard gives a detailed account of an environment which he had seen at *Documenta 5*, by the US-American artist Edward Kienholz about racialized violence, taking the artist's depiction as an example of what could be experienced in real life in the US. Lyotard further highlights the importance of this encounter when he begins another chapter, entitled "The Labyrinth at the Center," with the remark: "We chatted about Kassel on the shores of southern California" (1990b, 26).¹⁰

The visit to Kassel, at the eastern limit of the Western world during the years of the Cold War, appears to have had an exceptional significance for Lyotard, who in his works refers to specific exhibitions only very rarely. He made an exception, however, when in 1984 he asked the new director of the CCI, François Burkhardt, about his involvement in *Documenta 5*. Moreover, the catalogue of *Les Immatériaux* has features that echo the *Documenta 5* catalogue, including the use of a loose-leaf system and the presentation of archival materials collected during the preparation of the exhibition.¹¹

And then there was Daniel Buren's critique of *Documenta 5*. Buren claimed that in *Documenta 5* the position of the curator took prominence over the position of the participating artists, and that the exhibited artworks were being instrumentalized to illustrate the curatorial concept. This critique would later also be extended to *Les Immatériaux*, and it was through Buren's practice, which Lyotard had known about since the early 1970s, that Lyotard could affirm the claim. I'll return to this aspect later in the chapter.¹²

10 On Kienholz's environment *Five Car Stud* (1971), see the chapter in Lyotard (1990b), "The Kienholz Story," 11–17.

11 For the conversation, see Burkhardt (1984). The exhibition catalogues for Szeemann's *When Attitudes Become Form* (Basel, 1969) and *Der Hang zum Gesamtkunstwerk* (Zurich, 1983) also contained facsimiles of preparatory materials, like the *Album of Les Immatériaux*. Lyotard contributed a text to the catalogue of Szeemann's exhibition *Junggesellenmaschinen* (Lyotard 1975). He hints at the theme of this exhibition in the *Inventaire* in the introduction to the section "maternité" ("fantasme d'une semence célibataire," etc., n.p.).

12 For the relationship between Buren and Lyotard, see Py (2000), and Parret (2012), esp. 48–49. In the interview with Blistène (2024, 32), Lyotard refers to the Palais Royal for whose courtyard Buren was at that moment preparing his columns project, *Les*

Lyotard was thus not only aware of the theoretical debate on the postmodern crisis of the exhibition format which Buren addressed in his work, but he had in fact critically contributed to this debate. The same can be said for Lyotard's reception of Marcel Duchamp's work, whose rediscovery in France since the 1960s had culminated in a retrospective exhibition, curated by Jean Clair on the occasion of the opening of the Centre Pompidou in 1977. Lyotard's own critical engagement with Duchamp took place in the same years. He worked on his book, *Les TRANSformateurs DUchamp* (1977), from 1974 onward, and one of the chapters became part of the catalogue to Jean Clair's exhibition. Lyotard's chapter, "Machinations," written in 1974, testifies to the fact that he carefully read the notes for the *Large Glass*, which he analyzed in great detail, and some of which would be presented in *Les Immatériaux*, in the site "Infra-mince."¹³ In 1975, Lyotard wrote a review of Jean Clair's book-length analysis of the *Large Glass*, entitled *Marcel Duchamp ou le grand fictif* (1975). Lyotard makes no explicit mention of Duchamp's artistic and curatorial contributions to the *Surrealist Exhibition of Objects* (Charles Ratton Gallery, Paris, 1936), the *International Surrealist Exhibition* (Paris, 1938), or his string installation for the *First Papers of Surrealism* (New York City, 1942) (see chapter 8 and Altshuler 2008, 279–308). But like Buren's artistic practice, these exhibitions could have been an encouragement for Lyotard to take a radical approach to the exhibition scenography and to the selection of disparate exhibits.

This genealogical constellation—formed by *Documenta 5* and the *International Surrealist Exhibition*, by the "machines" of Marcel Duchamp, the interventions of Daniel Buren, and the paintings of Jacques Monory—marks a field of references that were Lyotard's starting point when he ventured into the exhibition project that would become *Les Immatériaux*. When he wrote a first conceptual sketch, the *Esquisse*, for the project in August 1983, the form imagined for the exhibition is still vague. Lyotard indicates that the selection of exhibits shall be heterogenous, and that the cohesion of the show will hinge on the formulation of a clear, "principal" conceptual question that the exhibition as a whole should address. Half a year later, in the discourse prepared for the team and published only posthumously, "After Six Months of Work" (2015), Lyotard develops basic scenographic ideas which ground the conceptual development of the shape that the exhibition will take (see the analyses in Wunderlich 2008 and Hudek 2015). In this exceptional text, Lyotard discusses the scenario and scenes on which his own thinking about the exhibition-in-the-making is based: Denis Diderot's review of the *Salon* of 1767, a critique of the museum galleries of the 19th century and the type of reception they invite, contrasted with a postmodern understanding of

Deux Plateaux (1986). Buren included his contributions to the *Épreuves d'écriture* in his collected writings, Buren (1991, 81–85).

13 See the chapter "Machinations" in Lyotard (1990a, 63–115). On the constellation between Lyotard and Duchamp, see Parret (2010); Toussaint (2014); and Hudek (2019, 64–65).

space-time, encapsulated in the notion of an “electronic-nuclear paradigm” suggested by sociologist Gairo Daghini, and urban theorist Paul Virilio’s notion of the “over-exposed city.”

Lyotard not only developed a particular understanding of the epistemological status and efficacy of the exhibits (see chapter 8), but his approach to exhibition-making was also crucially informed by his position as a philosopher who crossed institutional and disciplinary boundaries. In an interview conducted before the opening of the exhibition, he relates how when finishing his previous book, *Le Différend* (1983), he had thought a lot about the adequacy of the medium of the book and the possibility of philosophizing by the means of the exhibition:

If we want to give the exhibition the same strict finality as a philosophy book, it’s obviously out of the question, because of, let’s say, the privilege of language when it comes to argumentation. But if we shift the target, if we don’t seek to make something understood, or even to argue it, and especially not to explain it, but rather to make it be felt, then the exhibition is no longer taken in a pedagogical, didactic way. Above all, it has no encyclopedic purpose, and is not even the famous *Bildungsroman* that it has been in modern times. (Lyotard 2024, 72)

The dual foundation of this critical approach to the format of the exhibition lay in Lyotard’s philosophical critique of modernity on the one hand, and in the pioneering work of contemporary artists on the other. In the modernist framework, Lyotard claims in the days after the opening of *Les Immatériaux*, “the exhibition has always had the character of a formative journey, an odyssey. In the 1960s, this model was hotly debated, as artists joined the avant-garde movement and questioned the very space of the exhibition. Our hypothesis is that the general public is already aware of these problems of dematerialization and civilizational change” (Lyotard 2024, 123).

We can see that the genealogical constellation from which Lyotard departed when he started working on *Les Immatériaux* had both biographical and philosophical anchors, including *Documenta 5*, Szeemann’s 1975 project *Junggesellenmaschinen*, Duchamp’s exhibitions, and Daniel Buren’s exposures. It differs from the constellations proposed by Hudek, Birnbaum and Wallenstein, or Rajchman, in that it deliberately takes Lyotard’s subjective perspective, rather than looking at the development of the exhibition format in general, in which *Les Immatériaux* and Lyotard’s curatorial agency would be only an example, maybe a symptom, for a shift in exhibition paradigms or in the history of aesthetics. The decision for one or the other analytical approach need not be exclusive, but either of them necessitates a critical awareness of the ways certain readings or results are predetermined by the chosen methodology.

Lyotard's Thinking about Exhibitions after *Les Immatériaux*

The question of chronology in such constellations is pinpointed by the case of Lyotard's reflections on the writer and politician André Malraux. Malraux had been a prominent figure in French cultural life since the 1930s, and was a member of several of the de Gaulle governments from 1946 to 1969. Among his most influential ideas was the notion of an "imaginary museum," a "museum without walls," made possible by the technical medium of photography that fundamentally changed the way artifacts contributed to the understanding and construction of cultural history.

In his later life, Lyotard took a keen interest in Malraux, publishing several essays and a biography of Malraux during the 1990s (Lyotard 1996 and 1998; Fontenay 2014). It is, of course, possible to speculate about the resonance that Malraux's thinking—which was no doubt "in the air" throughout Lyotard's adult life—may have had on the making of *Les Immatériaux* (e.g., Hudek 2019, 66–69). Yet, Lyotard's active engagement with Malraux began only after 1985, and was itself informed by the experience of having worked on an exhibition. In Lyotard's essay "A Monument of Possibles," for instance, held as a lecture in 1993, he discusses Malraux in the context of the relationship between the museum, the archive, and the exhibition (1997, 143–157). His contemporary references are Marcel Duchamp and Daniel Buren, drawing upon Buren's critique of the curator, formulated about *Documenta 5*. Writing about the presentation, or the *exposition*, of museum objects, Lyotard remarks:

Here, the conservator, the archivist and/or the curator work like artists. And the richer the material, the more they have to invent forms of presentation—just as the contemporary composer, confronted with the infinite series of sounds the synthesizer can provide, is free to organize them into "arbitrarily" chosen structures. Daniel Buren was not wrong to see the curator of an art exhibition as the only artist truly on display. Perhaps he wasn't right to be indignant about it. It's hard to see how this aestheticization of presentation might be avoided when the available material begins to proliferate like an expanding world. (Lyotard 1993, 145)

Lyotard is clearly speaking from his own curatorial experience, during which he had been confronted with an immense amount of material and forced to make a selection and then integrate it into an aesthetic, scenographic structure.

What Lyotard found in Malraux's reflections in his book *The Voices of Silence* (1947) affirmed his own experience of the curatorial practice as a form of anamnesis of matter:

It's been said that works of art are imprisoned in museums. On the contrary, they are incarcerated in reality, as objects of worship or culture, and the museum, by removing them from the contingency of their occurrence, can write and deliver what is in them of writing and of crying. ... The museum does not arbitrarily transform the remnants of events into traces, if it is true that its selection is guided by listening to the cry that these remnants were stifling. The curator and exhibition manager listen to the voices of silence as the analyst listens to those of the unconscious. (Lyotard 1993, 152)

Lyotard's reading of Malraux appears predicated on the experience of the *Immatériaux* project—perhaps a typical case of what in Freudian theory is called *Nachträglichkeit*, the subsequent constitution of meaning of a memory previously buried in the unconscious. In an analogous case, during a lecture held in June 1986, Lyotard called the Philips Pavilion at *Expo '58* in Brussels (1958), realized by composer Edgar Varèse and architect Le Corbusier, the “first exhibition of immaterials” (*première exposition d'immatériaux*) (1991, 173). We cannot deduce from such a reference that the earlier instance (the Philips Pavilion) impacted on the later (*Les Immatériaux*), but rather, it seems that the later experience subsequently changed the memory and understanding of an earlier event. Our analysis of Lyotard's work on Malraux thus views it as crucially informed by Lyotard's engagement with the museum, the exhibition, and objects for presentation in the years 1983 to 1985.

