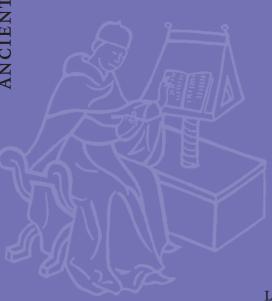
Plotinus on Individuation

A Study of Ennead V. 7 [18]

Text, Translation, and Commentary by Ina Schall



LEUVEN UNIVERSITY PRESS

PLOTINUS ON INDIVIDUATION A STUDY OF ENNEAD V. 7 [18]

ANCIENT AND MEDIEVAL PHILOSOPHY

DE WULF-MANSION CENTRE Series I

LXVII

Editorial Coordinator Russell Friedman

Editorial Board

Lisa Devriese Pieter d'Hoine Jan Opsomer Jenny Pelletier Andrea Robiglio Carlos Steel Gerd Van Riel

Advisory Board

Brad Inwood, Yale University, USA
Jill Kraye, The Warburg Institute, London, United Kingdom
John Marenbon, University of Cambridge, United Kingdom
Lodi Nauta, University of Groningen, The Netherlands
Timothy Noone, The Catholic University of America, USA
Robert Pasnau, University of Colorado at Boulder, USA
Martin Pickavé, University of Toronto, Canada
Pasquale Porro, Università di Torino, Italy
Geert Roskam, KU Leuven, Belgium

The "De Wulf-Mansion Centre" is a research centre for Ancient, Medieval, and Renaissance philosophy at the Institute of Philosophy of the KU Leuven,
Kardinaal Mercierplein, 2, B-3000 Leuven (Belgium).
It hosts the international project "Aristoteles Latinus" and publishes the "Opera omnia" of Henry of Ghent and the "Opera Philosophica et Theologica" of Francis of Marchia.

PLOTINUS ON INDIVIDUATION A STUDY OF *ENNEAD* V. 7 [18]

Text, Translation, and Commentary

by Ina Schall This publication has received support from the KU Leuven Fund for Fair Open Access, and has been accomplished within the framework of the ERC project PlatoViaAristotle (AdG 885273)



Published in 2025 by Leuven University Press / Presses Universitaires de Louvain / Universitaire Pers Leuven. Minderbroedersstraat 4, B-3000 Leuven (Belgium).

© Ina Schall, 2025

This book is published under a Creative Commons CC BY-NC-ND 4.0 International License: https://creativecommons.org/licenses/by-nc-nd/4.0/



Attribution should include the following information:

In a Schall, *Plotinus on Individuation: A Study of Ennead V. 7 [18], Text, Translation, and Commentary.* Leuven: Leuven University Press, 2025. (CC BY-NC-ND 4.0)

ISBN 978 94 6270 442 8 (Hardcover) ISBN 978 94 6166 596 6 (ePDF) ISBN 978 94 6166 597 3 (ePUB) https://doi.org/10.11116/9789461665966 D/2025/1869/4 NUR: 732

Cover: Geert de Koning Typesetting: Crius Group



TABLE OF CONTENTS

Ac	knov	vledgements	1
PA	RT I.	INTRODUCTION: STRUCTURE, CONTENT, AND CONTROVERSIES	
		OF V. 7 [18]	3
1.	Ind	ividuation, embryology, and transmigration in Plotinus	5
2.	Cla	rification of key terms	13
	a)	Individual/individuals (kathekaston/kathekasta)	13
	b)	Forming principles (logos/logoi)	16
3.	The	e style of V. 7 [18] and its place within the <i>Enneads</i>	27
	a)	Difficulties in writing style and argument	27
	b)	V. 7 [18] and the Fifth Ennead	30
	c)	V. 7 [18] and the chronological order of Plotinus' treatises	31
4.	Str	ucture and fundamental topics in V. 7 [18]	33
	a)	Plotinus' theory of individuals and logoi	37
	b)	Logoi in the doctrine of transmigration	38
	c)	Plotinus' embryology	39
	d)	Stoic influence in V. 7 [18]	40
5.	For	ms of individuals in Plotinus? A lengthy debate	45
	5.1	Three readings of V. 7 [18]	45
	5.2	First reading: V. 7 [18] is about Forms of sensible individuals	49
		a) Heinemann, Trouillard, Harder, Rist	50
		b) Blumenthal, Mamo, Rist	53
		c) Struggling with the doctrine of transmigration	56
		d) Graeser, O'Meara, Petit, Stern-Gillet, Sikkema	58
	5.3	Second reading: V. 7 [18] is about Forms of intelligible individuals	
		(Form-Intellects and soul-Forms)	61
		a) Armstrong, Gerson	62
		b) Kalligas, Ferrari, Tornau	63
	5.4	Third reading: V. 7 [18] is about <i>logoi</i> of sensible individuals	66
		a) Vassilopoulou, Remes, Aubry, Wilberding	67
	5.5	Summary of the scholarly debate	71

PA	RT II. SYNOPSIS, GREEK TEXT, AND TRANSLATION	75
1.	Synopsis	77
2.	Greek text of V. 7 [18]	83
	a) Consulted editions, translations, and commentaries	83
	b) Dictionaries	84
	c) Remarks on Plotinus' works and style	84
3.	Ennead V. 7 [18]	85
4.	English translation	89
PA	RT III. COMMENTARY	93
1.	V. 7 [18] 1: Principles of individuals – Forms or <i>logoi</i> ?	95
2.	V. 7 [18] 2: Embryology – How are $logoi$ passed on from parents to offspring?	163
3.	V. 7 [18] 3: Do seemingly identical individuals actualise the same	
	logoi-combination?	215
D:1	ali a zwa why	
DII	oliography 1. Editions and Translations	239 239
	2. Secondary Literature	239 242
		242
Ind	dex Locorum	259
Ind	dex of Names and Subjects	265

ACKNOWLEDGEMENTS

This book was originally submitted as a doctoral dissertation, which was made possible thanks to generous funding from the a.r.t.e.s. Graduate School for the Humanities Cologne at the University of Cologne and the Marie Skłodowska-Curie Actions. I would like to express my sincerest gratitude to my esteemed supervisors, Christoph Helmig and Matthias Vorwerk, for their invaluable support and guidance throughout my doctoral studies. In particular, I would like to extend my heartfelt thanks to Christoph Helmig for his patient and insightful responses to my inquiries, and to Matthias Vorwerk for his warm welcome during my year-and-a-half stay at the Catholic University of America.

I furthermore want to thank the entire a.r.t.e.s. team for enabling the stress-free completion of my thesis, as well as the a.r.t.e.s. Class 6, whose members and tutors, especially Sven Bernecker and Stephan Packard, enriched my research with ever-incisive discussion. I would also like to thank the reviewers from Leuven University Press — one anonymous reader and Damian Caluori. Their thorough reviews and valuable comments have greatly improved the quality of this book.

The completion of this book would not have been feasible without the invaluable support of the members of the Editorial Board of the Ancient and Medieval Philosophy Series 1 (Leuven University Press), namely Jan Opsomer, and Russell Friedman, and the team of Leuven University Press. The support of the KU Leuven Fund for Fair Open Access was instrumental in bringing this work to fruition. Furthermore, the publication of this book has received the generous support of the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme through the ERC Advanced Grant 'Not another History of Platonism', grant agreement no. 885273 (https://hiw.kuleuven.be/dwmc/research/not-another-history-of-platonism). I would like to express my profound gratitude to Jan Opsomer, the principle investigator of this ERC project, for his warm hospitality during my year at KU Leuven and his substantial support in the publication of the book.

Finally, this study would not have been possible without the generosity and support of my parents and fiancé, who have been unstintingly kind and encouraging throughout.

Part I.

Introduction: Structure, Content, and Controversies of V. 7 [18]

1. INDIVIDUATION, EMBRYOLOGY, AND TRANSMIGRATION IN PLOTINUS

Over the past century, no treatise by Plotinus has triggered as intense and sustained a debate as V. 7 [18], 'On the question of whether there are also Forms of individuals'.¹ In this treatise, Plotinus is believed to postulate a theory of individuation that stands out as markedly unorthodox within the Platonic tradition, capturing the interest of scholars.² Specifically, this involves the proposition that, in addition to the universal Platonic Forms of genera and species, there exist Forms of sensible individuals. Unlike traditional Platonic Forms, such as the universal Form of Human Being, which applies to all individuals within that category, the Form of an individual pertains solely to that *specific* person, defining his or her unique characteristics and physical individuality. For instance, the Form of Socrates (*Autosôkratês*) applies solely to Socrates, causing his particular appearance, unity, and uniqueness. This implies that the principles governing Socrates' bodily properties and personality traits reside within the universal Intellect.³

The theory of Forms of individuals has been hailed by some scholars as a 'radical innovation' and 'extension' of Plato's theory of Forms.⁴ Yet, should it indeed be the case that Plotinus advocated this theory, then one must acknowledge him as a singular figure within the history of Platonism advocating for such a doctrinal stance. Indeed, Forms of individuals are controversial within Platonic philosophy, leading scholars to propose various interpretations of how they should be understood in V. 7 [18].⁵ The Form of Socrates, for example, challenges the Platonic dogma that there are only Forms of genera and species, such as the Form of Human Being. Forms of individuals would, one may say, basically reduplicate the world. There would

¹ Conventionally, references to the *Enneads* use a numerical format: for example, V. 7 [18] 1, 6–8 denotes the fifth *Ennead*, seventh treatise (which is treatise number 18 in Porphyry's chronological ordering of Plotinus' writings), chapter one, lines six to eight. Regarding the placement of V. 7 [18] within the *Enneads*, see Chapter 3 on pp. 27–32.

² '[I]ndividuation, (1) in metaphysics, a process whereby a universal, e.g. *cat*, becomes instantiated in an individual – also called a particular, e.g. Minina; (2) in epistemology, a process whereby a knower discerns an individual, e.g. someone discerns Minina. The double understanding of individuation raises two distinct problems: identifying the causes of metaphysical individuation and of epistemological individuation. In both cases the causes are referred to as the *principle of individuation*. Attempts to settle the metaphysical and epistemological problems of individuation presuppose an understanding of the nature of *individuality*. Individuality has been variously interpreted as involving one or more of the following: indivisibility, difference, division within a species, identity through time, impredicability, and non-instantiability. In general, theories of individuation try to account variously for one or more of these' (Gracia, 2019: 507).

³ Compare Remes (2007: 60).

⁴ Rist (1963: 223), Gerson (1994: 67).

 $^{^5}$ To summarise briefly, there are three different readings as to what is at issue in V. 7 [18]: (1) V. 7 [18] is about Forms of sensible individuals; (2) V. 7 [18] is about individual intellects, or about undescended soul parts; or (3) V. 7 [18] is about forming principles (*logoi*) of sensible individuals and their properties. A detailed discussion of the three different readings of V. 7 [18] is given in Chapter 5 on pp. 45–73.

thus be individuals in the intelligible world (the realm of Being) and in the sensible world (the realm of Becoming), and, as Aristotle has pointed out, the connection between these ontologically distinct worlds is unclear. Moreover, the assumption that there are Forms of individuals alongside universal Forms risks introducing a troubling surfeit of Forms into the intelligible world. Another problem is that the Form of Socrates, in which only one individual participates, is instantiated only ephemerally in the sensible world and enjoys no other obvious use after and before.

Owing to the controversiality, V. 7 [18] has become one of the best-known and most-discussed texts in the scholarship on Plotinus, primarily due to its engagement with Forms of individuals. This makes it all the more surprising that there exists no running commentary on V. 7 [18].8 This may stem from the fact that Forms of individuals are not the focus of the treatise. On the contrary, Plotinus only mentions the issue of Forms of individuals in the opening lines of V. 7 [18].9 The term 'Form' (*idea*) appears just once, albeit in the treatise's very first sentence. Accordingly, most studies of the treatise concentrate on the first half of the opening chapter, while the rest is examined much less thoroughly. This results in an incomplete, and highly unrepresentative, understanding.

Unfortunately, since most research on V. 7 [18] has focused on the Forms of individuals, the other interesting aspects of the treatise have been largely overlooked. ¹⁰ Indeed, the treatise makes important contributions to many of the difficult philosophical cornerstones of the Platonic and Neoplatonic tradition. Plotinus dis-

⁶ Plato's division of reality into two realms in the *Timaeus* is foundational to understanding the philosophical challenges mentioned. He describes the intelligible realm as 'that which always is and has no becoming', and the sensible realm as 'that which becomes but never is' (*Tim.* 27c–28a, translated by D.J. Zeyl). This distinction is crucial as it illustrates the separation between the unchangeable, eternal Forms and the ever-changing material world, thus complicating the link between these ontologically distinct worlds as noted by Aristotle.