Another recorded instance of the influence of *Les Immatériaux* on Lyotard's thinking is associated with his ideas for another exhibition, at which he hinted on at least two separate occasions in 1989 and 1990. The first of these was a comment made in a lecture at the independent art school IHEAP (Institut des Hautes Études en Arts Plastiques) in Paris in 1989. The French artist Philippe Parreno remembers that during this lecture, Lyotard mentioned he was considering a “second exhibition” to follow *Les Immatériaux*, which would have been entitled *Résistance*. As Parreno recounts in an interview with curator Daniel Birnbaum in 2007:

When he visited the Institut des Hautes Études en Arts plastiques, he [Lyotard] explained his ideas for another exhibition that he would call ‘Resistance.’ Not resistance in the political sense of being against something in society, but in the sense that resistance in an electrical circuit can produce heat. When you develop an equation in physics you disregard certain empirical factors, as if everything took place in an ideal sphere without friction. What Lyotard said was: let's go back to the frictional points! The places where the general theories run into the real world and produce difficulties—that is what he wanted to address, and he

talked about it like someone who had prepared properly. There must be written notes about this planned exhibition. (2014, 57)¹⁴

What Lyotard actually said in June 1989 about these ideas for another exhibition is unknown, but it seems unlikely that Parreno would have come up with the example of the role of friction in physics if Lyotard hadn't first made a comment about this particular understanding of the notion of resistance. Instead, we can assume that Lyotard did speak on this occasion about the experience and the significance of *Les Immatériaux*—which some of the IHEAP students had visited—and about possible flaws he saw in it. One of the recurrent tropes of critique since 1985 was that the exhibition appeared to affirm rather than critique the technosciences. Even though such an impression was counter to Lyotard's intention, it was a dominant trend in the way many people perceived the presentation of new technologies in *Les Immatériaux*. Parreno's remark suggests that if in fact there had been an opportunity for Lyotard to work on another exhibition, he would have tried to alleviate this flaw of an ostensible affirmation, by emphasizing more explicitly the moments of friction and resistance.

A second instance where Lyotard mentions considering another exhibition is in the handwritten eulogy he penned for Thierry Chaput's funeral in 1990. It confirms that Lyotard had in fact considered the theme of *résistance* for an exhibition which, as he says in the eulogy, he wouldn't have wanted to work on without Chaput, but which regrettably they had no chance to discuss. Recalling a visit to the opening exhibition of the Deichtorhallen in Hamburg in 1989, Lyotard wrote:

In Hamburg, last December, the people in charge of the large halls recently converted into an event space, where I'd just been to see an

14 See also Parreno's rather more elliptical formulation in Obrist (2008, 17): "Lyotard wanted to do another exhibition, *Résistance*. 'Resistance' isn't a good title. You immediately think about a series of moral issues. But when I met him, I understood that he meant in fact resistance in another way. In school when you study physics you are told [about] frictional forces ...—the forces of two surfaces in contact let certain axioms become uncertain. I think that's what *Résistance* was supposed to be about" (also quoted in Obrist 2014, 161). See also Parreno's comments on his impressions of *Les Immatériaux*, Obrist (2008, 16–17). It is not known yet whether there is a recording of Lyotard's lecture, presumably held on 14 June 1989 at the Palais de Tokyo, in the Fonds IHEAP held by the Bibliothèque Kandinsky, Centre Pompidou. Parreno's conversations with Obrist took place in 2000–2002. Parreno's remarks are taken up by Birnbaum and Wallenstein (2019) and Hui (2019). Arguably, elements of such a resistance to technoscientific regimes were already present in *Les Immatériaux*, both in some of the exhibits and more generally in the scenographic strategies that Lyotard and the curatorial team developed. See Birnbaum and Wallenstein (2019, 19) for their conjectures about what Lyotard may have considered for an exhibition with the theme of "resistance" (it "would have dealt with the underside of communication, noise, distortion, and the dimension of experience that resists both consciousness and language" [202], and noise, scrambling of transmission, friction [234–236]).

exhibition, said to me: we need a strong project, like *Les Immatériaux*. Do you have an idea? I laughed, and told them: yes, yes, I have an idea, I don't know how strong it is, but I won't tell you, and anyway, I'm too old, I know what this work is like. And I thought to myself: if it were to be done, in any case, it would be with Thierry. He'd like the space and my idea too. The idea for the exhibition was called: resistance.

I'd have passed him the word, we'd have talked for hours, freely associated, and he'd have conjured up a whole host of sites from the poor word. We wouldn't have started again. He was a man of beginnings.¹⁵

It is not surprising to find Lyotard, in 1989, considering "resistance" as a theme or motto for an exhibition, given that there are many related remarks in his writings of the mid-1980s, especially in *The Postmodern Explained* (1986/1992) and *The Inhuman* (1988/1991). Throughout the essays and lecture manuscripts collected in these volumes, the notion of resistance has a positive connotation. It is summoned—to give a short, non-exhaustive list—against the failure of modernity, against totalitarianism, against pragmatism and dogmatism, against communicational trivialization, against the inhumanity of capitalism, and against synthesis, simplification, and so-called safe values. Lyotard recurrently posits the human body as a "line of resistance," but even more frequently he speaks about the resistance constituted by writing, understood in the broad sense of *écriture*, which includes different forms of artistic expression. In a text about George Orwell's novel *1984*, entitled "A Line of Resistance" and first presented as a lecture in October 1984, Lyotard highlights the fact that the hero, Winston, takes up writing a diary (Lyotard 1992, 87–98). This self-exploratory writing practice in the face of totalitarian control comes to epitomize Lyotard's understanding of resistance.¹⁶

The term also occasionally features in Lyotard's texts for the *Inventaire* exhibition catalogue, for instance in the introduction to the site *Théâtre du non-corps*: "This extensive site suggests the resistance of the body (I, here, now) to the dematerialization of its contexts in a mediated life."

This focus on the body is extended to other materials in Lyotard's introduction to the *Matériau* (Raw material) path: "Raw material [*matériau*]: that in which a message is inscribed; its carrier. It puts up resistance. One must know how to

15 Lyotard, "Hommage à Thierry Chaput," unpublished handwritten document (dated May 1990), private archive. Thierry Chaput had passed away on 28 April 1990. Crossed out after the word "*résistance*" are the words "*en singulier*" [in the singular]. The former market halls of the Deichtorhallen in Hamburg first opened as an exhibition center with an exhibition curated by Harald Szeemann, entitled *Einleuchten*, on 9 November 1989. In 1989–1990, the first director was Erik Berganus, followed by Zdenek Felix in 1991. According to his calendar, Lyotard was in Hamburg from 15–17 December 1989. To be able to imagine such an exhibition, we would need to consider not only Lyotard's notion of resistance, but also what Chaput would have made of it in their dialogue.

16 On Lyotard's notion of resistance, see also Moss (2019, 81–107), and Rajchman (2020).



[Figure 60] Thierry Chaput, standing behind Jean-François Lyotard during the exhibition opening, 26 March 1985, in the site *Toutes les copies* (All kinds of copies). Installation by Liliane Terrier. Photograph by Jean-Louis Boissier. Collection J.-L. Boissier.

take it, how to overcome it. Such was the task that was set: to make a table out of a tree.”

If we were to speculate about what ideas Lyotard may have considered when thinking about an exhibition on “resistance,” we could presume that, in the conversation with Chaput that never happened, about an exhibition that never happened, thoughts like these would have been the first points of departure (fig. 60).

Exhibitions in the Wake of *Les Immatériaux*

Les Immatériaux left its traces not only in Lyotard’s own thinking about exhibitions but also in the histories of exhibitions viewed more broadly. The first of these were some exhibitions that took place at the Centre Pompidou. The architecture curator of the CCI, Alain Guiheux, drew upon the conclusions from his own critique of the scenography of *Les Immatériaux*, when he developed the radical open-plan design of his exhibition about workplaces, *Lieux? de travail*, in 1986 (see chapter 6). In a less formal and more thematic way, the exhibition project of Bernard Stiegler and Catherine Counton for the Bibliothèque publique d’information (BPI), *Mémoires du futur* (1987–1988), took up the themes of writing, authorship, and memory. Counton had already addressed these themes in her work for *Les Immatériaux* when she co-curated the projects for the *Labyrinthe du langage*, and Stiegler no doubt had discussed

them with Lyotard, who during those years acted as one of his mentors at the Centre International de Philosophie. And *Les Immatériaux* also left its traces in the program of the Musée National d'Art Moderne, as when it presented the exhibition *Passages de l'image* in 1990, a show that reflected on the role of technical media in contemporary art and showed works using photography, film, video, and digital images.¹⁷ Other immediate follow-up projects that connected *Les Immatériaux* with the emerging digital and interactive art scene were the exhibition *Image calculée*, organized in 1988 by Jean-Louis Boissier, Thierry Chaput, and Philippe Délis at La Villette, Cité des Sciences et de l'Industrie, and the series of cabinet exhibitions, *Revue virtuelle*, organized by Boissier together with Martine Moinot and Christine van Assche for the MNAM/CCI on the ground floor of the Centre Pompidou, from 1992 through 1996.

Les Immatériaux was also explicitly used as a point of reference elsewhere. When the directors of the Merve publishing house in Berlin, Peter Gente and Heidi Paris, were invited by Peter Weibel and Gottfried Hattinger to organize a symposium about new technologies for the Ars Electronica festival in Linz, Austria, in 1988, they took *Les Immatériaux* and the questions it had raised as crucial references for contemporary philosophical reflections on new technologies. Featuring thinkers like Jean Baudrillard, Friedrich Kittler, and Vilém Flusser, this symposium prefigured important media-theoretical debates of the 1990s.¹⁸

But the technoscientific strand of *Les Immatériaux* was not the only aspect that left its mark; its theoretical strand did as well. The exhibition *Wunderblock. Eine Geschichte der modernen Seele*, presented in Vienna in 1989, dealt with the pre-history of Freud's psychoanalytic theories. Cathrin Pichler, who curated the show together with Jean Clair and Wolfgang Pircher, wrote in the introduction, penned in the name of the curatorial committee:

This exhibition formulates the question of the genesis of modern consciousness, finding itself in the tradition of Harald Szeemann's *Junggesellenmaschinen* (1975) and Jean-François Lyotard's *Les Immatériaux*—two exhibitions that dared to examine the self-understanding of modernity and attempted to show its genesis from the inter-relationship between the natural sciences and the artistic imagination of the 19th century. (Pichler 1989, 10)

17 *Passages de l'image* (1990) was curated by Raymond Bellour, Catherine David, and Christine Van Assche. For reflections on the artistic status of digital works in this exhibition, see Boissier (2015, 105–106).

18 Ars Electronica 1988, symposium, *Philosophien der neuen Technologie* (September 1988); the other participants were Hannes Böhringer, Heinz von Foerster, and Peter Weibel; the contributions were published by Merve in 1989 in a seminal volume of the same title.

Jean Clair concluded his own introductory text in the *Wunderblock* catalogue with thoughts about the impact of media technologies on the modern soul, and what postmodern society makes of it:

The postmodern society: a gigantic prosthesis, spread all over the globe, that guarantees to every individual (at least in the Western world) the conquest of ubiquity: to be ceaselessly elsewhere, to be different and in another time—ubiquity that, in exchange, deprives him of the pleasure of the 'here and now' that had made us aware of the presence of the work of art and had suggested to us the idea that we possess a soul. (Clair 1989, 24)¹⁹

These words strongly resonate with Lyotard's remarks about the donation of the soul represented in the Egyptian relief in the entrance chamber of the exhibition, as well as with his reflections on the technosciences, repeatedly formulated during and after the work on *Les Immatériaux*. In Clair's words we can sense an echo of the critical reading of the postmodern condition offered in *Les Immatériaux*; by the same token, *Wunderblock* provided a subsequent pre-history not only of the modern soul, but also of the postmodern scenario of *Les Immatériaux*.

Another practice upon which *Les Immatériaux* had an only slightly more protracted impact was the early work of Belgian curator Barbara Vanderlinden, especially in the experimental projects *Laboratorium* (Antwerp, 1999) and *Indiscipline* (Brussels, 2000). Vanderlinden relates how her visit to *Les Immatériaux* as a young student was a hugely important experience and remained a reference point throughout her career.²⁰ She first became aware of the show in conversation with her peers in Brussels, where it was talked about in art circles as early as the preparation phase in 1984, and then hotly debated after it had opened, especially for its emphasis on the controversial notion of the postmodern. What Vanderlinden felt at the time, and understood later, was the curators' attempt to make something that was not a usual exhibition, but something that would cause irritation and disquiet among its audience. She saw a direct connection between this project of destabilization and its exploration of telecommunications networks with what Nicolas Bourriaud described, a decade later, as *Relational Aesthetics* (1997). From here, says Vanderlinden, emerged the idea for *Laboratorium*, which was eventually realized in cooperation with Hans Ulrich Obrist in Antwerp in 1999. *Laboratorium* sought not to show art in its discursive context, but to highlight the places where art is made, whether a studio, workshop, or laboratory. It approached the exhibition as a network through which information flows, a

19 The title of Clair's essay, "Beilieb im Kopf," refers to a remark by Denis Diderot, "Les grands artistes ont un petit coup de hache à la tête" (Great artists have had a little axe blow to the head), made in his review of the *Salon de 1765*.

20 Vanderlinden, workshop presentation, ZKM, Karlsruhe, Germany, 23 February 2023.

network which at the time could be observed and engaged with either at its nodes spread around the city of Antwerp, or at the main hub or information center, “The Book Machine,” where information from all over the world was coming in, printed, and dispatched on a large wall.

Among the scientific advisors of the *Laboratorium* project were Peter Galison and Bruno Latour. Latour organized the “Theatre of Proof,” a series of lectures by historians, artists, performers, and scientists—among whom was Isabelle Stengers. Continuing in this direction of conceiving the exhibition not as a site of display and contemplation, but as a site of research and discourse, Bruno Latour and Peter Weibel organized several exhibition projects at the ZKM, Centre for Art and Media Technologies in Karlsruhe (*Iconoclash*, 2002; *Making Things Public*, 2005; *Reset Modernity*, 2016; *Critical Zones*, 2020). Latour had participated in *Les Immatériaux* as one of the authors of the collaborative writing experiment for the catalogue, *Épreuves d'écriture*. Weibel, in turn, took a keen interest in *Les Immatériaux* even before the show opened, and later wrote a favorable review (1985).²¹

From around 2004 onward, Weibel and Latour started to employ the notion of *Gedankenausstellung*, which translates as “exhibition of ideas, or thoughts,” to describe their own projects, located at the intersection of art, science, theory, and politics.²² The *Gedankenausstellung* is conceived in the same way a scientific and philosophical argument would be; it seeks to point out a particular problem in the mode of instruction and discussion, and it makes suggestions for how to act on this problem. The term *Gedankenausstellung* is usually only associated with the four projects by Latour and Weibel, and it conflates these curator-theoreticians’ thinking on the role of exhibitions and public presentations of science with the intentions of their specific exhibition projects.²³

Peter Weibel claimed on several occasions that he regarded *Les Immatériaux* as a precursor to this series, as a *Gedankenausstellung* “avant la lettre.” This interpretation of *Les Immatériaux* ran counter to Lyotard and Chaput’s understanding of the exhibition, and it could be argued that Weibel deliberately ignored the speculative and indecisive aspects of *Les Immatériaux* in favor of

21 See also Weibel’s letter to Lyotard and Chaput, dated 26 February 1985, CPA 1994033W669.

22 See Latour (2005, 53). In one of the earliest publications of this notion, Latour ascribes its origin to Weibel (Latour 2004a, 127–129). The notion of *Gedankenausstellung* can also usefully be discussed in relation to the critical debate on the “evidence of the expository” in Krüger et al. (2019), esp. the texts by Werner, Draxler, and Schwarte.

23 A comparison could be made to the conceptual approach of the curators of *Documenta 5*, which led to the classification of that exhibition as a “thematic and concept exhibition”; see Nachtigäller et al. (2001, 245–246). Other candidates for precursors to the *Gedankenausstellung* might be *Growth and Form* (1951), *Man Machine and Motion* (1955), *Jungesellenmaschinen* (1975), or *Wunderblock* (1989).

the occasional moments where the presentation of technoscientific items and phenomena could also be read in a more affirmative manner. However, expressly contrasting *Les Immatériaux* to the notion of the *Gedankenausstellung* appears more fruitful when attempting to understand its conceptual and scenographic particularities.

The application of the notion of the *Gedankenausstellung* to *Les Immatériaux* can be disputed on several counts. First, the *Gedankenausstellung* suggests an analogy to the *Gedankenexperiment*, that is, a “thought experiment” which does not have to be performed in reality, but that is only thought through in the mind. In that sense it is unclear whether the term even makes sense for the projects at the ZKM—or any other exhibition in physical spaces—given any exhibition’s experiential character, the physically present exhibits, and the attention paid to an effective scenography. In that sense, and due to the broader connotation of the term “discourse,” Weibel’s French translation of the term *Gedankenausstellung* as “*exposition discursive*” (discursive exhibition) appears perhaps more appropriate. Second, the notion of “thought” applied by Weibel and Latour differs from Lyotard’s understanding, as Lyotard conceives of thinking (and philosophy in general) not as a scientific methodology, but as a form of questioning which relies on a different epistemology, metaphysics, and phenomenology. Thus, on the discursive level, it may well be that Weibel and Latour speak about significantly different things from Lyotard when they speak about the constellations of thought, philosophy, and exhibition.

It could be argued that what Lyotard, in the *Esquisse*, his first exposé of 1983, conceives as a “philosophical” exhibition, underpinned by the *Mât* schema, is not dissimilar to what Weibel and Latour call a *Gedankenausstellung*: an exhibition guided by thoughts and concepts. However, in the course of the preparations, Lyotard will increasingly depart from this idea, concluding in the *Petit Journal* guide that rather than affirming the communication model, the exhibition in fact “interrogates” it (2). Even though the modernist *Mât* schema is still used as an organizational principle for the conceptual paths through the exhibition, its logic is overruled by other layers of meaning and by scenographic decisions which obscure this rational schema, including the soundtrack and audio zones, the labyrinthine structure, and spatial discontinuity of the *Mât* paths.

It therefore makes sense to conceive of *Les Immatériaux* not as a *Gedankenausstellung*, an exhibition of thoughts or ideas, but as “an exhibition of questions and not of definitions,” one that is “neither explicative nor complete,” as Lyotard and Chaput put it on one occasion (qtd. in Hernandez 2012, para. 10). While the projects by Latour and Weibel propose hypotheses and seek to convince their audience, Lyotard affirms: “We wanted to awaken a sensibility, not to indoctrinate people. The exhibition is postmodern dramaturgy: no

hero, no narrative" (*Album* 1985, 5). And Chaput adds: "When the true becomes uncertain, when existence loses its Manichean nature to become nothing more than a density of probable presence, then 'grasping' it becomes an uncertain task. Extracted from the hegemony of understanding (a futile vanity?) *Les Immatériaux*, then, call forth a secret sensibility" (*Album* 1985, 6).²⁴

This aspect was also remembered by the artist Philippe Parreno who commented, more than 15 years after seeing the show: "*Les Immatériaux* was an exhibition producing ideas through a display of objects in a space. It was very different from writing a book or developing a philosophical concept. And that's precisely what I loved in that exhibition, that it wasn't a conceptual exhibition" (qtd. in Obrist 2008, 17).

There is an ongoing debate about whether exhibitions can be understood as laboratories, as sites of research, and perhaps also as "tools" of experimentation and research.²⁵ These discussions hinge on an open definition of the laboratory, understood more broadly as a space of encounter and possibilities, and not mainly as an environment in which circumstantial conditions and procedural rules can be set or controlled. As science theorist Hans-Jörg Rheinberger (2001) has argued, the laboratory-based generation of knowledge often takes place where things happen outside of that control.

Considering the inherent unpredictability of the exhibition as a site of production and experience, Latour's understanding of the ZKM projects seems to be closer to a demonstration of methods of research and political agency. In contrast, *Les Immatériaux* did not seek to explicate or generate specific knowledge, to present evidence or convey information, but rather to create an atmosphere, a sentiment that was perhaps best experienced in a state of slumber. The purpose of this opaque showing, of this public *monstration*, was a manifestation of the postmodern here and now.

Latour remained emphatically critical of what he construed as Lyotard's hypothesis of an inadvertent immaterialization. He was against the postmodern relativism he saw in the exhibition, against the prevalence of "simulation," and against its lack of political concern.²⁶ In his own analysis, Latour claims that the modernist "matters of fact" are called into question by the contemporary "matters of concern." Latour's hypothesis of an emerging doubt

24 For a discussion of the "evidence" constituted by exhibitions, see the essays in Krüger et al. (2019), where Elke A. Werner argues for an understanding of exhibition-related evidence that is not based on logocentrism and scientific rationalism but on nonrational and implicit forms of knowledge conveyed by curatorial "intuition" and nonverbal, visual sense-making (Krüger et al. 2019, 18–20).

25 For this last claim, see Bismarck (2022); see also te Heesen (2012, 125–131).

26 It seems that Latour did not put his criticism of *Les Immatériaux* into writing; he summarized it in an interview with Hans Ulrich Obrist in 2016 (Latour 2016, ca. min. 4:00–9:00).

about modern facts is similar to Lyotard's critique of the modern conception of science. But the consequences they draw from this analysis differ significantly. Whereas Lyotard claims that it is necessary to stay—if cheerfully—with the doubt and the mourning, Latour calls for a political activism that intervenes: "The crucial point for me now is that what allowed historians, philosophers, humanists, and critics to trace the difference between modern and pre-modern, namely, the sudden and somewhat miraculous appearance of matters of fact, is now thrown into doubt with the merging of matters of fact into highly complex, historically situated, richly diverse matters of concern (2004b, 236–237)." At the same time, however, Latour seems to acknowledge that the current situation is not so dissimilar from the scenario proposed by *Les Immatériaux*. He writes that "matter itself is up for grabs ... To be materialist now implies that one enters a labyrinth more intricate than that built by Daedalus" (2005, 24).