⁷ Aristotle criticises the Platonic doctrine of Forms on several occasions. He cannot see what Forms could contribute to the sensible objects which are their copies, or how the Forms, which are the substances of sensible objects can 'exist in separation from them.' For Aristotle, speaking about the Forms and their copies is just as using 'empty phrases and poetical metaphors' (*Metaph.* I 991 a8–b20, translated by H. Tredennick). Consider also *Metaph.* XIII 1079b12–1080a8.

⁸ In August 2024, following the completion of this volume, Roberto Zucchi's *Plotino – Se esistino idee di particolari V 7[18]* was published by Pisa University Press. This work features a translation accompanied by an extensive introduction and commentary on treatise V. 7 [18], rendered in Italian. Unfortunately, due to the timing of its release, I was unable to engage with Zucchi's study in the present book. Nonetheless, Zucchi's sustained engagement with the treatise, culminating in a comprehensive 448-page analysis, underscores the enormous philosophical potential of V. 7 [18] and its pivotal role within the Platonic tradition – a dimension that has, until now, been insufficiently examined in existing scholarship.

⁹ Compare Gerson (1994: 64) and Kalligas (1997a: 208–209).

Remes (2007: 59): 'The question as to what makes human particulars individuals has, in Neoplatonic scholarship, been discussed as an aspect of the question whether Plotinus postulated forms of individuals or the so-called soul-forms.' Vassilopoulou (2006: 371): 'To the exclusion of almost all other possibilities, the question of individuality has been framed in terms of whether there are Forms of individuals – a Form of Socrates, say – within the Hypostasis *Nous*.' Aubry (2008: 271): 'La discussion du problème de l'individu chez Plotin s'est concentrée pour une grande part autour de la question de

cusses, for instance, the principles of individuation, the doctrine of transmigration of souls, the theory of cosmic cycles, the theory of biological heredity (embryology), and the premise that all individuals — even identical twins — are truly unique. In fact, I would argue that the question of the Forms of individuals is only a marginal problem in V. 7 [18]. The real interest in this treatise lies in its focus on the questions of embryology and the uniqueness of individuals.

Rather than postulating Forms of individuals, Plotinus resolves the aforementioned problems by introducing rational forming principles (logoi in pl. and logos in sg.), which are, in turn, images/copies of the transcendent Forms. 12 These logoi are creative principles in the soul that interact directly with, structure, and impart properties on matter similar to Aristotelian immanent forms. Unlike Plato, who posited that Forms (ideai) exist in a separate, non-physical realm of their own, Aristotle argued that forms are immanent, meaning they exist within the objects themselves and are inseparable from them. Aristotle believed that the form of an object is an intrinsic part of it, determining its nature and characteristics. This means that form and matter are considered coequal and interdependent; neither exists without the other. This relationship is a key element of what is known as hylomorphism, a theory that all things are composed out of matter (hylê) and form (morphê). The form is what makes a particular substance the kind of thing it is its essence or 'whatness' (to ti ên einai). According to Aristotle, Forms should be understood as immanent, because the Form of the Human Being, for instance, is the substance of, for example, Socrates, and the cause of Socrates being a human being (Metaph. VII 1031b3-31). In Plotinus' thought, the logoi serve a similar function to immanent forms in Aristotelian theory as they are principles that bring about individuation and specification – essentially, they define what a particular thing is. Both Aristotelian forms and Plotinian *logoi* provide the defining features that make entities distinct from one another within the cosmos.

Furthermore, Plotinus emphasises that matter cannot be the *principium individuationis*: that is to say, matter cannot be the cause of sensible individuals and their unique properties.¹³ The constitution of individuals is, according to Plotinus, exclusively due to intelligible causes, the *logoi*, which is a characteristically Neopla-

savoir si, oui ou non, les *Ennéades* admettent l'existence de Formes des Individus. Elle prend souvent la forme d'une exégèse du traité 18 (V, 7).'

[&]quot;' *Embryology*, the study of the formation and development of an embryo and fetus.' At: https://www.britannica.com/science/embryology. The present book will deal extensively with Plotinus' embryology in V. 7 [18] and elsewhere (III. 1 [3] 1, 32–36; III. 6 [26] 19, 17–41; III. 8 [30] 7, 18–27; IV. 3 [27] 7, 20–31; IV. 7 [2] 5, 43–52) on pp. 163–203. Recently, there has been a surge of interest in Neoplatonic embryology. Of particular importance is James Wilberding's 2017 monograph *Forms, Souls, and Embryos – Neoplatonists on Human Reproduction*, which discusses embryological texts by Neoplatonists such as Porphyry, Proclus, and Philoponus. Although Plotinus can be seen as the father of Neoplatonic embryology, V. 7 [18] receives only sporadic treatment from Wilberding.

See the discussion on logoi on pp. 16–26 and their relation to the Forms on p. 19.

¹³ V. 7 [18] 2, 13–18. See also Kalligas (2011: 765–766).

tonic approach.¹⁴ Throughout this study, I contend that Plotinus dismisses the idea that a singular principle (i.e. one Form or one *logos*) produces an individual with all its attributes. Rather, it is such that an individual with many peculiar properties like Socrates is produced by a complex combination of different *logoi* unified into one system.

Platonism had until this point lacked a coherent theory of sensible individuals, and thus had no systematic explanation of how individuals are constituted. This theoretic deficiency had been strongly criticised by the Peripatetic school, which reproached Plato for undermining the status of material realities. It may have been this criticism which drove Plotinus to postulate *logoi* as the principles of individuation, in order to remedy this major deficiency of Platonism. Unlike Forms of individuals, *logoi* can easily be integrated into the Platonic system; thus, individuals and their properties finally had a proper place in Platonism, which is a great achievement that must be credited to Plotinus.

The aim of the present study is an overall assessment of Plotinus' treatise V. 7 [18]. To this end, I shall provide a new translation and the first running commentary in English. Throughout my analysis, I argue that the principles of individuals and their individual properties are the rational forming principles (*logoi*). As I shall demonstrate, the philosophical potential of V. 7 [18] is not exhausted by the sole question of whether Plotinus postulates Forms of individuals. Crucially, Plotinus' argument substantiates his metaphysics of sensible individuality by means of a theory of biological heredity. Moreover, he finds a way of reconciling the doctrines of transmigration and biological heredity by connecting them within a metaphysics of individuality. Reconciling these two doctrines had been a major challenge for ancient philosophers since Pythagoras. Plotinus' concept of individuality thus

What I have called the Neoplatonic premise is the following statement: 'Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world].', (V. 7 [18] 1, 1-3). On Neoplatonic premise see pp. 97-98; pp. 130-131. Unless indicated otherwise, the translation of V. 7 [18] is always my own.

¹⁵ See Rist (1963: 229), Kalligas (1997a: 215–216).

There are two notable Italian commentaries on the subject. The first, an earlier and relatively concise commentary by Ferrari (1997), places central emphasis on the problem of the Forms of individuals. Ferrari interprets all the issues addressed in V. 7 [18] as relating fundamentally to the problem of the Forms of individuals. In contrast, Zucchi's most recent and comprehensive commentary, published in 2024, largely sidesteps the discussion of Forms of individuals. Instead, Zucchi's analysis concentrates on the Stoic and Aristotelian theoretical elements within V. 7 [18] and engages in a close reading of this treatise alongside the treatises VI. 1–3 [42–44], *On the Genera of Being.*

Being a faithful follower of Plato, Plotinus integrates the doctrine of transmigration as a substantial part of his metaphysics. Although a few scholars (Inge, 1929; Pisterious, 1952; Smith, 1984) claim that Plotinus did not take the doctrine of transmigration seriously, most scholars (Rich, 1957; Rist, 1963: 227; Blumenthal, 1966: 79; Armstrong, 1977: 64-66; Stamatellos, 2013) agree that Plotinus believed in it deeply. This is attested by many passages from the *Enneads* (I. 1 [53] 11, 9–15; III. 2 [47] 15, 14–31; III. 4 [15] 2, 12–24). Plotinus even held that it is possible for souls to transmigrate not only into human and animal bodies, but also into plant bodies (III. 4 [15] 2, 12–24). On transmigration in Plotinus, see Rich (1957), Cole (1992), Stamatellos (2013), and Karamanolis (2020).

has great relevance and innovative potential for the whole of ancient thought. The central position of the doctrines of transmigration and biological heredity within Plotinus' theory of individuality has yet to be acknowledged in the scholarly debate. With this in mind, the aim of the present book is to offer a comprehensive exegesis of V. 7 [18] as a whole in order to understand Plotinus' conception of individuals and their principles, not just in the opening chapter, but throughout the entire treatise.

When considering the principles of individuality within the context of the Platonic theories of biological heredity and the transmigration of souls, two general difficulties arise. First, it is unclear why individuals inherit certain features of their appearance or personality from their parents when the soul is supposed to be the primary cause of bodily form. Second, there is the question of how individuality can be constituted within the framework of the transmigration of souls. Assuming that individuals as different as Pythagoras and Socrates have the same soul, what, then, is the cause of their individuality? What are the principles that cause their individual physical features and character traits? On the other hand, if Socrates and Pythagoras have the same soul, the two individuals should have at least something in common, perhaps a particular character trait or talent.

The question of the relationship between biological heredity and individuality was not merely a problem for philosophers. Because ancient physicians had not yet discovered the ovum, there was disagreement as to whether the female, like the male, contributed semen during procreation. Aristotle, for instance, believed that the female contributed only impure menses, calling the female a deformed male and an infertile male (*GA* 737a25–30; *GA* 728a18–21, translated by A.L. Peck). It was therefore commonly assumed that the reproductive function of the female was inferior to that of the male, and that in providing the semen, the male not only generated and formed the embryo, but also animated and ensouled it. This theory, however, was unable to account for numerous fundamental phenomena, for example the similarity between mothers and their children, and the emergence of the female sex more generally.

¹⁸ The ovum (egg) was first discovered in the nineteenth century by the anatomist Karl Ernst von Baer, who described his discovery of the mammalian ovum in his *De Ovi Mammalium et Hominis Genesi* ('On the Mammalian Egg and the Origin of Man') in 1827.

¹⁹ Aristotelian embryology is largely treated in *Generation of Animals* (*GA*), which has been the subject of controversy in recent research. In *GA*, Aristotle speaks negatively of the female sex, saying that females are 'infertile males', a 'natural mutilation', and that the male sex is the 'most natural', leading to the conclusion that the female sex 'is a result of a defective teleological process' (Gelber, 2018: 171). While Mayhew (2004), Connell (2016), and Nielsen (2008) accuse Aristotle of biological sexism, Henry (2006a, 2006b, 2007), de Ribera-Martin (2018), and Gelber (2018) counter this widespread view by emphasising the female contribution to reproduction in Aristotelian embryology. A recent volume on Aristotle's *Generation of Animals* is Föllinger & Busch (2020). For a comprehensive comparison of Plotinus' and Aristotle's perspectives on embryology, refer to the detailed analysis on pp. 167–191; 196–197; pp. 219–221.

In Neoplatonism, by contrast, we find a 'revolutionary embryology', which attempts to solve the difficulties outlined above. 20 Thus, in contrast to Aristotle, the Neoplatonists attribute a greater role in heredity to females. According to Wilberding (2015a: 323), Neoplatonists not only restored a balance between the male and female in terms of biological reproduction and heredity, but they went so far as to 'identify the female rather than male as the immediate active cause of reproduction', crediting the female 'with leading the seminal principles from a state of potentiality to a state of actuality.' Both females and males are considered equally as the formal causes of their offspring, which explains why children can resemble the mother as well as the father. The foundation of the Neoplatonists' 'revolutionary embryology' are rooted in Plotinus' treatise V. 7 [18]. According to Plotinus' embryology, the female has the same power of procreation as the male. In contrast to earlier philosophers and physicians, who derived their knowledge of embryological matters from empirical observations, Plotinus grounds his embryology primarily on metaphysical considerations. He suggests that the inheritance of properties and the formation of embryos take place at the level of the Soul. Parents pass on to their children the intelligible principles, the *logoi*, of their bodily properties, which are stored in their souls. But the similarity of a child to either parent is not the result of one parent passing on more logoi than the other (V. 7 [18] 2, 8-11). In fact, Plotinus emphasises that both parents pass on the same amount of logoi (V. 7 [18] 2, 11–12). Whether the child resembles the mother or the father depends on which *logoi* come to dominate the biological heredity (V. 7 [18] 2, 12–13). If the logoi of the mother dominate, the child will show more similarities with the mother; if the father's logoi dominate, the child will resemble the father. Notably, the terms 'dominating' and 'dominant logoi' are quite analogous to the idea of dominant genes or traits in the Mendelian genetics.

On the basis of *logoi*, Plotinus can also explain how individuals are constituted within the framework of transmigration. In V. 7 [18], *logoi* are defined as intelligible principles of all existing properties. Plotinus emphasises that the soul of each individual possesses all the *logoi* that exist in the universe (V. 7 [18] 1, 9–10).