Les Immatériaux is unique for the way in which it forms part of not only one specific genealogical constellation, but of a multiplicity of discourses, traditions, and perspectives which it combined, reflected, and catalyzed. *Les Immatériaux* operated as a sort of time capsule which drew on contemporary and historical visual art, science, popular culture, fashion, architecture, etc., its exhibits covering a broad range of materials that placed visitors at a momentary conjunction of art, science, technology, media, and popular culture. What appeared to some reviewers and visitors at the time as a weird mix and an inconclusive statement can now, with hindsight, be recognized as a complex and timely form of posing questions about the contemporary condition against a broad, historical, and transdisciplinary horizon.

Dreamscape

“If you haven’t seen the exhibition, it’s hard for me to describe it. If I tell you how it was, it will sound like a dream.” This is what artist Philippe Parreno said about his memories of visiting *Les Immatériaux* and the possibility of speaking about it, 20 years later (qtd. in Obrist 2014, 160). It would sound like a dream, and the account would perhaps in fact be a dream narrative, with the typical ellipses and hesitant poetic approximations which show that one is not at all sure whether the narrative matches the original experience.

A decade after the exhibition, the US-American performance scholar Elinor Fuchs wrote that “the largest space at the exhibit was devoted to a *Théâtre du non-corps*, where voices played over a shifting light and hologram performance” (1996, 4). We know that it wasn’t like this, that the soundtrack in the *Théâtre du non-corps* comprised only one voice, there were no shifting lights, and there was no hologram performance. One wonders whether Fuchs actually saw the exhibition, which contained each of these elements but elsewhere in the galleries, and conflated them into one exhibit, or whether she was only imagining this scene based on what others had told her. But the recollections give a sense of the dreamwork-like condensation and displacement of memorized elements—operations which Freud has called the craftsmen of the dream (1913, 286).

According to Jean-François Lyotard, the entire curatorial project resembled a psychoanalytical process of anamnesis in which, as he said after the exhibition, all members of the team would bring to their bi-weekly sessions a new idea, an object, or a scenographic proposal, “as one brings a dream to the analyst” (Lyotard 2021).



[Figure 61] Site *Musicien malgré lui* (Inadvertent musician), sound installation *Son = Espace* (1985) by Rolf Gehlhaar, with two visitors who might be Jack Lang (left) and Jean-François Lyotard (center). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0283]

These and the following references to the theme of dreams and dreaming compel me to review the exhibition—and the vague memories of my own visit in June 1985—in this light or, rather, in the shadow of *Les Immatériaux* as dreamscape.

Some dreamlike elements in the exhibition scenography were particularly prominent. There was the dark and somber atmosphere, the overall sparse lighting, and the use of spotlights which isolated the individual exhibits and accentuated the in-between zones of vague obscurity. Metal meshes separated the sites and paths, but their oscillating transparency half-negated this separation, the neighboring spaces and the things and the people in them were there and not there, appearing and disappearing according to unforeseeable movements, here or elsewhere, of people or lights or things. (Which of them is me?) These non-wall semi-separators floated above the ground, like many of the displays and exhibits throughout the show, suspending gravity and suspending a clear sense of above and below, here and there. If the walls were floating, how could visitors to this dreamscape be sure they were walking rather than floating above the ground (fig. 61)?

This dislodging of the visitors' sense of space, loosening their orientation and disrupting the rational parameters of space and movement, was complemented by the erratic succession of the sites and their themes. Rather than

following a comprehensible narrative or structure, the sequence logic seemed unhinged, stringing together memories of the Holocaust with artificial skin, identity games, and music videos, each of which might have been metaphor, scenographic illustration, scientific example, or autonomous artwork.

The soundtrack also fostered a dreamlike atmosphere. With headphones donned, immersing them in the soundscape of voices and electronic music, and thus turned into a silent listener, the visitor was isolated from other people in the galleries, making those others appear to be distant and virtual figures, hard to communicate with. Very close, though, were the disembodied voices of the soundtrack, whispering or shouting directly into the visitor's ears as though they were speaking from within the visitor's own head. In the overall quietness of the galleries, amid a distant murmur, shuffling of feet, and clicking of computer keyboards, the visitor couldn't be sure whether these invasive voices were speaking to everyone at the same time, or whether the listening experience was specific to each person—making it impossible to tell whether this was a collective or a solitary dream. (And if we are perhaps not hearing the same sounds, maybe we aren't seeing the same things either?)

The texts spoken by the voices on the soundtrack further enhanced this atmosphere, overlaying and recalibrating the gallery setting as well as the individual exhibits. The texts included descriptions of more or less well-known scenes and figures, such as Alice's encounter with Humpty Dumpty, from Lewis Carroll's *Through the Looking Glass*.¹ Carroll's novel is a dream narrative from beginning to end, and in this particular scene, Humpty Dumpty insists that he can make the words mean whatever he wants them to mean, deliberately ignoring the matrix in which they usually have their fixed place. Visitors would hear of this lexical autocracy while engaging in a computer-based conversation with a chatbot in the site *Préparlé*, and may therefore have wondered whether there was in fact a shared understanding of the words used between the virtual and imaginary dialogue partners (fig. 54).

Elsewhere, visitors heard an excerpt from a recent book about childhood cruelty and oneiric loneliness by the Belgian writer Eugène Savitzkaya, describing the dream scene of a meal where guests keep open books next to their plates on an elaborately laid table—similar to the plates, glasses, and dishes in the slideshow of tabletops in the site *Mangeur pressé*, and the telephones next to the hurried eaters in a photo on the respective *Inventaire* catalogue page, where stockbrokers take their hectic meals interrupted by money-trading phone calls.²

1 Audio zone 23, *Précuisiné-Préparlé* site. See Carroll (1976, 207–221).

2 Audio zone 14, *Homme invisible*, *Habitacle*, and *Mangeur pressé* sites; excerpt from Savitzkaya (1984).

And the description in audio zone 13 of exploding colors and a “somnambule line” tracing its path barely masked its delirious origin. It was taken from a text by the French artist Henri Michaux (1972), who described here a mescaline-induced trip.³ The exuberant painterly liberation was also connected to the neighboring visual arts sites, *Lumière dérobée* and *Peinture lumineuse*, its celebration of the independent agency of color a model for the detachment of the visitors’ perception from the things they saw in the exhibition:

But it was always a question of the impossible, of rendering a place without a place, matter without materiality, space without limitation. How to present the object when it had ceased to be weighty, ceased to be impenetrable, ceased to be objective, ceased to be fixed; intact and yet ruined. ...
And every measure lost, every dimension, every definitiveness annulled.
(Michaux 1972, 95–96)⁴

This description of an imaginary artistic process was superimposed over hovering exhibits of dubious materiality and unclear dimensionality, questioning the presence of the visitors as well as the presence of the things in front of them, or indeed the voices in their heads. (Who is imagining whom?)

It is not clear whether these scenographic and curatorial choices were taken consciously or were perhaps the result of a more intuitive reaching toward configurations and assemblages that simply felt right. It was perhaps a symptom of this curatorial dreamwork that the curators and contributors hardly ever reflected on it in these terms. In a rare exception to this rule, the scientific advisor Paul Caro used the romanticist trope of the modern repression of nature into the realm of dreams, nature’s place being taken by technological artifacts:

The “natural” scenery has completely disappeared in our “developed” countries, replaced by multiple effects, multiple materials, and multiple elusive elements that flow, spin, burst, rubbing against the senses in all directions... The “natural” is now no more than a primed, reconstituted

- 3 Sentences quoted from Michaux (1972, 78–82, 11–13, 95–96), in audio zone 13, *Petits invisibles* and *Architecture plane* sites. The “gong” with which the text excerpt starts describes the beginning of a mescaline trip which became crucial for Michaux’s experience of color, line, and space. In the manuscript for the audio track, a passage that appears earlier in Michaux’s book, about lines (11–13), is placed after the passage about the explosion of colors (78–82), making it appear as though the sense of the *ligne somnambule* was also an effect of this drug experience. The site *Petits invisibles* was originally conceived under the title *Toutes les couleurs* (All kinds of colors), which motivated the selection of a text passage that did not directly match the eventual visual display of the site. *Émergences—Résurgences* (Michaux 1972) was reprinted in Michaux (2004); see also there, Michaux’s 1969 book on dreams, *Façons d’endormi, façons d’éveillé* (Michaux 2004, 445–540).
- 4 Elision in the original typescript for the soundtrack.



[Figure 62] The team of *Les Immatériaux* and members of the CCI, December 1984, from left, front: Thierry Chaput, Chantal Noël, Martine Moinot, Nicole Toutcheff; back: Marc Girard, Sabine Vigoureux, Jean-François Lyotard, Jean Dethier as Père Noël, Élisabeth Gad, Catherine Testanière. Photographer unknown. Private collection.

reality (gardens, parks, advertising, etc.), like a vague oneiric aspiration, like a nostalgia, a hell that dreams itself a lost paradise. There's an experimental fact: confronted with "things," man can't resist transforming them. He can only endure his own creation: *the artificial*. (Caro 1985, 120)

This "reconstituted nature" was a theme of Caro's site *Irreprésentable*, which highlighted the limits of such a garden by ignoring a possible wilderness that might lie beneath or beyond it.

More likely, though also subcutaneous, are the resonances that Surrealism and its obsession with dreams may have sent through the *Immatériaux* exhibition. From its outset in the first "Manifesto of Surrealism" in 1924, André Breton had spoken of the "omnipotence of the dream" and called the human subject an "inveterate dreamer," with Surrealism striving for the "future resolution of these two states, dream and reality ... into a kind of absolute reality, a *surreality*" (1972, 26, 3, 14). We find an obscure, rebus-like

clue for such a rapprochement of Surrealism and *Les Immatériaux* in the text that Lyotard wrote after the exhibition to report on the work done by the group of collaborators at the CCI. Here Lyotard (2021) calls the core curatorial team a “mind with seven heads” (*esprit à sept têtes*). This “mind” is a displacement of the seven-headed monster from the Bible’s Book of Revelation (13:1), which was notably featured in the winter 1937 issue of the Surrealist journal *Minotaure*, in the form of Jean Duvet’s mid-16th-century print from his *Apocalypse figurée*. This issue of *Minotaure* was published at the very moment when Breton, Duchamp, and others were preparing the *International Surrealist Exhibition* for the following year. I imagine Lyotard, Chaput, Toutcheff, Moinot, and the others browsing through this journal where, as in a dream, an excessive number of acquaintances, dream-scholars, and dream-things scramble together, including a French translation of Franz Kafka’s short story of *Odradek* (*Minotaure* 1937, 17), photos of Marcel Duchamp’s *3 Stoppages étalon* and of assemblages by Joseph Cornell and Hans Bellmer (all on 34), Duchamp’s typographic piece *Rendez-vous du 6 février 1936* (66), photograms by Man Ray, here presented under the title “dawn of the objects” (*Aurore des objets*) (41–44), and finally an advertisement for the weekly art journal *Beaux-Arts* (70), whose gallery in the Rue du Faubourg Saint-Honoré would host, a few months later, the *International Surrealist Exhibition*—reminding the imaginary crew leafing through the journal that the result of their own joint endeavor would inevitably have to be an exhibition (fig. 62).