In recent scholarship on Neoplatonism, there has been a great deal of interest in the perceptions and conceptions of women and the female/feminine in metaphysics, biology, ethics, and politics. The general impression is that, compared to other philosophical schools of the pre-modern world, the Neoplatonists regarded the status of women as broadly equivalent to that of men in many areas. Plotinus is increasingly seen as a valuable source for feminist research and work in philosophy, religion, and pedagogy. Cooper (2007: 78) has identified some 'areas of common ground between Plotinus' thought and an active and contemplative feminist spirituality.' Also Layne (2021: 304) observes that 'that there is certain feminine and even queer power haunting the *Enneads* [i.e. the works of Plotinus].' See feminist scholars writing on the role of the female/feminine/women in Plotinus: Irigaray (1985a, 1985b), Brisson (2006), Cooper (2007), Vassilopoulou (2010), Cambron-Goulet & Côté-Remy (2021), Layne (2021, 2022), Michalewski (2021), Schultz (2021). See feminist scholars discussing the role of women in Ancient Philosophy: Spelman (1982), Lloyd (1984), Grimshaw (1986), James & Dillon (2012), Addey (2018), Schultz (2019), Chouinard et al. (2021).

Some of these *logoi* are actualised by the soul of the individual, while others are not, i.e. some *logoi* manifest themselves in the individual's phenotype while others are present in an inactive form.²¹ In other words, a soul actualises only those logoi which constitute that specific individual – their bodily features and character traits – which the soul ensouls during its incarnation on earth. For example, when a soul is reborn as Socrates, the soul begins to actualise the 'Socratic' logoi, i.e. the logoi which produce the peculiar properties of Socrates, such as the snub nose and the blue eyes, etc.22 When Socrates dies and his soul transmigrates into another body, his soul stops actualising the 'Socratic' logoi and starts actualising a new set of logoi (or 'logoi-combination', as I will call it for the rest of book) relating to the new individual. Sensible individuals 'have a particular organisation of properties', and a logoi-combination is the intelligible plan for that organisation of properties.²³ Plotinus stresses that each individual – even an identical twin²⁴ – is produced by a unique logoi-combination.25 Thus, by actualising different logoi-combinations at each incarnation, one and the same soul can be reborn as different individuals (such as Pythagoras and Socrates) at different times. In this way Plotinus offers a solution to the problem of how it is possible for a soul to retain its identity and yet be reborn as different individuals.

Against the background of this understanding of transmigration and individuation, we must ask what is the principle or mechanism that determines which *logoi* a soul will actualise in its next incarnation. The answer to this question is again the innovative embryology of Plotinus, according to which the father and the mother pass on their *logoi* to their children. The soul of the child now actualises the *logoi* that proved to be dominant in the heredity (V. 7 [18] 2, 8–13). Plotinus' embryology based on *logoi* shows a similarity to the twenty-three chromosomes from modern studies of heredity (genetics), and the notion of dominant *logoi* strongly resembles Mendel's model of dominant and recessive traits in heredity.²⁶

²¹ 'Phenotype, all the observable characteristics of an organism that result from the interaction of its genotype (total genetic inheritance) with the environment. Examples of observable characteristics include behaviour, biochemical properties, colour, shape, and size.' At: https://www.britannica.com/science/phenotype.

²² V. 9 [5] 6, 13–14; V. 9 [5] 12, 9–10; II. 6 [17] 1, 30–43.

Remes (2007: 54), Kalligas (2011: 763–764). Kalligas refers to the passage at VI. 3 [44]8. 20, where Plotinus speaks of 'a sensible substance [as] a conglomeration ($symphor\hat{e}sis$) of qualities and matter.'

²⁴ 'Twin, either of two young who are simultaneously born from one mother. Twinning, common in many animals, is of two biological kinds: the one-egg (monozygotic), or identical, type and the two-egg (dizygotic), or fraternal, type.' At: https://www.britannica.com/science/twin.

 $^{^{25}}$ V. 7 [18] 1, 18–22; V. 7 [18] 3, 1–6. On the uniqueness of the individuals and the unique logoi-combinations, see pp. 154–158, 168–170, 176, 215–235.

²⁶ Mendel (1865: 3-47).

2. CLARIFICATION OF KEY TERMS

In V. 7 [18] the terms 'individual' (*kathekaston*, pl. *kathekasta*) and 'forming principle' (*logos*, pl. *logoi*) are central. Plotinus explains that a forming principle (*logos*) produces a certain property and that an individual, consisting of many different properties, is accordingly produced by a multitude of different forming principles (a *logoi*-combination). Further, Plotinus explains how *logoi* are biologically inherited by offspring from their parents. To begin, it will be helpful first to clarify what exactly is meant by 'individual' (*kathekaston*) and 'forming principle' (*logos*).

a) Individual/individuals (kathekaston/kathekasta)

The term *kathekaston* is used by Plotinus to signify what we would call 'the individual' or 'the particular'. A glance at the *Lexicon Plotinianum* (Sleeman, 1980) reveals that Plotinus employs this term when referring to members of a certain group such as 'particular living beings' (II. 3 [52] 16, 46), 'individual souls' (IV. 8 [6] 4, 1), and 'individual intellects' (IV. 8 [6] 3, 9), but also when referring to abstract things such as 'single subjects of study' (III. 9 [13] 2, 2) or 'individuality' in general (IV. 3 [27] 8, 25; V. 9 [5] 12, 5). Aristotle originally introduced the terminological distinction between the individual (*to kathekasta*) and the universal (*to katholou*): while 'individual' refers to a concrete object, 'universal' refers to the species or genus.²⁷ In V. 7 [18], the term *kathekaston* mainly exemplifies human individuals, such as 'I and every individual' (V. 7 [18] 1, 1–2), 'Socrates' (V. 7 [18] 1, 3), and 'Pythagoras' (V. 7 [18] 1, 7). But there are also some passages in which Plotinus uses this term to refer to each individual living being (*zôon*) (V. 7 [18] 1, 12) and to animals, 'who give birth to many cubs in a litter' (V. 7 [18] 3, 2–3; V. 7 [18] 3, 19).

There is disagreement among scholars as to what kind of individuals (*kathekaston*) Plotinus has in mind in V. 7 [18]. Some scholars argue that *kathekaston* does not refer to sensible individuals, but rather to intelligible entities, such as souls or intellects;²⁸ thus, some doubt that *kathekaston* includes animals.²⁹ In all, there are about three different readings of what the term *kathekaston* might mean in V. 7 [18], depending on how scholars understand the theory of Forms of individuals in Plotinus. The three options are: (i) *kathekaston* refers to sensible living beings (human and animal); (ii) *kathekaston* refers to individual human souls; and (iii) *kathekaston* refers generally to everything that can be identified as an individual, including humans, animals, and properties.

²⁷ Compare Tornau (2009: 339). Aristotle, *Metaph*. VII 1038b34–1039a7.

²⁸ Armstrong (1977), Gerson (1994), Kalligas (1997a), Tornau (2009).

²⁹ Mamo (1969), Gerson (1994), Kalligas (1997a).

The first reading, then, is that Plotinus postulates Forms of sensible human beings and animals in V. 7 [18]. According to this reading, Plotinus connects Forms of individuals with the Platonic doctrine of the transmigration of souls, which allows for the reincarnation of human souls into animal bodies. In V. 7 [18] Plotinus only discusses the case of a human being, e.g. Pythagoras, being reborn as another human being, e.g. Socrates, but there are numerous passages in the *Enneads* in which Plotinus asserts that human souls can also be reborn as animals. ³¹

Moreover, in the first chapter of V. 7 [18], Plotinus speaks of 'individual living beings' (V. 7 [18] 1, 12), indicating that his theory and principles of individuation apply not only to human beings but also to animals. In the third chapter (V. 7 [18] 3, 2–3; 19–21), he speaks explicitly of animals and says that every individual animal, even one born as part of a litter, is the product of a unique logoi-combination. Accordingly, the first option is that the term kathekaston can stand for both individual human beings and animals.³²

Like the first reading, the second reading champions the theory of Forms of individuals. But unlike the first, the second reading identifies Forms of individuals with the undescended soul (the theory of soul-Forms).³³ According to the second reading, there can only be Forms of individuals (*kathekasta*) possessing an intellect – which is only true for human beings. In the most recent translation of the *Enneads*, Gerson et al. (2018) choose to translate *kathekaston* as 'each individual', noting in the synopsis of V. 7 [18] that they mean by this 'each individual human being' (2018: 605). Since animals have no intellects, there can be no Forms of individual animals in the universal Intellect (*Nous*). In light of this conclusion, the doctrine of transmigration in V. 7 [18] poses a problem for the second reading. How can human intellects possibly transmigrate into animals that have no intellects? A way to reconcile the

³⁰ Heinemann (1921), Trouillard (1955), Harder (1956), Rist (1963), Blumenthal (1966), Arnou (1967), Rist (1970), Graeser (1996), Petit (1999, 2000), Stern-Gillet (2000), Sikkema (2009). I have classified Mamo (1969) and O'Meara (1999) under the first interpretation, although their perspectives differ. While both agree that Forms of individuals pertain to sensible human beings, Mamo does not include Forms of individual animals. In contrast, O'Meara suggests that according to Plotinus' theory in V. 7 [18], there should be Forms of not only all sensible living beings but also of things and properties. For a detailed discussion of the first reading see pp. 49–61.

³¹ I. 1 [53] 11, 9-15; III. 2 [47] 15, 14-31; III. 4 [15] 2, 12-24.

Rist (1963: 228): 'We have indicated already that it is only in this section that the theory of Forms of individuals is extended to cover animals, though we may note at this point that the theory of the transmigration of human souls into animal bodies probably demands it. In 5. 7. 3, however, Plotinus seems to treat individual animals in the same way as he treats individual humans. In 2, 18–20 he asks the question whether there are as many Reason-Principles [i.e. *logoi*] as there are animals born in a litter – and he answers this question in the affirmative. We should not be afraid, he says, to suppose that the Reason-Principles are numerically beyond limit. This is natural in the non-sensible realm. It is true to say, therefore, that by the end of *Ennead* 5. 7 Plotinus has come down firmly in favour of Forms corresponding to all individuals.'

³³ Cherniss (1944), Armstrong (1977), Helleman-Elgersma (1980), Gerson (1994), Kalligas (1997a), Ferrari (1997, 1998), Ousager (2004), Tornau (2009, 2010). For a detailed discussion of the second reading, which includes the theory of soul-Forms and Form-Intellects, see pp. 61–65.

second reading with the doctrine of reincarnation is, for instance, to argue that '[a] Form of Dog and a Form of Socrates would suffice for the reincarnation of Socrates as a dog. There would be no need for an additional Form of Fido.'34

Finally, the third reading argues that the principles of individuals (*kathekasta*) discussed in V. 7 [18] are not primarily Forms, but rational forming principles (*logoi*).35 Indeed, the term *logos* (pl. *logoi*) seems to be central to the whole treatise. Based on the *logoi*, Plotinus elucidates the mechanisms of reincarnation, embryology, and the general phenomenon of individuality and uniqueness. In doing so, he refers to *logoi* as principles that cause individuals and their individual properties. In discussing the *logoi*, Plotinus first considers humans, then animals, and finally differences (*diaphora*). So there is no need for different principles for human individuals on the one hand and animals or plants on the other, and still other principles for properties. For the causation of all these things *logoi* seem to be sufficient. Indeed, there are many passages in the *Enneads* in which Plotinus describes *logoi* as creative powers of nature (IV. 3 [27] 11, 8–13), responsible for creating all living beings (III. 2 [47] 4, 18–20), plants (III. 8 [30] 2, 27–30), and properties (II. 6 [17] 1, 41–43).36

When we consider the content of V. 7 [18] as a whole, it becomes clear that individual intellects and Platonic Forms are not the central theme. Instead, the treatise delves into the complexities of biological heredity. It explores the principles underlying individual living beings and their unique properties, the mechanisms driving biological inheritance, the reasons behind differences between siblings, and the nature of identical twins.³⁷ These issues form the core of Plotinus' inquiry in V. 7 [18].

In this context, the term *kathekaston* must therefore refer to living beings – humans and animals – as well as to their distinctive properties. I will generally use the term 'individual' when translating *kathekaston* because it aptly captures the essence of uniqueness and specificity. The term 'individual' effectively encompasses the diversity of entities discussed in the treatise, from single living beings to their particular characteristics.

³⁴ Gerson (1994: 66)

³⁵ D'Ancona Costa (2002), Nikulin (2005), Sorabji (2006c), Vassilopoulou (2006), Remes (2007, 2008), Aubry (2008), Volkova (2015), Wilberding (2017). For a detailed discussion of the third reading see pp. 66–71.

 $^{^{36}}$ In their discussion of V. 7 [18], Remes and Aubry offer comprehensive explanations of the *logoi* in Plotinus. They point out that the theory of individuals presented by Plotinus in V. 7 [18] fits well with his passages on the *logoi* in the *Enneads*. See Remes (2007: 68–76) and Aubry (2008: 273–285).

 $^{^{37}\,\,}$ For Plotinus, identical twins are not truly identical – they just seem to look identical. He argues that each individual is unique, but in some cases 'we are unable to perceive the difference' (V. 7 [18] 3, 11–12).

b) Forming principles (logos/logoi)

The concept of *logos* (pl. *logoi*) is fundamental to Plotinus' metaphysics.³⁸ *Logos* as principle is present on all levels of being (except the One), in the sense 'that a lower principle is a *logos* (i.e., expression or image) of a higher.'³⁹ This relationship between principles is understood to be causal, ontological, and epistemological:

As the spoken word (*logos*) is an imitation of that in the soul, so the word [i.e. *logos*] in the soul is an imitation of that in something else: as the uttered word, then, is broken up into parts as compared with that in the soul, so is that in the soul as compared with that before it, which it interprets (I. 2 [9] 3, 27–30, translated by A.H. Armstrong).

In V. 7 [18], the term *logoi* is used in the sense of rational forming principles, which exist on the level of the Soul. These forming principles interact directly with matter by imparting on it a particular form:

And if corporeity was a formative principle (*logos*): which by its coming to matter makes body, obviously the formative principle includes and contains all the qualities. But this rational principle, on the assumption that it is not a sort of definition which declares the nature of the thing but a rational principle which makes a thing, cannot include the matter but must be a principle in relation with matter which enters matter and brings the body to perfection, and the body must be matter and a rational principle present in it, but the rational principle itself, since it is a form, must be contemplated bare, without matter, even if it is itself as inseparable as it can be from matter. For the separated form is a different one, that which is in intellect: and it is in intellect because it is intellect itself (II. 7 [37] 3, 6–15, translated by A.H. Armstrong).

According to this text, corporeity is a rational forming principle, i.e. a *logos*. It is involved in the formation of bodies and encompasses all the qualities associated with the formation of bodies. The intelligible *logos* exists independently from matter and must engage with it, by entering it in a way and perfecting it. This indicates a process whereby the immaterial (*logos*) and material (body) are distinct yet intimately connected, with the former acting upon the latter to achieve a state of perfection, implying that a body consists of both matter and the rational forming principle, working together. Importantly, the text states that the *logos* should be 'contemplated bare without matter, even if it is itself as inseparable as it can be

³⁸ There are many studies on Plotinus' concept of *logos / logoi*: Rist (1967b: 84–102), Turlot (1985), Emilsson (1988), Kalligas (1997b, 2011), Fattal (1998), Brisson (1999), Brisson (2000), Fattal (2003), Remes (2007: 68–76), Aubry (2008: 273–285), Brisson (2009), Chlup (2012), Helmig (2012: 184–204), Gerson (2012), Fattal (2014), Emilsson (2017: 31–32, 45–48), Hutchinson (2018: 99–112).

 $^{^{39}}$ See Gerson (2012: 17). Compare also Hutchinson (2018: 105). Emilsson (2017: 46) summarises the relationship between principles – that a lower principle is the *logos* of a higher one – according to the following formula: 'The *logos* of X is something that expresses the content of X but in a more detailed and explicit form than this content has in X itself.'

from matter'. This suggests that a *logos* has structural similarities with a definitional formula accounting for the essence of a thing (very much in the Aristotelian sense of a *logos*). Accordingly, the *logos* is not just an external shaper but intrinsically contains all the characteristics that define the body, suggesting an immanent rather than a purely transcendent forming principle. However, while a definition explains what a thing is, the text asserts that the rational forming principle actually brings a thing into being. The text emphasises that the function of *logos* goes beyond being a mere definitional tool. Rather, it is 'seen as the principle governing the arrangement of the qualities constituting the body, in accordance with the pattern exhibited by the definition of each thing' (Kalligas, 2011: 771).⁴⁰ This suggests that the *logos* is not merely a definitional formula or blueprint of a thing but an active, creative force that moulds and organises matter by imposing its intelligible form on it, thus producing and individuating sensible entities. By penetrating and organising every bit of matter, whether it is a living being, an artefact, or inanimate natural phenomena like rocks, clouds, or snow, *logoi* are the causes of everything that comes into existence.⁴¹

Emilsson (2017: 47) emphasises that the notions 'form' and 'logos' are closely related, often appearing to denote the same thing. He notes that the association of these terms can be traced back to Aristotle. There exists, however, a significant difference: 'whereas logos seems to be restricted to the intelligible sphere in the broadest sense, including all levels of soul, Plotinus is willing to speak of sensible qualities and shapes as forms in matter or corporeal forms' (Emilsson, 2017: 47). The close connection between form and logos likely influenced the adoption of 'logos' as 'forming principle' (i.e. the principle of form) in translations. In my view, this translation is particularly apt as it effectively captures the hierarchy wherein the higher intelligible cause (i.e. logos) generates a sensible form in matter.

Crucially, a particular forming principle can only impart that particular form and property on matter which is in encoded in the forming principle, i.e. the form-

⁴⁰ Kalligas (2011: 770–773) places significant emphasis on the definitional aspect of the *logos*, highlighting its crucial role in epistemology. He argues that 'the *logos* itself is not directly perceptible, being accessible only to the rational capacities of the soul' (2011: 772).

On *logoi* being the causes of artefacts, see Kalligas (2011: 773–777). In this context, Kalligas considers what this could mean for human creativity with regard to artefacts. He (2011: 777) writes: 'This unifying conception of the various elements that make up the given artefact is expressed in the corresponding *logos*, and serves to identify it as the kind of thing it is. The case is especially telling, because it brings to light the flexibility and the openness of the notion of *logos* in a striking way. New purposes may stir inventive creators to come up with new *logoi* not yet encountered in the universal order. This may lead to the creation of novel structures which, in so far as they serve some specific purpose, may be legitimized as new items in the demarcation of sensible reality.' If I understand Kalligas correctly, he argues that individuals have the capacity to generate entirely new *logoi* in form of artefacts that did not previously exist within the 'universal order' (does this pertain to the intelligible realm or the universe?). Plotinus, however, maintains that the set of *logoi* has been predetermined 'from the very beginning' (V. 7 [18] 3, 13–19), and no new *logoi* can be brought into existence. At most, people can uncover new *logoi*, as exemplified by the discovery of chemical elements, for instance. Consequently, human creativity is quite restricted as it is primarily centred on the revelation of hitherto undiscovered *logoi* or their concrete manifestations, rather than their outright invention.

ing principle of a snub nose can only produce a snub nose. A human individual consisting of a multitude of body parts and properties must therefore be the product of many *logoi*, collectively forming a *logoi*-combination. The *logoi*-combination can in turn be considered as a unit — one intelligible formula or a 'well integrated system of commands and rules which guides the performance of every single part of the organism, and makes it work in accordance with a unified plan' (Kalligas, 2011: 773). Plotinus may refer to such a multifarious yet cohesively unified system of *logoi* as *logos* (in the singular):

But in the things that are made there is no simultaneity, as there is no togetherness, though there is togetherness in the rational forming principles, as the hands and feet in the rational principle are together, but in the objects of sense they are separate (IV. 4 [28] 16, 5–9, translated by A.H. Armstrong).

And in the intelligible world the composite being is differently constituted, not like bodies since forming principles, too, are composite, and by their actuality make composite the nature which is active towards the production of form. But if this nature both works on and derives from something other than itself, it is composite to an even higher degree. The matter, too, of the things that came into being is always receiving different forms, but the matter of eternal things is always the same and always has the same form (II. 4 [12] 3, 6–11, translated by A.H. Armstrong).

A *logos*, then, is a complex principle composed of many parts. These parts may, in turn, be called *logoi*. Consider, for example, the *logos* of a face. The face 'is not one lump' (VI. 7 [38] 14, 8), but consists of eyes, nose, and a mouth. The *logos* of a face must contain all of these things in 'simultaneity' and 'togetherness'. Or consider the *logos* of the nose. This, too, is not simple, but contains the *logos* of the skin, the bone, and the peculiar shape of a snub nose or an aquiline nose. It would be misguided to think that one particular *logos* would correspond to one particular part of the body, like the nose, or to one particular property, like the eye colour blue. Each *logos* is multifaceted and 'multiple in itself':

For what forming principle of plant or animal would you like to take as an example? For if it was one thing and not this one varied thing, it would not be a forming principle, and what came to be would be matter, if the principle did not become all things so that by penetrating every point of the matter it allowed nothing of it to be the same. A face, for instance, is not one lump, but has both nostrils and eyes; and the nose is not one thing, but there is one part and again another of it, if it is going to be a nose; for if it was simply and solely one thing it would be a lump. And the unbounded is in Intellect in this way, that it is one as one-many, not like one lump but like a rational forming principle multiple in itself, in the one figure of Intellect holding as within an outline outlines inside itself and again figurations inside and powers and thoughts (VI. 7 [38] 14, 3–15, translated by A.H. Armstrong).

This explains why Plotinus sometimes speaks of one individual actualising a *logos*, and then again of many *logoi* producing one individual. To avoid confusion in the translation, I have marked the passages that say *logos* in the singular, but actually mean a *logoi*-combination, with [*logoi*^{comb}]. The ambiguity of the *logos* in the singular and the use of [*logoi*^{comb}] will be explained in more detail later in this chapter.

One can assume a hierarchical dependency between the unifying *logos* and the individual *logoi*. For example, the *logos* of a face is a unified principle that stands above the individual *logoi* of the mouth, nose, eyes, and skin. Plotinus suggests that a unifying *logos* has a similar relationship to the *logoi* that depend on it as a definition has to its parts (II. 7 [37] 3, 6–15, discussed above on p. 16). Thus standing higher in the intelligible hierarchy, the unifying *logos* seems to govern the subordinate *logoi* that depend on it. 'Thus the *logos* may be seen as the principle governing the arrangement of the qualities constituting the body, in accordance with the pattern exhibited by the definition of each thing. That seems to be the reason why the formative principle is designated as rational, i.e., as being articulated according to the injunctions of a rational agent' (Kalligas, 2011: 771–772). Furthermore, because of its structuring and unifying qualities, it is the *logos* that endows things and organisms with unity, harmonising their internal structure and activities, thereby making them the individuals they are supposed to be, as foreseen by the mind of the reality-producing Soul.

In the hierarchy of *logoi*, the higher, unifying *logoi* are themselves dependent on the universal Forms. The *logos* of human being is closely linked to the Form of Human Being. From the Form of Human Being this *logos* derives the information which characteristics can manifest within the human species and which cannot. Therefore, it is determined by the Form of Human Being that traits such as blue skin and green hair are not possibilities for humans. Remes (2007: 81) points out that *logoi* function as patterns determining which properties of the human form can be realised in matter to maintain the identity of an organism such as a human:

Each combination that can or will be instantiated in matter exists in the intelligible as a possibility of embodiment. In this sense there can be said to be principles, *logoi* or formations not just of properties like aquilinity but of individual human beings. But these collections of *logoi* are forms only in a very loose sense of the word. They are patterns that determine which set of properties contained in the form of human being it is possible to instantiate in matter so that the resulting organism is and remains a human being. They are not forms for one important reason: they are logical parts of forms, that is, possibilities within the form of human being. None of them includes all properties a human being could have, or represents all possible collections of properties a human being could instantiate (Remes, 2007: 81).

The actualisation of *logoi* is a dynamic process. One and the same *logos* can be actualised by many individuals at the same time. When a mother passes on her eye

colour to her children, the mother and her children actualise the same *logos* for eye colour. When the actualisation process of a particular *logos* is completed because, for example, the mother and her children suddenly pass away, the *logoi* that were actualised by them are not destroyed: they are intelligible principles, and therefore eternal. Since the *logoi* are intelligible, they are not subject to change even though the sensible individuals change. For example, a person's hair grows and turns grey with age, but the *logos* for the hair does not grow, change colour, or undergo any other changes. It is intelligible and therefore eternally unchanging:

One certainly should not think that, because a great variety of different things comes to pass, that which produces them also conforms to the changes of the product. The unchanging stability of the producer is in proportion to the variety of products. For the things which happen according to nature in one single living being are many, and they do not all happen at once; there are the different ages and the growths which occur at particular times, for instance of the horns or the beard or the breasts; there is the prime of life and procreation of other living things; the previous rational forming principles are not destroyed, but others come into operation as well; this is clear from the fact that the same rational forming principle [which is in the parent], and the whole of it, is also in the offspring (IV. 4 [28] 11, 14–23, translated by A.H. Armstrong).