Even if this scene of the magazine-browsing curators never took place, the Surrealist spirit of mixing dreams and reality and the dislodging of modernist certainties was clearly on the curatorial agenda from an early stage onward. In the introduction to his first written sketch for *Les Immatériaux*, the *Esquisse* of August 1983, Lyotard mentions the extensive semantic field of *matériau*, *matière*, etc., and writes:

The semantic field is considerable (see Bachelard, for example). We cannot try to describe it in full or even base the show on its full richness. But in relation to the “objects” presented, it should give rise to crossings, intersections, and slippages between semantic zones. The visitor should at least get the idea that material [*matériau*] is not simply something over which humans exercise power, and that if it is, strictly speaking, new, then the whole network of associations we have just suggested will be altered. (1983, 3)

Lyotard’s reference to Bachelard is both surprising and obvious. It is surprising because there are hardly any such philological references in this short text, a fact that gives the small parenthetical mention particular weight. And the reference is obvious because Gaston Bachelard, in addition to his influential books on the history and theory of science, had also published essays on the phenomenology of time and space, as well as a series of books about the

four elements (fire, water, air, and earth), which Lyotard was well aware of. For Bachelard, the preferred mental state for such phenomenological investigations was that of *rêverie*, daydreaming, and his advice for understanding matter was not to “observe” it, but to “dream it well” (Bachelard 2004, 9).⁵

The phrase in the *Esquisse* shows that Bachelard, this dream analyst of physics and matter, was on Lyotard’s mind when he first began thinking about the exhibition project. In his text, Lyotard also hints that condensation and displacement, which Freud identified as the main operations of dreamwork, will constitute basic curatorial principles because, in the exhibition, associations will be “changed” (*altéré*) by powers that are not under the control of self-conscious human subjects. This conception of a type of dreamwork that is not conducted by a modern individual, but that occurs in a more diffuse process, points us toward what theorist Elisabeth Lenk has called the “dream form” (*Traumform*), to which we will return shortly.⁶

Bachelard begins the book on the earth element with a chapter on the resistance of matter, a resistance based on “the dialectics of hard and soft” (Bachelard 2004, 23). This resistance is a source for the dualism of subject and object, and it is aroused from matter in the act of dreaming:

In fact, it’s perhaps in its aspect of imagined energy that the philosophical dualism of subject and object presents itself in its clearest balance. In other words, in the reign of the imagination, we can also say that real resistance gives rise to dynamic daydreams, or that daydreams awaken sleeping resistance in the depths of matter. (29–30)

Inspired by such conjectures, we can fantasize about the “seven-headed mind” dreaming up *Les Immatériaux* from the depths of the state of “im-materi-ality,” seeking to depart from Bachelard’s own pre-postmodern episteme. We will ask a little later in this chapter whether there are any roots to such fantasies detectable in the exhibition; however, it can already be affirmed

- 5 Bachelard’s advice is not a “conseil de *bien voir*” but “notre paradoxal conseil de *bien rêver*, de rêver en restant fidèle à l’*onirisme* des archétypes qui sont enracinés dans l’inconscient humain” (2004, 9). There is an implicit reference here to psychoanalyst C. G. Jung for whom the elements of the dream derive from collectively held, transhistorical “archetypes” like the Mother, the Divine Child, the Trickster, or the Shadow. Unlike Lyotard, Bachelard was a devout Jungian, but rather than from archetypes, the exhibits in *Les Immatériaux* drew their strength from being more or less generic contemporary objects. The continued relevance of Bachelard to Lyotard can also be gleaned from Lyotard’s essay “L’Eau prend le ciel” (1970) in Lyotard (1994, 133–149).
- 6 In the conceptual notes for the site “*Infra-mince*” in the April 1984 list (1994033W666_030), there is a phrase that refers to an artwork by Kounellis but that is also suggestive of Bachelard’s writings: “Paradoxes about the support of the artistic message: water, earth, air, fire...” I’m grateful to Julie Champion for pointing me to a France Culture podcast about Bachelard and dream thinking, presented during the Covid-19 pandemic confinement (Van Reeth 2020).

that Bachelard was certainly not some sort of secret mastermind in the background, but rather someone whose prolific and original writings about fluctuating materialities formed part of the wider cultural context from which the exhibition took shape. And Bachelard was perhaps as relevant to Lyotard's thinking as the techno-philosophical writings of Gilbert Simondon were to Thierry Chaput, as Simondon's ideas are equally looming somewhere in the epistemological background of *Les Immatériaux*.

Bachelard's book on "the earth and the reveries of resting" (*La Terre et les rêveries du repos*) starts with the antagonism of hard and soft, and it ends with a reflection on the dichotomy of repose and movement. About the closing chapter, where he contrasts the extreme spaces of the grotto and the labyrinth, Bachelard writes: "The grotto is a resting place. The labyrinth sets the dreamer in motion" (Bachelard 2004, 20).⁷

The scholar of *Les Immatériaux* is, of course, tempted to see before his mind's eye the labyrinthine structure of the exhibition layout and to imagine that the dusky sequence of sites was in fact designed to lure the visitor into an aimless and somnambulant perambulation of the labyrinth.

Lyotard in his own writings offers no clue that he intended that the exhibition be read as a dreamscape. Instead, in his comments on dream theory, he remained somewhat caught in a Freudian psychoanalytic register, even though his remarks in *Discourse, Figure* point beyond it and toward "the 'disorder' of dreams, poetry, and the figure, revealing, in fact, the unstable, impossible 'order' of a being torn between Eros-death and Eros-reality, between variant and invariant, between figure and discourse" (Lyotard 2011, 54).

In 1968, Lyotard had held a seminar on Freudian dream theory which led him to write "The Dream-Work Does Not Think," a text that became a section in *Discourse, Figure* (2011, 233–267).⁸ It is an exegesis of Freud's chapter on dream-work from *The Interpretation of Dreams* (*Die Traumdeutung*, 1900). Lyotard's emphasis on the constellation of figure and desire, and on the figural efficacy of the readable, the audible, and the visible, can perhaps be interpreted as ideas which would later also inform decisions taken in the preparation of *Les Immatériaux*. Lyotard argues against a Lacanian understanding of the unconscious as modeled on articulated discourse, and instead emphasizes what cannot be captured by language:

Reverie, dream, phantasm are mixtures containing both viewing and reading matter. The dream-work is not a language; it is the effect on

7 On labyrinthine exhibitions, see R. Greenberg (2018), as well as the work of the mathematician Pierre Rosenstiehl, a scientific advisor to *Les Immatériaux*, on the labyrinth, e.g., Rosenstiehl (2013).

8 See also Eizykman and Fihman (2014); Jones and Woodward (2017).

language of the force exerted by the figural (as image or as form). This force breaks the law. It hinders hearing but makes us see: that is the ambivalence of censorship. But this composite is primordial. It is found not only in the order of the dream, but in the order of the “primal” phantasm itself: at once discourse and figure, a tongue lost in a hallucinatory scenography, the first violence. (Lyotard 2011, 267)

This is, of course, not a program for *Les Immatériaux*, but an attempt to find a way of speaking about that which eludes language in philosophical discourse. Nevertheless, we can imagine how some of these thoughts may have resonated with Lyotard when he was confronted with the task of making an exhibition that might be a form of philosophizing by other means. *Discourse, Figure* represented a similar self-set task, imbricating discourse and the figural: “the figure dwells in discourse like a phantasm, while discourse dwells in the figure like a dream. ... [T]he dream is the acme of the inarticulate, deconstructed discourse from which no language, even normal, is entirely free” (249).

And elsewhere in *Discourse, Figure*, Lyotard quoted Maurice Merleau-Ponty on a use of language by philosophy in which the words appear to act independently as they would in a dream, or in their employment by Humpty Dumpty:

“... there could be a language of coincidence, a manner of making the things themselves speak. ... It would be a language of which he [the philosopher] would not be the organizer, words he would not assemble, that would combine through him by virtue of a natural intertwining of their meaning, through the occult trading of the metaphor—where what counts is no longer the manifest meaning of each word and of each image, but the lateral relations, the kinships that are implicated in their transfers and their exchanges.” (52)

But in this quotation from Merleau-Ponty and also elsewhere, Lyotard’s recourse to the theme of dreams is not a discourse on dreams, but rather a demonstration of how the tools of Freudian dream interpretation can be applied to the discourse of philosophy.⁹ The theoretical impetus of this thinking re-emerges in the semiotic critique that underpins *Les Immatériaux*, with its professed deconstruction of the modern matrix of signification as it also occurs in dreams and in poetry. This thread was already spun in *Discourse, Figure*:

9 Such a metaphorical use of the dreamwork lexicon is also applied in *Discourse, Figure* in Lyotard’s analyses of Artaud’s language (2011, 88), and of Michel Butor’s works *L’appel des Rocheuses* (1962) and *Illustrations* (1964) (372–374). And a decade after *Les Immatériaux*, Lyotard’s text about dreams for the *Encyclopædia Universalis* emphasizes the Freudian understanding of dreams and dream interpretation and makes only passing reference to the Romantic and Surrealist traditions; see Lyotard (1995).

To undo the code without, however, destroying the message, while instead releasing from it the meaning and the lateral semantic reserves concealed by structured speech, is to carry out a series of operations that Freud called dream-work and that ... consists entirely in the transgression of the measured intervals underpinning the weave of language [*langue*], and is thus, indeed, "fulfillment of desire." (53–54)

From such a Freudian and instrumental perspective, it could be argued that the curatorial preparing for *Les Immatériaux* was a kind of dreamwork whose operations—condensation, displacement, figurability—were employed to erode the modernist discourse embodied by the technoscientific exhibits. But the Freudian approach to dreams assumes that there is a dreaming individual, and that the content—that is, the dream thoughts—form the basis of the dreamwork: two aspects which reinstate the human subject and waking life as the dominant dimensions of reality, undermining the core of Lyotard's post-modern critique.

These Freudian assumptions were taken to task by the German literary scholar Elisabeth Lenk, who argues in her book *Die unbewußte Gesellschaft* (The unconscious society) (1983) that dreams should be considered not so much as content that can be put into words, but rather in terms of their particular aesthetic form, which Lenk calls the "dream form" (*Traumform*). As we will see in a moment, Lenk's dream-theoretical framework makes it possible to conceive of the dreamscape of *Les Immatériaux* from a different, more complex perspective, and to recognize the dreamlike aspects of both the exhibition as a whole and many of its details.