In V. 7 [18], Plotinus reveals another very important function of the *logoi* besides the causation of individuals. The *logoi* play a key role in the transmigration of souls. Plotinus argues that one and the same soul can be born as different living beings – human, animal, and even plant (III. 4 [15] 2, 12–24) – with the soul actualising different *logoi* at different times. Each soul can actualise all possible *logoi* because each soul possesses all *logoi* that exist in the universe (V. 7 [18] 9–12). For example, when a soul is born as Socrates, it begins to actualise the *logoi* that make up the individual Socrates. When Socrates dies, his soul ceases to actualise the 'Socratic' *logoi*. It transmigrates into another body (human, animal, or plant) and begins to actualise a new *logoi*-combination. Whether the soul is born as a human or as an animal depends on whether it has committed itself to the spiritual or the beastly plane:

But when the soul takes the body of a beast one wonders how it does it when it is the forming principle of man. Now it was all things, but is active at different times according to different ones. When it is pure, then, and before it is spoilt it wills man and is man; for this is finer, and it does what is finer. [...] But when the soul [...] when it was a man follows the soul which has chosen the nature of a beast, it gives the forming principle in it which belongs to that living thing in the intelligible world. For it possesses it, and this is its worse form of activity (VI. 7 [38] 6, 23–36, translated by A.H. Armstrong).

It is important to understand that *logoi* essentially constitute the Soul, just as the Forms essentially constitute the universal Intellect. Plotinus distinguishes between the intellectual faculties of the Soul and the Intellect. The Soul engages in discursive reasoning, involving *logoi*, while the Intellect employs noetic (or intuitive) reasoning, involving the Forms. The dianoetic self in discursive reasoning cannot directly grasp Forms, and genuine knowledge of Forms is attainable only by faculties that possess them internally, as is the case with Intellect:⁴²

For around Soul things come one after another: now Socrates, now a horse, always some one particular reality; but Intellect is all things. It has therefore everything at rest in the same place, and it only is, and its 'is' is for ever, and there is no place for the future for then too it is – or for the past – for nothing there has passed away – but all things remain stationary for ever, since they are the same, as if they were satisfied with themselves for being so (V. 1 [10] 4, 20–26, translated by A.H. Armstrong).

There is, however, a direct connection between the Forms and the *logoi*. The *logoi* are images of the Forms, and they are, as it were, 'unfolded Forms', i.e. the *logoi* contain the information of the unified Forms in a differentiated multiplicity:

So we also possess the forms in two ways, in our soul, in a manner of speaking unfolded and separated, [and] in Intellect all together (I. 1 [53] 8, 7–8, translated by A.H. Armstrong).

And one will transfer these same observations to the whole universe, and will ascend there also to Intellect and suppose it to be the true maker and craftsman, and will say that the underlying matter receives the forms, and part of it becomes fire, and part water, and part air and earth, but that these forms come from another: and this other is soul; then again that soul gives to the four elements the form of the universe, but Intellect provides it with the forming principles, as in the souls of artists the forming principles for their activities come from their arts; and that one intellect is like the form of the soul, the one which pertains to its shape, but the other is the one which provides the shape, like the maker of the statue in whom everything that he gives exists. The things which Intellect gives to the soul are near to truth; but those which body receives are already images and imitations (V. 9 [5] 3, 24–37, translated by A.H. Armstrong).

The *logoi*, which are directly involved in the generation of sensible bodies and their qualities, occupy the lowest tier in the metaphysical hierarchy. Plotinus refers to the *logoi* responsible for producing sensible bodies as those imbued with life, for they bestow life upon the bodies. Following these living *logoi* are those that generate the qualities of sensible bodies. These latter *logoi* represent the final stage in the unfolding process of the soul, i.e. these *logoi* no longer create any further *logoi*, but

⁴² Compare Hutchinson (2018: 103-112) and Caluori (2005: 79-83).

lead to the production of matter instead. This also means that a *logos* is not divisible into arbitrarily many sub-*logoi*; rather, the division reaches a point where the *logoi* lose their intelligible status and turn into matter.⁴³ Hence, Plotinus refers to these *logoi* as 'dead': 'This *logos*, then, which operates in the visible shape, is the last, and is dead and no longer able to make another, but that which has life is the brother of that which makes the shape, and has the same power itself, and makes in that which comes into being' (III. 8 [30] 2, 30–34). Emilsson (2017: 186) illustrates this distinction between the living and the dead *logoi* with an illustrative example: 'The dead *logos* is that which produces visible, natural qualities and shapes, the red and roundness of a tomato, for instance. The "brother" is the *logos* that works in the body and makes it a living body. Both kinds of *logos* are, as is clear from the context in III.8. 1–4, parts or aspects of the lowest phase of soul, nature.' The commentary on the third chapter offers a detailed discussion of nature (pp. 208, 218, 220–221, 228–234).

Furthermore, Plotinus compares the process of the unfolding of the Forms on the level of the Soul to a unified thought (*noêma ameres*), which is discursively expressed through language (*logos*):44

The intellectual act is without parts and has not, so to speak, come out into the open, but remains unobserved within, but the verbal expression (*logos*) unfolds (*anapthuxas*) its content and brings it out of the intellectual act into the imagemaking power (*phantastikon*), and so shows the intellectual act as if in a mirror, and this is how there is apprehension and persistence and memory of it (IV. 3 [27] 30, 8–12, translated by A.H. Armstrong).

Furthermore, *logoi* play a crucial role in sense-perception and judgements. During sense-perception *logoi* are activated and are used to judge qualities like beauty and

ongoing scholarly debate about whether the soul actually produces matter. Moreover, there has been ongoing scholarly debate about whether the soul actually produces matter at all and whether matter is not merely the result of emanation from the One, but rather a principle in its own right. This would imply that Plotinus' system is dualistic, with the One and matter as independent principles. However, Denis O'Brien has compellingly made the case that this lowest level of the soul is actually responsible for the creation of matter. But as Emilsson notes (2017: 225): 'O'Brien has, however, not convinced everyone: Carroll (2002) argues that Plotinus remains ambivalent about the origin of matter and Phillips (2009 argues, in my view ultimately unconvincingly, that the key passages O'Brien appeals to, III.4 (15) 1 and III.9 (13) 3, do not support his view that matter is the product of soul. See also Narbonne 2007.' For more reading on matter in Plotinus, see O'Brien (1971), Schwyzer (1973), O'Brien (1996), Nikulin (1998), O'Brien (1999), Brisson (2000), Opsomer (2001), Pang-White & White (2001), Schaefer (2004), Gurtler (2005), Narbonne (2007), Opsomer (2007), Philips (2009), Rist (2009), O'Brien (2011a, 2011b, 2012), Noble (2013a), Long (2016), Emilsson (2019).

Chlup (2012: 146): 'the idea of *logos* as something internal to be brought forth and uttered externally was probably suggested to Plotinus by the Stoic distinction between *logos* in the mind (*endiathetos*) and *logos* expressed in speech (*prophorikos*). No less inspiring must have been the fact that in Stoicism the unfolding of *logos* had its cosmic correlate too, all things being seen as "growing out" of the spermatic Logos to return to its unity later upon their dissolution (*SVF* 1 497). It was Plotinus' original contribution, however, to bring the physical and the mental unfolding of *logos* together, understanding it as a crucial part of the soul's self-reflection.'

goodness in the external world. They serve as rulers or standards (*kanones*) for applying normative and aesthetic concepts to objects and persons.⁴⁵ In fact, *logoi* play a fundamental role in every aspect and operation of the soul, including dianoetic consciousness, discursive reasoning, sense-perception, memory, imagination, belief formation, judgment, and speech.⁴⁶ *Logoi* are, therefore, the internal activity of the soul, through which the soul organises all things and imparts to them the mentioned properties and abilities. It should be noted, however, that the soul, being an intelligible entity, remains unaffected by physical processes such as perception, sensation, ageing, and other biological functions. In fact, as Plotinus asserts, the soul does not truly descend into the body; instead, it sends a trace of itself – a sort of image that becomes associated with the body:⁴⁷

The soul's dual composition, no doubt, is meant to explain its double epistemological potential, which allows it to apprehend both the intelligible Forms – even if only in its own, analytical and discursive manner – and, through the mediation of the senses, their sensible counterparts, the qualitative characteristics that, together with unknowable matter, make up the bodily objects of our everyday experience (cf. vi 3.8.20 and Kalligas 1997b, 402–410) (Kalligas, 2012: 149).

The versatile use of the term *logos* and its association with different functions predates Plotinus by several centuries. In Ancient Greek, the basic meaning of *logos* was 'word' or 'speech'. With the advent of Presocratic philosophy, *logos* acquired an additional, ontological meaning. The Heraclitean *logos*, for instance, represents a ra-

Hutchinson (2018: 96): 'In both cases, the forms in us — which elsewhere Plotinus refers to as *logoi* — are described as *kanones*, which can be variously translated as "rulers," "measures," or "standards." The reflections of Forms in us ultimately provide rules for the application of normative/aesthetic concepts to persons. Although Plotinus does not provide an exhaustive list of which concepts we possess a priori, textual evidence suggests the soul is equipped with a wide array of a priori concepts necessary for making judgments concerning natural kinds and possibly artificial kinds. Thus, the beliefs we form about sensible objects involve the coherence of the image of an object with the *logoi* in our soul.'

⁴⁶ Hutchinson (2018: 99–112).

A human being, according to Plotinus, consists of three phases of the soul: a higher soul that remains in the intelligible world, a lower soul (*hêmeis* = the individual rational soul) that descends into the sensible world to care for the qualified body, and a soul-trace that animates the body and provides certain life-capacities. I think that the World Soul while producing the body of the embryo, endows it with the soul-trace, which is necessary to prepare the body for the lower soul's descent. The soul-trace, therefore, establishes a connection between the body and the rest of the world, and enables the lower soul to care for the body without being affected by it. Hutchinson (2018: 45–66) comprehensively discusses the soul-trace, its function and connection to the other kinds of soul, such as Hypostases Soul, World Soul and individual rational souls. He (2018: 49) also clarifies the difference between the soul-trace and the lower soul: 'Plotinus follows the school tradition of characterizing the lower soul as descending into the body. However, the lower soul is not actually in the body. Strictly speaking, the lower soul is a power that the higher soul sends into the sensible world to care for a body. Since this power is incorporeal, it cares for the body without descending into the body and without undergoing bodily affection.' For a detailed account of the soul-trace, see also Kalligas (2012) and Noble (2013b).

tional order governing the universe. ⁴⁸ Moreover, in Plato and Aristotle, *logos* evolves into an epistemological principle. The importance of the 'right explanation' (*orthos logos*) and the giving of account (*logon didonai*) shows that *logos* centrally comprises the Platonic dialectic (*Phaed.* 73a–b; *Phaed.* 76b; *Rep.* 531e4–5). ⁴⁹ Aristotle also refers to the concept of *orthos logos* in the *Nicomachean Ethics* (1103b33; 1114b29; 1119a20; 1138b29–34), where he considers it to be of a moral nature, specifically moral reason. Aristotle uses this term to describe the kind of reasoning that leads to virtuous actions and ethical living. In Aristotle's ethical system, rationality plays a crucial role in achieving *eudaimonia* (often translated as happiness). According to him, virtuous actions are not just about emotions or habits but must be guided by correct reasoning about what is ethically right. In general, Aristotle calls *logos* a definitional formula that represents the essence (*ousia*) of things (*Metaph.* VII. 1037a–1037b).

The Stoics differentiated between the one divine *logos* and the multitude of *logoi spermatikoi* – the so-called seminal reason principles. The divine *logos* was considered the highest principle governing the whole cosmos through the *logoi spermatikoi*. These *logoi spermatikoi* are material structural principles ('seeds'), which produce things in nature and also play a significant role in sense perception and reasoning. Thus, in Stoicism, we find that the *logos* embodies both ontological and epistemological functions. Despite espousing a similar concept, Plotinus criticises the Stoic concept of material seminal principles, arguing that such principles contain the structural information only in potency – just as the seed of a tree is the fully grown tree only in potentiality. Thus, *logoi spermatikoi* are incomplete and cannot be brought into actuality without other principles already existing in actuality:50

What comes to be in the All, then, does not come to be according to seminal formative principles but according to formative principles which include powers which are prior to the principles in the seeds; for in the seminal principles there is nothing of what happens outside the sphere of the seminal principles themselves, or of the contributions which come from matter to the whole, or of the interactions on each other of the things which have come to be (IV. 4 [28] 39, 5–12, translated by A.H. Armstrong).

⁴⁸ Vassallo (2017).

⁴⁹ See Weiner (2012: 7-20).

⁵⁰ Compare Helmig (2012: 194–195). On the Stoic concept of the *logoi spermatikoi* in Plotinus, see Witt (1931: 103–111). See also Helmig's elaboration on 'the twofold nature of the *logoi*' 'as criteria in perceptual judgements' and 'as causes in matter', in Helmig (2012: 184–204).