Lenk critiques Freud's understanding of dreams which, in her reading, ignores the particular aesthetics and efficacy of the dream. The Freudian approach posits that it is the *interpretation* of the dream which elucidates its true nature, turning the actual dream into a distorted and worked-over version which requires clarification through analysis. Against this twisted logic, Lenk (1983, 14) argues that dreamwork isn't "work" at all. Lenk takes descriptions of her own dreams as the starting point for an argument that combines literary, sociological, and psychological considerations (333–393).¹⁰ The analysis of the formal, aesthetic elements of her dreams—such as their particular corporeal, spatial, and temporal structures, colors and lights, and their narrative incompleteness—brings Lenk to a characterization of the dream in which we can recognize important scenographic elements of the *Immatériaux* exhibition:

10 For another artistic phenomenology of the dream form, see (or hear) Derbyshire and Bermange (1964), a radio play with a collage of voices of people from different social classes, "participating in a shared, collective dream," speaking about their dreams, which are organized into different sections around the themes of running, falling, land, sea, and color. The chapter called "Falling" describes the dream experience of falling, calling to mind the floating mannequins in *Nu vain*.

The tendency of the dream to dramatize, its cloudy, dark, enigmatic character, the hermetic element, its pleasure in the game of hide-and-seek, in the sensual, in colors and sounds, in the pictorial, even where it stages the terrible, its penchant for caricature, the grotesque, the absurd, its lighting effects, its labyrinthine architecture, all this is not even perceived from a purely content-related point of view, let alone appreciated in its independent, irresolvable otherness. (13–14)

It is striking how this general description of the dream appears to offer guidelines for the scenography of *Les Immatériaux*. Lenk had been based in Paris for the main part of the 1960s and held academic posts in Berlin and Hannover from the 1970s onward. Her book came out in 1983 and, hypothetically, might have been available from the German bookshop in the Rue Rambuteau next to the Centre Pompidou.¹¹ But it is highly unlikely that either Lyotard or anyone else on the curatorial team was aware of this publication or met Lenk during one of her visits to Paris. Rather, the apparently parallel visions suggest that both projects, Lenk's analysis of dream forms and the curatorial project of *Les Immatériaux*, were tapping into the same repository of scenographic elements that countered modernist forms of presentation and representation.

Both projects also shared the postmodern critique of the human subject. What he had already developed in *Libidinal Economy* (1974) was reiterated by Lyotard in the essays and talks of the mid-1980s which were compiled in the book *The Inhuman* (1988). Here in the introduction, Lyotard posits infancy as a state of the “not-yet-human,” a state prior to the inscription into the social order by the institutions of language, education, and work. The adult maintains a contradictory, dual relation to these institutions: unconditional conformity on the one hand, and resistance on the other:

the power of criticizing [the institutions], the pain of supporting them and the temptation to escape them persists in some of his or her activities. I do not mean only symptoms and particular deviances, but what, in our civilization at least, passes as institutional: literature, the arts, philosophy. There too, it is a matter of traces of an indetermination, a childhood, persisting up to the age of adulthood. (Lyotard 1991, 3)

With Elisabeth Lenk we can add to this list of resistant activities the dream, which is equally embattled as a site of institutional framing versus indetermination, as are philosophy, literature, and the arts. Lenk discusses these tendencies of institutionalization by using the term *Vernunftform*, the “form of reason,” which is her counterfigure to the dream form (Lenk 1983, 300–307). Lenk is interested in how, under the regime of the modern, the inner world of the dreamer is increasingly occupied by society. In the modern imaginary, the

11 For a biographical sketch, see Lenk's obituary in Vukadinović (2023).

dream, that last secret path to steal away from so-called reality, has become a “highroad to the unconscious” (*Heerstraße des Unbewussten*) (246–250). Lenk asserts that psychoanalysis and psychology, through their codification of the unconscious and programs of manipulation, have led to the imposition of what Freud called the “Ego-Ideal” (*Ichideal*) and society’s occupation of the inner world. This occupation implies that henceforth “people feel that their inner selves are something alien, something that is excluded from society” (304). Pinpointing her critique of the modern subject, Lenk writes that “the homogeneous self, that’s the others” (248). And in analogy to the passage in Lewis Carroll’s *Through the Looking Glass* (1976, 169), where the other people on the bus not only speak in chorus, but they also “think in chorus,” Lenk (1993, 249) claims that the dream has become a site where the choir of the others sing their song.

But there is something that preserves the resistant potential of the dream as the Other of society, a potential countering the process of rationalization, and that is the fact that the dream is tied to the body: “The dream shows society from the perspective of the body” (Lenk 1983, 362).¹² This notion resonates with Lyotard’s own insistence on the body as a site of resistance—as well as his focus on writing. Lenk’s argument centers on the history of literature and on the emergence of a “dreamlike literature” (*traumartige Literatur*) in the second half of the 19th century. Her historical argument is that a re-evaluation of the dream as a counter-modernist dimension of experience occurs at the very moment when the occupation of the modern mind is in full swing. Discussing the writings of Lautréamont and Lewis Carroll, Lenk argues that, unlike in romanticism, “dreams are no longer merely narrated, described, used for literary purposes at a decisive point (this has always been the case ever since there was literature), but are staged before the reader’s eyes with the help of linguistic tricks” (255).

According to Lenk, the language of the *Chants de Maldoror* by Lautréamont defies the organization of concepts, figures, and spaces which it instead fragments, dissociates, and decontextualizes: “The words resist their duty to convey meaning, and the things on their part are extremely suspicious of their names” (Lenk 2013, 257). The precarious relationship of words and things was also a regular theme in Lewis Carroll’s texts, and it seems consequential that the scene in which Alice meets Humpty Dumpty was quoted in the *Immatériaux* soundtrack for the site *Précuisiné-préparlé*.¹³

12 See also Lenk (1983, 264, 301–302).

13 The theme also recurs in Carroll’s novel *Sylvie and Bruno* (1889, 1893) where it appears in the phrase “words are ever so many other things” (Carroll 1976, 702, see also 708–709). Here we also already encounter the motif of the one-to-one scale map which the exhibition soundtrack relates in audio zone 19 in the words of Jorge Luis Borges. In Carroll’s book, a foreign visitor brags that the cartographic ambitions of his country led to the project of such a map the same size as the territory: “It has never been spread

There are, however, not merely such coincidental parallels between elements of *Les Immatériaux* and Lenk's treatment of the dream form. Rather, my hypothesis is that Lenk elucidates qualities of the dream which have unwittingly informed the scenography and curatorial work of the exhibition team. *Les Immatériaux* was informed by the dream form, making the exhibition a dreamscape, albeit unintentionally.

In her chapter on dreamlike literature, Lenk puts her attention not on Carroll's two books about Alice, which both employ a relatively clear-cut separation of dream and waking reality. In each book, Alice falls asleep at the beginning of the story and wakes up again at the end. In contrast, in *Sylvie and Bruno* (Carroll 1889, 1893) the sibling children Sylvie and Bruno first appear to the narrator in his vivid dreams, but as the story progresses, the distinction between dreams and waking life becomes less clear, characters and narrative elements spilling over from one sphere to the other. Sylvie and Bruno are able to cross that boundary at will, and the narrator does so too, though involuntarily, like a dreamer who appears here and there, sometimes an active participant, then a passive or even invisible observer. Elisabeth Lenk highlights that Carroll's books are similar to the *Chants de Maldoror*, both written around the same time at the end of the 19th century, and both not just describing dreams, but developing a poetic language which emulates dream experiences.

For instance, when Bruno is told that he said something in the manner of his sister, he admits: "I know I did. I quite forgot that I wasn't Sylvie" (Carroll 1976, 356). In the course of the novel, the narrator gains the impression that it is not only he himself, but also his friend Lady Muriel who verges "eerily" between dream and waking life.

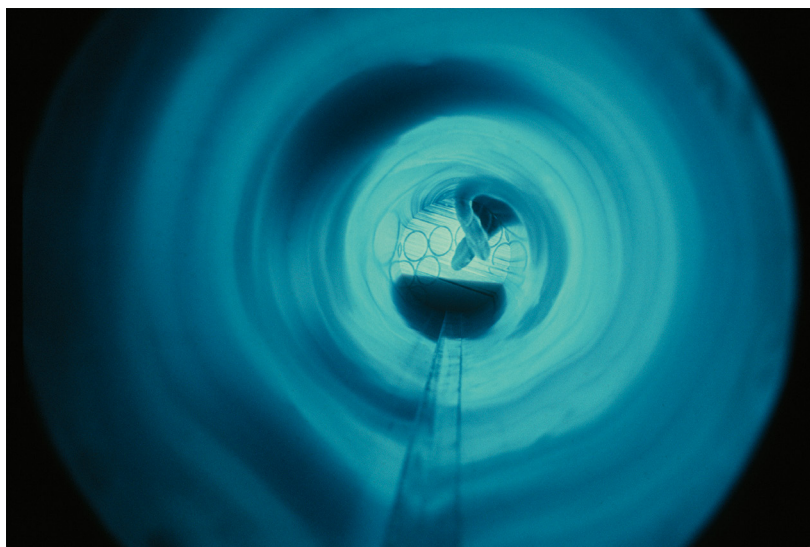
I seemed to wake out of a dream: for the "eerie" feeling was still strong upon me, and the figure outside seemed to be changing at every moment, like one of the shapes in a kaleidoscope: now he was the Professor, and now he was somebody else! By the time he had reached the gate, he certainly was somebody else: and I felt that the proper course was for Lady Muriel, not for me, to introduce him. She greeted him kindly, and, opening the gate, admitted the venerable old man ... who looked about him with dazed eyes, as if he, too, had but just awaked from a dream! (1976, 576)

What Lenk cherishes about Carroll's book is that it presents the dream not as something that is produced and "owned" by the dreamer but as something that occurs and plays by its own rules. The dream performs involutions of experience which undermine rational and linear conceptions of time and

out, yet, ... the farmers objected: they said it would cover the whole country and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well" (617).



[Figure 63] Site *Matériau dématérialisé* (Dematerialised material) with visitors. Concept by Philippe Puicouyoul. To the left, two round openings for video tubes (see fig. 64). In the background surgeon's and chef's uniforms in the site *Indiscernables*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0341]



[Figure 64] Site *Matériau dématérialisé* (Dematerialised material), view inside one of the tubes with video monitor (see fig. 63). © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0301]

space, and opens up the possibility of sliding between places and periods. What seems impossible in the *form of reason* is feasible and unsurprising in the dream form.

An important reference for Lenk—and Lyotard also has him in mind in the introduction to *The Inhuman*—is Walter Benjamin. In his book of childhood memories, *Berlin Childhood around 1900*, Benjamin remarks: “By the same token, someone can dream of the way he once learned to walk. But that doesn’t help. He now knows how to walk; there is no more learning to walk” (2002b, 396).¹⁴ We can read this as a sign of resignation to the impossibility of learning to walk again, and an invitation to try to at least remember the state before having learned it. But what Benjamin also says here is that it is indeed possible to learn it again *in a dream*.¹⁵

This potential of the dream is latent in Benjamin’s and Lyotard’s thinking, and it is activated in the approach to the dream taken by Lenk. Moreover, Lenk’s notion of the dream form makes it possible to recognize the dreamlike dimensions of *Les Immatériaux*, and to understand that this exhibition was endowed with the potential of involution and resistance, which are ascribed to the dream.

Indeed, visitors would have come across dream form elements in every other corner of *Les Immatériaux*, in addition to the general dreamlike scenographic features described at the beginning of this chapter (fig. 63, 64). We can only hint cursorily at some of these particular elements—and we will not take them to the analyst. But the examples that follow indicate how dense the exhibition was in such dreamlike experiences. Revisited with such dream-seeking intent, the exhibition slips deeper and deeper into the dream form.

The stone bas-relief greeting visitors as the first exhibit in the *Vestibule d’entrée*, depicting a goddess who offers the pharaoh a symbol of the soul and of life, was accompanied in the soundtrack by the sound of human breathing, marking the exhibition entrance as a site of both coming to life and falling asleep (fig. 4). In his book *Air and Dreams*, Bachelard writes about the word *âme* (soul), which in French and many other languages is onomatopoeic of the physical breath of life that it signifies (Bachelard 1988). At the other end of the exhibition, in the *Vestibule de sortie*, the image of the bas-relief returned in fragmented and multiplied form as an ephemeral projection, resembling

14 Translation modified from first-person singular to third-person singular, masculine, to approach the original: “So mag manch einer davon träumen, wie er das Gehn gelernt hat. Doch das hilft ihm nichts. Nun kann er gehen; gehen lernen nicht mehr.” See also Lenk (1983, 302–303).

15 Unlike Lyotard, Walter Benjamin emphasized the collective dimension of memories and dreams—see Benjamin 2002a (K 1, 4; K 1a, 6; L 1, 3; L 1a, 1; L 1a, 2)—and on the notion of “awaking” (*Erwachen*), which Benjamin deploys as a metaphor for overcoming the dreamlike bourgeois and capitalist mentality of the 19th century (K 1, 1; K 2, 4).

the uncertain glance upon waking from sleep, or perhaps the last glimpse of a dream image, when we are still unsure which side of the border between dream and waking life we are on.

Behind the entrance chamber the tunnel of the *Galerie d'entrée* began, with its descending Doppler-sound of pulsating blood, reminiscent of the sense of falling and falling asleep, the visitor's drift down the corridor resembling Alice's fall into the rabbit hole on her way to Wonderland.

Elsewhere are images of the starry night sky and constellations of stars, observable in the large round well of *Creusets stellaires*, into which visitors would look down like Narcissus, not to regard themselves but to look into the extraterrestrial expanse of which they formed but a miniscule, dustlike part (fig. 26). This play of absence and deferred presence of the self could also be experienced in the time-delay video installation of *Temps différé*.

Each of the enigmatic, decontextualized photos in *Trace de trace* could have come from a dream (fig. 59). They are like photograms which Tristan Tzara, in his preface to Man Ray's album of "rayographs," *Champs délicieux* (1922), called "projections surprised into transparency, by the light of tenderness, of things that dream and talk in their sleep" (qtd. in Brown 2015, 110).

The condensation, in the site "*Infra-mince*," of scraps of paper by Yves Klein and Marcel Duchamp, apparently contradicting the conceptual relevance that both artists had for thinking through the "im-materials;" the conglomeration of their notes and sketches into the two levels of one small vitrine, as though they had been crammed into a tiny house (fig. 40). In his book of 1977, *Duchamp's TRANS/formers*, Lyotard had quoted a note by Duchamp about day-dreaming as a legitimate form of thinking: "I think it is to be recommended, in order to establish the diverse modalities of the activity of thought, that one does not use at first the relation to consciousness, and that one qualifies *day-dreams* as well as the thought-chains studied by Varendonck (*as freely wandering or fantastic thinking*) by opposition to an intentionally oriented reflection" (1990a, 102).

The confrontation and displacement of words, things, and mimetic representations in *Ombre de l'ombre*, where Joseph Kosuth's installation *One and Three Shadows* (1965) challenged each of the appearances of the shadow as a mere shadowing of the others, replicating a suggestion by René Magritte that "an object never achieves the same as its name or its image," whether horse, shadow, or chair (1929, 32–33).

No doubt one of the eeriest apparitions of the exhibition is in the site *Nu vain*, where humanoid mannequins were suspended in mid-air, ascending and descending like the angels in Jacob's dream, of which Héléne Cixous—Lyotard's erstwhile colleague at the University of Vincennes—writes in the *School of*



[Figure 65] Jean-François Lyotard in a film set modeled after the diorama *Pas moi: maternité* (site *Théâtre du non-corps*). Filmstill, Zajdermann/Soutif, *Octave au pays des Immatériaux*, 1985 (min. 05:27). Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.



[Figure 66] Diorama *Pas moi: maternité* in the site *Théâtre du non-corps* (Theatre of the non-body), designed by Gérard Didier and Jean-Claude Fall, after an original stage design for the play by Samuel Beckett, *Dis Joe*. © bpk / CNAC-MNAM / Photograph by Jean-Claude Planchet. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou. [CCI_147_0780]

Dreams (Cixous 1993, 66–70). In the background of these floating angelic souls, a film sequence from a movie about the German occupation of France during the Second World War, and a photo of a prisoner in a Nazi concentration camp, taken after the liberation, but showing a destitute body—nightmarish images intended to follow us into our dreams.

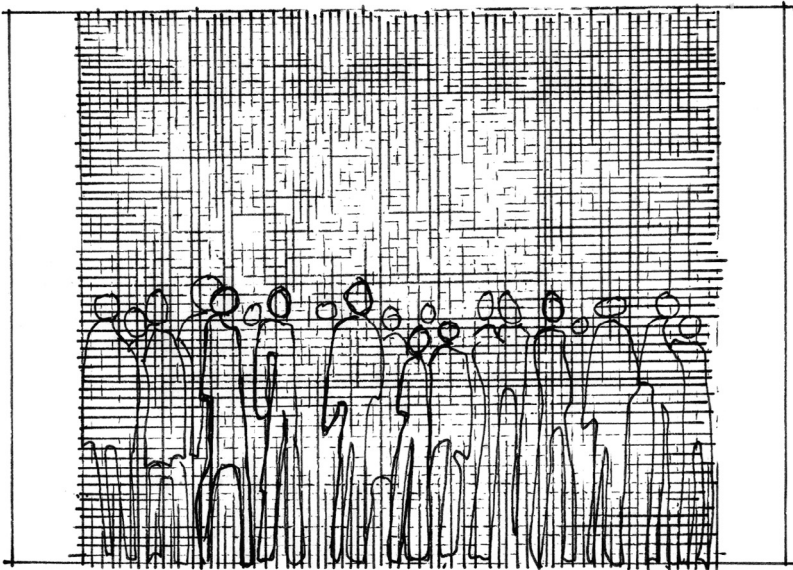
The mirrors in the *Théâtre du non-corps*, *Indiscernables*, and *Corps éclaté*, reflecting the images of the visitors and blending them into foregrounds and backgrounds, front sides and rear sides of bodies and objects. The multiplication of human figures into shifting constellations (*Indiscernables*), switching clothes and switching roles (*L'Ange, Vite-habillé*), and the dormant manifold body of the *Sleeping Hermaphrodite* in *L'Ange*, whom Lautréamont's Maldoror implores to keep on dreaming: "Awaken not, *hermaphrodite*. Do not wake yet, I beg you."

Elsewhere, other bodies and body parts and things at wildly different scales in *Corps éclaté*, *Surface introuvable*, *Langue vivante*, and *Matériau dématérialisé*, incredibly large and unbelievably small.

The humble scale model of an omnibus with video-montaged still lives on the small window screens of *Visites simulées*. Lives at dollhouse-size, to be observed by visitor-giants, like the empty miniature stages in the *Théâtre du non-corps* where the slight movements of things betray absent, imagined bodies at incompatible scales.

All of a sudden, an actor appears on these stages; it's a philosopher by the name of Jean-François Lyotard. For a documentary about the exhibition, film sets have been built that resemble the dioramas of the *Théâtre du non-corps* and form the setting for Lyotard's theoretical musings (fig. 65, 66). The film's title, *Octave au pays des Immatériaux*, echoes the French title of Carroll's better-known book, *Alice au pays des merveilles*. In the film, Octave is a teenage boy who traverses the exhibition on roller skates, exploring the Land of the Immatériaux just as Alice explores Wonderland. But in the film's occasional diorama scenes, it is Lyotard who can be seen in the cinematic dream rendition of the exhibition. I try to imagine what it must have been like for him to be walking around in a makeshift filmset, knowing that this perambulation would place him on par with the stages of Beckett's *Play* (1962), *Eh Joe* (1963), *Not I* (1972), as an accidental passerby, inhabitant of someone else's dream. While Lyotard explicates the philosophical discourse of *Les Immatériaux*, does he remember that years earlier, in 1971, he had suggested that "the figure dwells in discourse like a phantasm, while discourse dwells in the figure like a dream" (2011, 249)?

After Alice has passed "through the looking glass," she sees the Red King fast asleep and snoring under a tree during her encounter with Tweedledee and Tweedledum. Tweedledee tells her not to wake the King up because he



[Figure 67] Sketch of the desired transparency effect of the metal meshes. Drawing by Philippe Délis. Bibliothèque Kandinsky, MNAM/CCI, Centre Pompidou.

is dreaming, warning Alice that she might exist only in the King's dream and would therefore, if he woke up, immediately "go out just like a candle." Tweedledum, more realistic and less alarmist than his brother, objects that "it's no use your talking about waking him ... when you are only one of the things in his dream. You know very well you're not real" (Carroll 1976, 189–190).

Which brings us to the last question to address: assuming *Les Immatériaux* was a dream, who was doing the dreaming? The chapters of this study ought to have shown that I dismiss the idea that *Les Immatériaux* was dreamed up by Jean-François Lyotard. He certainly participated in the somnambulist flock, but there were other dreamers in addition to him, and we must bear in mind that both Lyotard and Elisabeth Lenk would advise us not to imagine an individual dreaming subject in the first place. When Lenk asks herself who is doing the dreaming, her answer is that the dreamlike literature of the late 19th century—and also the writings of authors like Kafka and Beckett—"shatters] the fiction of a unifying aesthetic ego" (Lenk 1983, 259); it does away with a central perspective, and its authors take a definitive distance from the literary figures. The dream is not, as Freud suggested, wish-fulfillment, but rather a way of "revealing and thereby psychically realizing the part of reality which under given social imperatives is supposed to remain unperceived" (Lenk 1983, 260). Under modernity, language has become totally subordinated to the

waking world and therefore needs to be reinvented and rearticulated “from the pole of the dream: a radical reversal of the movement of language” (261).