In Plotinus, the *logoi* are purely intelligible principles of the Soul, which are embedded in a complex hierarchy of principles that ultimately depend on the Forms in the universal Intellect.⁵¹ The Soul itself is a *logos* that comprises the sum of all *logoi*:

[The Soul] is a forming principle (logos) itself and the sum of the forming principles ($t\hat{o}n\ log\hat{o}n$), and the principles are its activity when it is active according to its substance (VI. 2 [43] 5, 12–13, translated by A.H. Armstrong).

Thus, *logoi* are creative powers of the World Soul which structure and form the material world and everything within it (III. 2 [47] 4, 18–20; III. 1 [3] 7, 1–4). They are the essence (*ousia*) of all things, living beings, and properties (II. 6 [17]), and their rational structure permits knowledge of the things which they essentialise:

Making for it [i.e. creating for the *logos*], means being what it is, and its making power is coextensive with what it is. But it is contemplation and object of contemplation, for it is a rational principle. So by being contemplation and object of contemplation and rational principle, it makes in so far as it is these things (III. 8 [30] 3, 17–21, translated by A.H. Armstrong).

The *logoi* are fundamentally driven by the formative and creative activities of the World Soul. Therefore, they may be regarded as authentically Neoplatonic elements, emerging from a thoughtful extension of the concept of the world soul as reinterpreted by Plotinus.

In V. 7 [18], Plotinus alternates between the singular form '*logos*' and the plural form '*logoi*'. The meaning of the plural form is clear: it signifies a general multiplicity of forming principles. *Logos* in the singular, by contrast, can be understood in two ways: (1) it can stand for a single forming principle [*logos*^{sing}]; or (2) it can stand for a particular set of *logoi* (*logoi*-combination), which in turn are combined into one unified *logos* [*logoi*^{comb}].

- (1) Logos in the singular can thus stand for the forming principle of a peculiar property, form, or structure: 'There is one principle (logos) of the eye and another of the hand' (V. 9 [5] 6, 13–14), and one for 'differences of colour' (V. 9 [5] 12, 9–10). Any quality or feature of a living being or thing will have its own logos: 'whiteness' of the skin (II. 6 [17] 3, 1), 'snubnosedness' (II. 6 [17] 2, 11), and even something as truistic as the heat of fire (II. 6 [17] 3, 15–16). An individual human being is an amalgamation of different forms and properties, and thus embodies a great quantity of different logoi; I call this collection of logoi their logoi-combination.
- (2) When Plotinus refers to a specific *logoi*-combination, he may again use the term *logos* in the singular to indicate that this particular combination can also be seen as a unit, since it represents a single person: 'As for the powers in the seeds, then, each

⁵¹ See Helmig (2012: 195).

of them is one whole formative principle (*logos*) with the parts included in it' (V. 9 [5] 6, 15–17, translated by A.H. Armstrong). 'But in the things that are made there is no simultaneity, as there is no togetherness, though there is togetherness in the rational forming principles, as the hands and feet in the rational principle (*logos*) are together, but in the objects of sense they are separate' (IV. 4 [28] 16, 5–9, translated by A.H. Armstrong). In V. 7 [18], Plotinus more often speaks of *logos* in the singular, although it is clear from the context that it usually implies a *logoi*-combination (V. 7 [18] 2, 1–5; V. 7 [18] 2, 19; V. 7 [18] 3, 3–5; V. 7 [18] 3, 20). An individual like Socrates is thus the product of a *logoi*-combination, in which each *logos* is responsible for a particular property of Socrates (such as his snub nose, his white skin, etc.). The 'Socratic' *logoi*-combination can in turn be seen as a unit, or the *logos* of the individual human Socrates.

The distinction between the two different uses of the singular logos is quite important from a philosophical perspective, but unfortunately is not made explicit by Plotinus himself. To identify these two different meanings, the first definition of logos will be marked as logos^{sing}, and the second as logoi^{comb}.

3. THE STYLE OF V. 7 [18] AND ITS PLACE WITHIN THE ENNEADS

Plotinus' method throughout the treatise can be described as dialectical. It consists of first asking a question or raising a problem, and then presenting several possible answers, which are then challenged with counter-arguments. Finally, Plotinus presents the correct answer or solution to the problem (V. 7 [18] 1, 1–8; V. 7 [18] 1, 9-23, V. 7 [18] 3, 1-6). This interrogative technique has prompted some scholars to characterise the treatise as a dialogue.⁵² Given the embryological context, we might suppose that the speakers are Plotinus himself and certain students who were familiar with biology and medicine. Thanks to Porphyry, we know that at least three physicians visited Plotinus' school. Two of them, by the name of Zethus and Eustochius, were even close friends of Plotinus.⁵³ It can therefore be assumed that biological and embryological issues were frequently discussed in his Academy. The fact that Porphyry dedicated an entire book to embryology further supports this.54 It is all the more surprising, then, that discussions on embryology are only found sporadically within the Enneads, especially lacking in detail about the physical aspects of the field, such as the debate over whether both parents contribute semen or the exact process of embryonic development. Nevertheless, a detailed analysis of the theory of biological inheritance that Plotinus presents in V. 7 [18] indicates his deep involvement in the topic, presumably enhanced by his discourse with Zethus and Eustochius. These circumstances allowed Plotinus not only to establish an original 'Platonic' theory of individuals in V. 7 [18], but also to develop significant embryological innovations that would pave the way for later Neoplatonic embryology.

a) Difficulties in writing style and argument

Even though V. 7 [18] is one of the shortest treatises within the *Enneads*, it presents significant challenges of exegesis for several reasons. One frequently mentioned factor is the difficult linguistic style of V. 7 [18], which renders the actual argument

Compare Fritz Heinemann (1921: 63) and Richard Harder (1956: 555). Harder (1956: 555): 'Ich habe die Inhaltsangabe als Dialog gegeben (und zwar hoffe ich dem Text nähergeblieben zu sein als Heinemann, Plotin 63 ff.); erwägt man Natur und Tonfall der Argumentation, so muss alles von \S 9 ab dem stoischen Partner gehören. Schon daraus geht hervor, dass hier nicht eine Diskussion mit Widerlegung des Gegners stattfindet, sondern ein echter Austausch. Das was als Gespräch erscheint, ist in Wahrheit ein Selbstgespräch, die beiden Personen, der eine strenger platonisch, der andere stoisierend, sind in Plotin selber.' See the more detailed treatment of Heinemann's and Harder's contributions to V. 7 [18] on pp. 50–53.

⁵³ *Vita Plotini*, 7, 8–12; 7, 16–20. The name Eustochius stands out prominently in the *Vita*, as he was the companion who stayed by Plotinus' side until his passing and recounted Plotinus' renowned final words: 'Try to bring back the god in us to the divine in the All!' (*VP*, 2, 26–27, translated by A.H. Armstrong). Eustochius was also the first to edit Plotinus' writings; his edition, regrettably, has not survived to the present day. For Eustochius being the first editor of Plotinus' works see Armstrong (1988: ix) and Schwyzer (1951: 488–490).

⁵⁴ Porphyry: To Gaurus on How Embryos Are Ensouled. Translated by James Wilberding. London: Bloomsbury Academy, 2011.

rather opaque. In his comprehensive study of the language of the *Enneads*, Luc Brisson (2014: 130) calls the quality of Plotinus' Greek a disappointment for any 'translator of Plotinus who is familiar with Plato's language.' This is mainly due to the fact that Plotinus suffered from poor eyesight, meaning that he never revised his texts.⁵⁵ This, perhaps combined with a naturally eccentric style of writing, means that the *Enneads* are full of breviloquent formulations, phrases lacking a predicate, erratic word placements, and parentheses: 'Plotinus was hard to understand, even to his contemporaries' (Brisson, 2015: 134).⁵⁶ Consider also what Porphyry reports about Plotinus' writing style:

In writing he is concise and full of thought. He puts things shortly and abounds more in ideas than in words; he generally expresses himself in a tone of rapt inspiration, and states what he himself really feels about the matter and not what has been handed down by tradition. (*VP*, 14, 1–4, translated by A.H. Armstrong)

Though reading Plotinus often requires 'much work left to the reader', I nonetheless concur with Emilsson (2017: 17) that 'Plotinus can write quite beautifully' and that 'his style is agreeably personal and unaffected. We get an impression of someone who sincerely cares about the issues he writes about and has thought deeply about them.'57

In total, Plotinus wrote approximately fifty-four treatises.⁵⁸ Through Porphyry we learn that Plotinus was not writing for a broad audience, but for a select group

⁵⁵ Vita Plotini 8, 1-8.

⁵⁶ A detailed survey of Plotinus' language is provided by Hans-Rudolf Schwyzer's (1978: 514–530) notorious entry 'Plotinos' in *Paulys Realencyclopädie der classischen Altertumswissenschaft*: 'Was das Verständnis von P.-s Sprache ungemein erschwert, ist seine Breviloquenz [...] Unzählige Male muß dem Sinne nach etwas ergänzt werden, was nicht im Text steht. [...] Öfters fehlt jedoch ein Wort, das nicht ohne weiteres ergänzt werden kann, sondern erst aus dem ganzen Zusammenhang erraten werden muß. [....] Außerordentlich zahlreich sind Sätze ohne Prädikat' (520).

starl Steinhart, a prominent Plotinus scholar of the early 19th century, evaluates Plotinus' language in a predecessor article of the *Realencyclopädie* similarly to Schwyzer, yet with praise akin to that of Emilsson: 'Die Sprache Plotins ist nichts weniger als musterhaft, oft nachlässig, uncorrect, reich an Anakoluthien, dabei nicht selten räthselhaft dunkel und doppelsinnig, ohne Harmonie und Fülle und wie aus dem Stegreif hingeworfen; aber sie ist körnig, gedrungen, wahrhaft philosophisch, und für den tiefer Forschenden höchst anziehend durch ihre frische Originalität. Bald erinnern kühne Bilder und lange Reihen epigrammatisch zugespitzer Antithesen an die Sprache der indischen Philosophen und der persischen Sufiten, bald hören wir in der milden Wärme und dem sanften Fluß der periodischen Rede den Nachahmer Plato's, bald ringt die Sprache in dithyrambischem Schwunge mit der Erhabenheit und Tiefe des Gedanken und erliegt zuweilen in diesem Kampfe.'

In the *Vita Plotini*, Porphyry provides two lists: the first list features the treatises in chronological order (chapters 4–6), and the second presents Porphyry's own arrangement of the texts as the *Enneads* (chapters 24–26). For Porphyry's edition of the *Enneads* see pp. 27–32. Originally there were slightly fewer than fifty-four texts. In order to achieve symmetrical proportions, Porphyry artificially divided some of them into separate treatises, thus creating six books, the *Enneads*, which can be translated as 'groups of nine texts'. On the arrangement of Plotinus' by Porphyry see Brisson et al. (1982: 143–186), Eborowicz (1991), Brisson et al. (1992), Mansfeld (1995), Whittaker (1997).

of students among whom his texts were circulating.⁵⁹ His texts are based on discussions that took place in his lectures and thus presuppose a good knowledge of Plotinus' entire philosophy.⁶⁰ This classroom context further contributes towards the difficult linguistic style of the treatises:

As Porphyry testifies, however, Plotinus' works must be placed in relation to his lectures. They therefore maintained the qualities and defects of oral style. Plotinus is hard to read, because he expresses himself allusively, as is normal in front of a group of well-informed listeners. His writings are therefore characterized by particularly condensed expression: he loves concision and subtlety. In addition, since his expositions are often interrupted by questions that raise objections or demand technical clarifications, his phrase is uneven, since it accumulates explanations and remarks layer upon layer, like a layer cake (Brisson, 2014: 134).

Many of the difficulties with Plotinus' style mentioned by Brisson – such as 'defects of oral style', allusive and condensed expressions, and multi-layered explanations – are especially applicable to V. 7 [18]. This treatise gives the impression of a rough and ready record of a class discussion, rather than a coherent analysis of a problem. Throughout the text, logical links and connecting elements are frequently missing: the syntax is mostly elliptical, and there is little acknowledgement of what has already been said. The overall argument thus seems incoherent, which, as Ferrari puts it, gives the reader the impression of an author whose thought lacks clarity. In terms of content, the treatise is particularly dense. Plotinus addresses many issues, including principles of individuals, transmigration, the doctrine of cosmic cycles, and biological inheritance, to name just a few. He does not, however, treat all these topics sufficiently, and many questions remain unanswered. Nevertheless, one should not infer from the quality of the writing that the philosophical quality is similarly subpar: V. 7 [18] presents outstanding concepts of individuality and embryology.

One strategy that may help us to interpret V. 7 [18] is to look at its placement within the *Enneads*. There are, in fact, two alternative ways of placing the treatise within the works of Plotinus. First, there is Porphyry's classification of the text as the fifth *Ennead*, and second, there is the chronological arrangement, according to which it is text number 18. The two different systems for locating the treatise are often used as arguments in support of a particular line of interpretation. In what follows, I shall first discuss the stylistic difficulties of V. 7 [18], and then consider

⁵⁹ Vita Plotini 4, 1–22.

⁶⁰ See Atkinson (1983: x).

 $^{^{61}}$ Franco Ferrari (1998: 629–630) in his analysis of V. 7 [18] aptly summarises the problem when he describes some passages as completely inscrutable and obscure which gives the reader the impression of an author whose thought lacks clarity.

 $^{^{62}}$ Gerson (1994: 65), when discussing the section on Forms of individuals, notes that 'it is not easy to see what is and what is not being asserted here.'

its two possible locations within the *Enneads*. In doing so, I argue that despite the difficult style of V. 7 [18], it is possible to arrive at an accurate reading by considering the context of its chronological position.

b) V. 7 [18] and the Fifth Ennead

If we want to understand the significance of V. 7 [18]'s placement within the Enneads, it is worth reconstructing the development of the Enneads and their very first redaction. We owe almost everything we know about the life and works of Plotinus to his student Porphyry (234?-305? AD). 63 Some thirty years after Plotinus' death, Porphyry not only dedicated a biography to his teacher, the Vita Plotini, but also edited all his writings. In his arrangement of the texts, Porphyry abandoned their chronological order and organised them into six books of nine treatises each, calling them the *Enneads* ('groups of nine texts'). ⁶⁴ Porphyry's arrangement serves a very specific purpose. Beginning with the first book and ending with the sixth, he intended to illustrate a kind of thematic ascension from natural philosophy to metaphysics, from the lowest principles to the First Principle – the One. Thus, the first *Ennead* deals with ethical questions; the second and third deal with the affairs of the material cosmos; the fourth book begins to transcend the issues of the physical realm and engages with problems of the soul; the fifth is dedicated to Intellect (Nous) and Forms. Finally, the sixth book is concerned with the One. Porphyry's arrangement, with its emphasis on the One, highlights the originality of the First Principle, which sets Plotinus' philosophy apart from all previous versions of Platonism.

The treatise which concerns us is numbered V. 7 [18] according to Porphyry's system: it is the seventh treatise within the fifth *Ennead* (= V. 7). Chronologically it is text number 18 (= [18]), which indicates that it belongs to the early creative phase of Plotinus' work.⁶⁵ The early treatises are mainly characterised by breviloquence and a rather cumbersome dialectical style. That Porphyry placed V. 7 [18] within the fifth *Ennead* suggests that he thought its main topics of enquiry were the Intellect (*Nous*) and Forms. Moreover, its title, 'On the question of whether there are also Forms of individuals' – which is very likely borrowed from the introductory

⁶³ O'Meara (1993: 1–11), Atkinson (1983: ix).

⁶⁴ For translations (and commentaries) on Porphyry's *Vita Plotini*, see Harder (1937), Armstrong (1966), Bréhier (1997), Igal (1982), Brisson et al. (1992), and Faggin (1992).

In the *Vita Plotini* (6, 26–37), Porphyry groups Plotinus' treatises into three creative phases, defined by his own presence at Plotinus' Academy. The early phase, i.e. before Porphyry's arrival in Rome, comprises the first twenty-one treatises. Porphyry arrived at the Academy when Plotinus was fifty-nine years old; the next twenty-four treatises were written while Porphyry was present at the Academy, a period Porphyry calls the middle or 'prime' period of Plotinus' work. And finally, in the late phase, after Porphyry had left the Academy and Plotinus was struggling with the illness that eventually led to his death, nine treatises were written. Porphyry assesses the phases in a way that highlights himself as an influential student, particularly important to Plotinus' creative spirit, as many scholars have noted. On this, see O'Meara (1993: 2).

question⁶⁶ – adds further weight to the theory that the main concern of this treatise is Forms. The sentence following the introductory question, meanwhile, mentions the concept of *noêton* (i.e. the intelligible), which is generally used to denote the Intellect. Thus, there are several indications that Porphyry was right to sort the treatise into the fifth *Ennead*. After reading the treatise, however, it becomes apparent that apart from the opening question, the title is not an accurate reflection of the overall content of the treatise. In V. 7 [18], Plotinus is much more concerned with principles of sensible individuals, which, he argues, are not Forms, but rational forming principles (*logoi*). The Intellect, on the other hand, hardly appears, and the term 'Form' (*idea*) occurs only once in the entire treatise.

There is thus good reason to think that Porphyry's classification of the treatise as part of the fifth *Ennead* is misleading.⁶⁷ Let us now see whether the chronological context of the treatise is more helpful as a guide to interpretation.

c) V. 7 [18] and the chronological order of Plotinus' treatises

If one considers the treatise within the chronological context of its composition, one notices a strong thematic connection with the preceding treatise, II. 6 [17], entitled 'On Substance or on Quality'. ⁶⁸ Both texts focus on the subject of *logoi*, but with different emphases. In II. 6 [17], Plotinus discusses *logoi* in general terms, in the sense that they produce both essential and accidental qualities of sensible substances. Plotinus cites examples of qualities such as 'white' in swans and lead, or the quality 'fiery' in fire, and argues that these qualities – like any other quality – are caused by *logoi*. He mainly investigates whether in the intelligible, these principles have the same status of being qualia of substances. The answer is that *logoi* are not differentiators that allow substances to be differentiated from one another. In the intelligible *logoi* are themselves substances. The categorisation of qualia into essential and accidental types only applies to the sensible world. In the intelligible, everything is a substance. In V. 7 [18], Plotinus becomes more specific by considering

 $^{^{66}}$ "The question is, is there also a Form of the individual? Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world]" (V. 7 [18] 1, 1–3).

Remes (2007: 78): 'Somewhat misleadingly, I think, Porphyry has placed this treatise together with the treatises which deal with the Intellect and its contents, the forms. In the chronological ordering, however, this *Ennead* comes after II.6 titled *On Substance, or On Quality* in which the central claim is that essential differentiations, like two-footed/four-footed, should be regarded not as Aristotelian qualities, but as activities of substance and formative principle. Even many qualities, like white, are due to *logoi*; they are just not necessary for the specific essence of things which can, say, have other colours as well.' See also D'Ancona Costa (2002: 532). Also Kalligas (2023: 330) in his most recent commentary on V. 7 [18] acknowledges that the treatise 'appears somewhat out of place in the otherwise thematically coherent fifth *Ennead*.' However, he still adheres to his theory of soul-Forms (discussed on pp. 51–65, 118–120) and explains that the theme of the treatise 'is more directly related to P.'s psychological theory, and more specifically with his view on the "undescended" nature of the soul, and less so with the nature and structure of the realm of the intelligible beings.'

⁶⁸ The heading is translated by A.H. Armstrong.

how *logoi* determine biological inheritance. Luc Brisson (2014: 129) suspects that Porphyry divided more treatises to comply with numerological symbolism than he admitted in the *Vita Plotini*. He suggests that the shorter treatises (which include II. 6 [17] and V. 7 [18]) might also be the result of Porphyry's divisions, so it is possible that these two treatises were originally one long treatise. There is, however, some evidence that the two were always separate texts. For example, the theme of embryology in V. 7 [18] plays no part in II. 6 [17], and conversely, the concept of substance, which is central to II. 6 [17], is not mentioned once in V. 7 [18]. On the other hand, there are many thematic overlaps, such as the discussions about *logoi*, archetypes, matter, and properties. For this reason, it is perhaps best to consider V. 7 [18] as a direct sequel to II. 6 [17].

V. 7 [18] is followed by I. 2 [19], entitled 'On Virtues'. This treatise abandons the embryological discourse, and the term *logos/logoi* does not appear even once in the entire treatise. However, the discussion of human affairs continues, this time focusing on ethics. Plotinus considers the origin of virtues, their various types, their acquisition, and their function in making the human individual godlike (*homoiosis theo*). All in all, I. 2 [19] does not offer much help for the interpretation of V. 7 [18], but we do learn that the only way to ascend to the universal Intellect is through the practice of virtues; Plotinus does not mention that ascent to the Intellect can also be achieved via Forms of individuals.

Given the common theme of *logoi*, it is reasonable to read V. 7 [18] in connection to the treatise which preceded it chronologically, II. 6 [17]. In both treatises, Plotinus pursues the same goal, which is to explain the phenomenon of sensible individuals and their properties. For Plotinus, the material world is derived from the intelligible, which means that individuals and their properties must come from intelligible causes. The immediate causes, however, cannot be the universal Forms, for the same principles would not be able to produce both broad genera and their particular sensible members. There must therefore be other intelligible principles reserved for individuals and their properties, serving as intermediaries between universal Forms and particular things.

4. STRUCTURE AND FUNDAMENTAL TOPICS IN V. 7 [18]

In this chapter, I will briefly present the argumentative structure of the treatise as a form of contextual preparation for the subsequent chapter on the various interpretations of V. 7 [18] in scholarly discourse. Without this foundational overview, the discussions and debates among scholars would remain incomprehensible. By outlining the main arguments and themes of the treatise, we can better understand the basis upon which different scholars have built their interpretations.

The treatise is divided into three chapters of approximately equal size, each dealing with a different issue on a common overarching topic. The standard division, which we owe to Marsilio Ficino,⁶⁹ clearly marks the introduction of a new theme by beginning each chapter with a major issue or question:

Chapter one: What are the intelligible principles of individuals and individual properties, and how many principles are there?⁷⁰

Chapter two: How are *logoi* passed on from parents to offspring, and what role does matter play in the formation of embryos?

Chapter three: Are identical twins really identical, i.e. are they produced by the same *logoi*-combination?

I will now provide a brief introduction to the argumentative structure of V. 7 [18], and draw attention to some problematic and/or essential passages. What follows anticipates in a simplified form the most important theses that will be dealt with in much greater detail in the commentary.

Chapter V. 7 [18] 1 begins by asking, 'is there also a Form of the individual?' (V. 7 [18] 1, 1). To this question, Plotinus provides a three-step answer (V. 7 [18] 1, 1–9). Initially, he proposes that if every individual traces back to the intelligible, the principle of every individual must also reside in the intelligible (V. 7 [18] 1, 1–3). Plotinus,

⁶⁹ Marsilio Ficino (1433–1499, Florence) published a Latin translation of Plotinus' complete works in 1492, based on only one of the three manuscripts known to us today (Laurentianus 87,3). His Latin translation and his reading of the original Greek text are still influential. Saffrey (1996: 505) comments on Ficino: 'In the pocket edition of the *Philosophische Bibliothek*, by Harder, Theiler and Beutler, which may be regarded as an *editio variorum*, Ficino's name recurs over a hundred and twenty times; that is to say, each time Ficino suggested a valuable reading that should be taken into account listing what the Greek text was.'

The two questions are related, for as Plotinus progresses in his examination of the principles of individuals, the scope of the individuals examined increases. At first, Plotinus' inquiry initially centres on human individuals (V. 7 [18] 1, 1–2), then expands to encompass all living beings in the cosmos (V. 7 [18] 1, 11–12), and finally, individual properties (V. 7 [18] 1, 20–21). This progression raises the issue of potentially infinite principles, but Plotinus firmly rejects this notion, arguing for a finite number of principles in the intelligible realm and for a finite number of individuals in the physical realm. See the discussion on the finite number of intelligible principles on pp. 131–140, 146–154.

however, does not specify at this point whether this principle is a universal Form, a Form of an individual, or yet something different.

Next, Plotinus considers the possibility of there being such a thing as 'Socrates-It-self' (*Autosôkratês*), assuming that the soul of Socrates must eternally be the soul of Socrates. This means his soul must be essentially 'Socratic' and retain Socrates' personality, memories, and traits eternally, even after Socrates' death (V. 7 [18] 1, 3–5).

Finally, Plotinus challenges this hypothesis using the Platonic doctrine of reincarnation (V. 7 [18] 1, 5–8). He argues that if Socrates' soul reincarnates into other individuals, it ceases to be Socrates, and therefore there cannot be a Form of an individual like $Autos\^{o}krat\^{e}s$ in the intelligible realm. To reconcile this with his initial premise – that the principle of all individuals must be in the intelligible – Plotinus introduces the rational forming principles (logoi) within the soul, which enable one and the same soul to be born as different individuals at different times (V. 7 [18] 1, 5–8). During its different incarnations the soul simply actualises different logoi each time. This mechanism allows for the possibility of different individuals – even 'as different as the famously beautiful Pythagoras and the notoriously ugly Socrates' – sharing the same soul. Moreover, Plotinus states that each soul contains all the logoi that there are in the universe (V. 7 [18] 1, 9–12), implicitly explaining how a human soul can be reincarnated as animals and plants.