Approaching the question of the dreaming subject, then, requires the acknowledgement that the dream is not anyone’s in particular, but that the dream is dreamed by many, while the not-I of the dream is also dispersed into a multitude of others who take “my” role (see Lenk 1983, 356). Lenk’s answer is that it is the choir of the others who is doing the dreaming. The dream is the chorus that the choir of the others is singing in me: “The others reflect the disciplinary process that has happened to me. They think and act in chorus. ... In the dream, the ego is only a stage, the other stage on which society is a guest, a stage that can see, that is all eye” (356).¹⁶

The mirror-scapes of *Les Immatériaux* offer a vivid image of this dispersal. They reflect the entangled visitors and exhibits, the quasi-objects and quasi-subjects proposed by Serres which bring forth the “we,” construct the collective, and surpass individuation. Like the choir of the others, the quasi-object connects the dream forms of waking life and sleep. In the words of a day-dreaming Michel Serres (1982, 233):

Who am I, once again? A symbol, but especially the symbol of the other.

The symbolic is there; it is divided and is not divided. What is the symbol? A stereospecificity? It is also a quasi-object. The quasi-object itself is a subject. The subject can be a quasi-object.

Sometimes the “we” is the passing, the signing, the drawing up of the “I.”

The “im-material” exhibits in *Les Immatériaux* were tokens of the inscriptions into the modern social matrix which Lenk calls “the choir of the others.” The exhibits were not resistant in themselves, but they were presented in a scenographic setting which emulated the dream form (fig. 67).

There were limitations to how successful such emulation could be. Lenk (1983, 258) writes about Lautréamont’s *Chants de Maldoror*: “Words and things, freed from the rules of the waking world, constitute a formless, chaotic mass. But new figures emerge from this chaos, much more fluid and changeable than the figures of the outer world.”

This was hardly the case of the things in *Les Immatériaux*. Instead, many exhibits looked rather familiar, and in several exhibition sites, the endlessly scrolling *dérouleur* texts provided reasonable explanations and recaptured wandering things and daydreaming minds. Maybe this is why Lyotard later thought about (or dreamed of) a second exhibition which would more

16 See also the remarkable sample of dreams collected in Beradt (1968), discussed in Koselleck (2004, 205–221).

explicitly take the perspective of resistance, one that would depend less on the objects derived from the waking world and the form of reason.

The images of the choir and the quasi-collective also return us to the question of the curatorial subject raised at the beginning of this study. The exhibition—to which the various contributors had brought items and ideas “as one brings a dream to the analyst” (Lyotard)—if it was a dream, then it was a collective dream not only of the curators and contributors, but also of the somnambulant visitors, and even of those who never saw the exhibition but imagine what it may have been like.

Appendix 1: Short Chronology of *Les Immatériaux*

31 August 1981	Raymond Guidot's exposé, <i>Matériaux nouveaux et création</i>
18 June 1982	Thierry Chaput's exposé, <i>Matériaux nouveaux et création</i>
14 April 1983	Chaput's exhibition concept, <i>La matière dans tous ses états (Matter in All Kinds of States)</i>
4 June 1983	First meeting of Jean-François Lyotard with Chaput
10 August 1983	Lyotard's first exhibition concept, <i>Esquisse (Sketch)</i>
15 September 1983	Formal introduction of Lyotard at the CCI, Centre de Création Industrielle
20 September – 4 December 1983	Lyotard teaches in the US
19 December 1983	First meeting with the scientific advisors
29 December 1983	First working meeting with Bernard Blistène
9 February 1984	First working meeting with Alain Guiheux
March 1984	Lyotard dictates <i>Après six mois de travail...</i>
April 1984	First complete concept submitted to the president of the Centre Pompidou, <i>Présentation</i>
28 May 1984	First working meeting with scenographer Philippe Délis
13 July 1984	First working meeting with Dolorès Rogozinski (Lyotard)
26 March 1985	Official opening of the exhibition
28 March 1985	Exhibition open to the general public
15 July 1985	Exhibition closes

Appendix 2: The Sites of *Les Immatériaux*

Site	French original	English
01	<i>Vestibule d'entrée</i>	Entrance Chamber
02	<i>Galerie d'entrée</i>	Entrance Corridor
03	<i>Théâtre du non-corps</i>	Theatre of the Non-Body
04	<i>Nu vain</i>	Vain Nakedness
05	<i>Deuxième peau</i>	Second Skin
06	<i>L'Ange</i>	The Angel
07	<i>Corps chanté</i>	Sung Body
08	<i>Corps éclaté</i>	Exploded Body
09	<i>"Infra-mince"</i>	"Infra-thin"
10	<i>Surface introuvable</i>	Elusive Surface
11	<i>Indiscernables</i>	Indiscernibles
12	<i>Matériau dématérialisé</i>	Dematerialized Material
13	<i>Peinture luminescente</i>	Luminescent Painting
14	<i>Peintre sans corps</i>	Bodiless Painter
15	<i>Toutes les copies</i>	All Kinds of Copies
16	<i>Toutes les peaux</i>	All Kinds of Skins
17	<i>Ration alimentaire</i>	Food Ration
18	<i>Tous les bruits</i>	All Kinds of Noises
19	<i>Langue vivante</i>	Living Language
20	<i>Jeu d'échecs</i>	Chess Game
21	<i>Matricule</i>	Registration
22	<i>Variables cachées</i>	Hidden Variables
23	<i>Petits invisibles</i>	Little Invisibles
24	<i>Architecture plane</i>	Flat Architecture
25	<i>Homme invisible</i>	Invisible Man
26	<i>Habitacle</i>	Compartment
27	<i>Mangeur pressé</i>	Hurried Eater
28	<i>Musicien malgré lui</i>	Inadvertent Musician
29	<i>Auto-engendrement</i>	Auto-generation
30	<i>Creusets stellaires</i>	Stellar Crucibles
31	<i>Ombre de l'ombre</i>	Shadow of a Shadow
32	<i>Trace de trace</i>	Trace of a Trace
33	<i>Espace réciproque</i>	Reciprocal Space
34	<i>Lumière dérobée</i>	Stolen Light
35	<i>Irreprésentable</i>	Unrepresentable

36	<i>Images calculées</i>	Calculated Images
37	<i>Odeur peinte</i>	Painted Scent
38	<i>Arôme simulé</i>	Simulated Aroma
39	<i>Visites simulées</i>	Simulated Visits
40	<i>Profondeur simulée</i>	Simulated Depth
41	<i>Référence inversée</i>	Inverted Reference
42	<i>Vite-habillé</i>	Speed Dressing
43	<i>Trois mères</i>	Three Mothers
44	<i>Précuisiné-préparlé</i>	Pre-cooked-Pre-spoken
45	<i>Monnaie du temps</i>	Currency of Time
46	<i>Négoce peint</i>	Painted Trade
47	<i>Terroir oublié</i>	Neglected Terrain
48	<i>Tous les auteurs</i>	All Kinds of Authors
49	<i>Labyrinthe du langage</i>	Labyrinth of Language
50	<i>Mémoires artificielles</i>	Artificial Memories
51	<i>Logiques artificielles</i>	Artificial Logics
52	<i>Mots en scène</i>	Words on Stage
53	<i>Séquences à moduler</i>	Sequences to Be Modulated
54	<i>Romans à faire</i>	Novels to Be Made
55	<i>Machines stylistiques</i>	Stylistic Machines
56	<i>Champ et moment de la voix</i>	Field and Moment of the Voice
57	<i>Épreuves d'écriture</i>	Trials of Writing
58	<i>Temps différé</i>	Deferred Time
59	<i>Galerie de sortie</i>	Exit Corridor
60	<i>Vestibule de sortie</i>	Exit Chamber
	<i>Ciné-immatériaux</i>	Cine-Immaterials
	<i>Sons et voix</i>	Sounds and Voices
	<i>Conférences</i>	Conference Programme
	<i>Octave au pays des Immatériaux</i>	Octave in the Land of the Immaterials

Mât paths

<i>Matériau</i>	Raw material (support, medium)
<i>Matrice</i>	Matrix (code)
<i>Matériel</i>	Hardware (equipment, receiver)
<i>Matière</i>	Content (referent)
<i>Maternité</i>	Maternity (sender, origin)

Théâtre du non-corps, dioramas

<i>Pas le corps: matériau</i>	Not the body: raw material [desert]
<i>Pas la parole: matrice</i>	Not speech: matrix [coat]
<i>Pas l'autre: matériel</i>	Not the other: hardware [mouth]
<i>Pas l'histoire: matière</i>	Not history: content [shoes]
<i>Pas moi: maternité</i>	Not me: maternity [ashtrays]

Appendix 3: The Words of *Épreuves d'écriture*

<i>artificiel</i>	artificial
<i>auteur</i>	author
<i>capture</i>	capture
<i>code</i>	code
<i>confins</i>	confines
<i>corps</i>	body
<i>dématérialisation</i>	dematerialization
<i>désir</i>	desire
<i>droit</i>	law
<i>écriture</i>	writing
<i>espace</i>	space
<i>façade</i>	facade
<i>flou</i>	blur
<i>geste</i>	gesture
<i>habiter</i>	habitation
<i>image</i>	image
<i>immortalité</i>	immortality
<i>improbable</i>	improbable
<i>interaction</i>	interaction
<i>interface</i>	interface
<i>langage</i>	language
<i>lumière</i>	light
<i>matière</i>	content (matter)
<i>matériau</i>	raw material
<i>matériel</i>	hardware
<i>matrice</i>	matrix
<i>maternité</i>	maternity
<i>méandre</i>	meander
<i>mémoire</i>	memory
<i>métamorphose</i>	metamorphosis
<i>miroir</i>	mirror
<i>monnaie</i>	money
<i>multiple</i>	multiple
<i>mutation</i>	mutation
<i>nature</i>	nature
<i>naviguer</i>	navigate
<i>ordre</i>	order
<i>preuve</i>	proof
<i>prothèse</i>	prosthesis
<i>réseau</i>	network
<i>séduire</i>	seduce

sens

signe

simulation

simultanéité

souffle

temps

traduire

vitesse

voix

sense

sign

simulation

simultaneity

breath

time

translate

speed

voice

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Andreas Broeckmann
The Making of *Les Immatériaux*

The exhibition *Les Immatériaux* took place at the Centre Pompidou in Paris in 1985. Curated by Jean-François Lyotard and Thierry Chaput, it is widely regarded as a landmark in postmodern philosophy and discourses around art, science, and digital culture. *The Making of Les Immatériaux* provides the first comprehensive account of the preparations, detailing how the exhibition emerged from collaborations in such diverse fields as contemporary art, architecture, science, and network media. Giving behind-the-scenes insight into the curatorial process, the book highlights the cooperation among a wide array of professionals involved in the conception of the exhibition, including Lyotard, Chaput, the team at the Centre de Création Industrielle, and the artists, theorists, and scientists they consulted.

Broeckmann explores the lasting impact of *Les Immatériaux* on the organization and design of interdisciplinary exhibitions, emphasizing current debates on materiality, immateriality, subjectivity, and thinghood. He shows how *Les Immatériaux* continues to offer a significant contribution to debates that have become ever more urgent.

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