If, then, there are logoi for each individual, Plotinus expresses the fear that this might introduce an unlimited number of logoi into the intelligible world (V. 7 [18] 1, 12–13). However, he counters this unpleasant consequence with the concept of periodic cosmic cycles. He argues that since each cycle is limited, a limited number of individuals will be produced in each cycle. To produce a limited number of individuals, in turn, necessitates a limited number of principles (V. 7 [18] 1, 13–14). Plotinus then asserts that a forming principle can produce only one specific form or property, and thus an individual consisting of a multitude of properties must accordingly be the product of a multitude of logoi, i.e. a logoi-combination (V. 7 [18] 1, 16–22).

The chapter concludes with Plotinus revisiting the idea of cosmic cycles. He introduces a novel concept: the recurrence of cosmic cycles will bring forth the same individuals through the same *logoi*, underscoring his stance on the finite nature of the intelligible (V. 7 [18] 1, 22–25).⁷²

⁷¹ Kalligas (1997a: 212). See the discussion on this part on pp. 122–129.

Tt is doubtful that the cosmic cycles are actually identical. If they were, this would imply that at the end of each cycle, the entire cosmos rewinds to the beginning and starts again, proceeding identically – akin to a video cassette. Such an idea of cosmic evolution is quite peculiar, and Pronoia would seem incongruous within such a framework. It is more plausible that the development of the cycles follows a singular intelligible plan, with the transition from one cycle to the next being seamless. While similar events occur and individuals may appear identical to those in the previous cycle, they are not necessarily ensouled by the same souls, thereby allowing for distinct and unique lives in each cycle. See pp. 160–161 where I comment on this passage in more detail.

Chapter V. 7 [18] 2 discusses the transmission of forming principles (logoi) in biological heredity. Plotinus explores whether parents can pass on logoi to their offspring that are not actualised in their own phenotype, leading to offspring inheriting traits different from those of their parents (V. 7 [18] 2, 1–7). He suggests that during reproduction, parents produce a unique mixture of logoi for each of their offspring, including some logoi that are not actualised by the parents themselves (V. 7 [18] 2, 5–7). This results in offspring inheriting a distinct logoi-combination, leading to individual properties not directly traceable to their parents.

Plotinus then examines why siblings often resemble one parent more than the other (V. 7 [18] 2, 7–8). He attributes this to the unequal dominance of paternal and maternal *logoi* in heredity (V. 7 [18] 2, 8). This dominance is qualitative rather than quantitative, as both parents pass on the entire set of *logoi* (i.e. the *logoi* of all living beings contained in the soul) (V. 7 [18] 2, 11–12). The dominance in the embryonic matter, however, can sway towards either the maternal or paternal *logoi* (V. 7 [18] 2, 12–13).

Next, Plotinus discusses the origin of various phenotypes (such as skin colour, body size, mentality) in different regions of the earth. He initially suggests that the variation in dominance of *logoi* in matter across different regions leads to these differences. However, he rejects this theory, asserting that beautiful properties arise from *logoi*, while matter can only produce ugliness.

Plotinus concludes the chapter by setting the stage for a discussion on identical twins in the next chapter. He ponders whether the same *logoi*-combination can produce several identical individuals within one cosmic cycle, having established in the previous chapter that different individuals cannot result from the same *logoi*-combination.

This chapter is, in my opinion, of great interest and value, for it is here that Plotinus speaks at greater length about embryological issues than anywhere else in the *Enneads*. He introduces a concept of biological heredity that was very different from the prevailing theories of his time. Even in this brief presentation on biological heredity, it is striking that Plotinus does equal justice to both procreators, which represents a major departure from the theories popular at the time that denied the female role in reproduction. It involved a radical change in the representation of the female role in reproduction, which was subsequently taken up and developed further by some later Neoplatonists.⁷³ Unfortunately, Plotinus does not explain what criterion or mechanism determines whether it is the male or the female part that

On Neoplatonic embryology, see the work of Wilberding (2008, 2011, 2012, 2015a, 2015b, 2016, 2020). In his monograph *Forms, Souls, and Embryos*, Wilberding (2017) compiles several important texts on embryological questions by Neoplatonists such as Porphyry, Proclus, Philoponus et al. On embryological models in ancient philosophy see also Henry (2005), Sharples (2004), Potter (2012), Pellegrin (2006), and Müller & Olsson (2003).

dominates. However, in other passages he does mention that the principle governing hereditary processes is the World Soul.⁷⁴

Chapter V. 7 [18] 3 explores the formation of identical twins and cubs from the same litter, focusing on how each individual is uniquely formed by a distinct logoi-combination. Plotinus initially hypothesises that identical twins and cubs might actualise the same logoi-combinations as their siblings, considering their apparent identical nature (V. 7 [18] 3, 3–4). If this were the case, then the number of individuals born in one cosmic cycle would not correspond to the number of possible logoi-combinations (V. 7 [18] 3, 4–5). Plotinus, however, rejects this conclusion and affirms that there must be as many different individuals as there are different logoi-combinations (V. 7 [18] 3, 4–5).

To illustrate how seemingly identical individuals are indeed uniquely produced, Plotinus draws a comparison between a craftsman's production methods and nature's approach. A craftsman, who uses conscious planning and 'logical difference' to create products, differs from nature, which operates without discursive reasoning (*logismos*) and automatically produces things without consciously planning them (V. 7 [18] 3, 7–11). Nature, guided by the blueprints of the World Soul, manifests unique living beings through distinct *logoi*-combinations, even if these differences are not (immediately) perceptible (V. 7 [18] 3, 11–13).

Plotinus further elaborates that the number of individuals in creation is predetermined by the total number of logoi (V. 7 [18] 3, 12–15). Once all logoi-combinations are actualised, the cosmic cycle completes and restarts. Each new cycle repeats the same actualisations of logoi-combinations (V. 7 [18] 3, 15–19). (This, however, must not lead to identical evolution across cycles.)

Plotinus concludes by addressing the scale of a cosmic cycle and the vast number of individuals it encompasses (V. 7 [18] 3, 19–22). He emphasises that while the cosmic cycle's scope might seem immeasurable, it does not imply numerical infinity in the intelligible realm. The principles of the Intellect and the Soul are unlimited in their active power, not in their quantity (V. 7 [18] 3, 22–24).

Despite the brevity of V. 7 [18], Plotinus treats the subject of individuality on every level imaginable. He begins with metaphysical concerns about the principles of individuation, then moves on to problems about heredity/embryology, and also deals with the psychological aspect of individuals by considering the mechanism of transmigration of souls. Plotinus also looks at the individual from a cosmological perspective, pointing out that each person is genuinely unique within the same cosmic cycle. Throughout the treatise, Plotinus emphasises that individuality is the result of a collaboration of many *logoi* at work, rather than a single principle, such

The role of the World Soul and other factors in biological heredity is discussed on pp. 180–189. See also Wilberding (2020), "The World Soul in the embryological theories of Porphyry and Plotinus'.

as a transcendent Form or a single *logos*, or, on the other hand, purely matter. In the spirit of Plotinus, I understand the *logoi* as holistic principles that are involved in both psychological and biological/embryological processes, and that can therefore plausibly account for the constitution of sensible individuals. Plotinus progresses from a rudimentary understanding of each living being's individuality, such as visible bodily traits, through more complicated instances such as identical twins and animal cubs. V. 7 [18] must be mentioned as the sole treatise in which sensible individuality is discussed in depth.

a) Plotinus' theory of individuals and logoi

The Neoplatonic metaphysical system is based on the premise that the whole sensible cosmos and all the living beings in it originate from the intelligible, and are thus caused by intelligible principles (V. 7 [18] 1, 1–3). While Plato's opponents accused him of dividing reality into an intelligible realm of abstract Forms, on the one hand, and the physical cosmos on the other, Plotinus cannot be accused of such a division of reality into two essentially different realms. By introducing the One as the First Principle, Plotinus lays a foundation for both the intelligible and the physical realm, thereby establishing an ontological kinship between the two, in the sense that the physical realm emanates from the intelligible. Accordingly, sensible individuals and their individual properties must be generated by intelligible principles – and this is precisely what Plotinus wants to demonstrate in the first chapter of V. 7 [18]. The question is, which principles are best suited for the generation of individuals within a Neoplatonic system? If one turns to Plato's and Aristotle's respective theories of individuals, one encounters difficulties. Platonic Forms are universal and therefore certainly not suitable as principles of individuals. Aristotelian hylomorphism, meanwhile, rejects the idea that intelligible Forms exist independently from matter. Plotinus' solution is to postulate principles of individuals that exist independently of matter in the intelligible, but are not as universal as Forms: these principles of individuals are the *logoi* in the soul. Using *logoi*, the Soul creates the physical cosmos together with all the living beings existing in it (V. 7 [18] 1, 9-12).

Plotinus' theory of individuals, based on *logoi*, enjoys significant advantages over the theory of Forms of individuals. Because of their exclusively universal character, Forms cannot explain particular phenomena such as individuals and individuality. *Logoi*, on the other hand, provide a clear model of how the individuality of an individual might be constituted. Each individual, according to Plotinus, is generated by a combination of *logoi*, in which each *logos* is responsible for a particular property. This model is able to capture both the complexity and the uniqueness of individuals. Moreover, unlike the Forms of individuals – a theory which violates all the fundamental principles of Platonism – the theory based on *logoi* can easily be adapted to the Platonic system. Plotinus provides a theory which grounds not only individuals and individuality in the intelligible, but also the uniqueness of individuals: everyone

is unique because Plotinus demands a strict quantitative correspondence between individuals and their causes, i.e. their *logoi*-combinations. According to Plotinus, it is impossible for two identical individuals to exist within one cosmic cycle – even a pair of identical twins is actually produced by two different *logoi*-combinations. Another advantage of *logoi* is that unlike the theory of Forms, *logoi* are responsible not only for human individuals but for the whole of creation. *Logoi* are holistic principles, meaning it is unnecessary to postulate different principles for humans on the one hand, and the rest of creation on the other. It is also significant that this theory of individuals can explain how the transmigration of the soul works: although transmigration is an important doctrine of Platonism, until Plotinus it had been primarily based on mythical narratives. Plotinus also uses *logoi* to develop an innovative and advanced embryological theory, according to which both the male and the female procreator contribute equally to biological heredity and the formation of offspring.

Despite all the advantages that Plotinus' theory of individuals has to offer, some questions remain unanswered. For example, how can physical changes such as the growth of the body, the greying of the hair, and the ageing of the skin be explained by *logoi*? Are the processes of ageing encoded in the *logoi*? Or is it possible that a soul, when ensouling a new body, 'deactivates' certain *logoi*, and later starts to actualise other *logoi* as the individual changes, for instance by acquiring virtues and abilities?

b) *Logoi* in the doctrine of transmigration

Although Plotinus does not discuss it much, the doctrine of transmigration has a key function in V. 7 [18]. It helps Plotinus to define appropriate principles for the individuation of sensible individuals. At the beginning of chapter one, Plotinus shows that Forms of individuals are not compatible with the doctrine of transmigration. If there were a Form of Socrates, for example, then the soul of Socrates could only be reborn as Socrates. But according to the doctrine of transmigration, the soul of Socrates periodically reincarnates as a completely different individual, which could be an animal or even a plant. For reincarnation to be possible, the soul of Socrates must transcend or carry within itself the principles of individuation. This is why Forms cannot be the principles that individuate sensible individuals. The *logoi* in the soul, on the other hand, are suitable for this task.

Immediately after proposing this theory (V. 7 [18] 1, 7–9), Plotinus makes two important statements to refine it further. First, he states that every soul possesses the *logoi* of every living being existent in the cosmos (V. 7 [18] 1, 9–12). Throughout the *Enneads*, Plotinus repeatedly emphasises the unity of all souls, which is now also expressed in the fact that all souls possess the same principles. This fact explains

⁷⁵ III. 4 [15] 2, 12-24.

how it is possible for a soul to reincarnate first as Socrates and then as someone else, or even for a human soul to transmigrate into an animal body.

c) Plotinus' embryology

In chapter two, Plotinus presents an embryological concept based not on empirical observations, but on metaphysical considerations. In doing so, Plotinus creates a new methodological approach to embryological issues. This approach leads Plotinus to postulate equality between male and female procreators with regard to biological heredity. The logoi play a key role in this.

Plotinus describes a process of biological inheritance that takes place at the level of the Soul. Parents pass on their bodily properties to their offspring by passing on the *logoi* of those properties. When the paternal and maternal *logoi* are mixed, a *logoi*-combination is created which is then actualised by the future child (V. 7 [18] 2, 1–2). Which parent the child more closely resembles does not depend on how many *logoi* each of the parents contributed to reproduction (V. 7 [18] 2, 8–12). Rather, Plotinus states that the child's similarity to the father or the mother is defined by which parental *logoi* are dominant (V. 7 [18] 2, 8). If the child resembles its father, this is because the father's *logoi* were dominant during procreation; if the child resembles its mother, the maternal *logoi* have prevailed. Which *logoi* prove to be dominant in reproduction is regulated by the World Soul. (This is, however, not explained in V. 7 [18], but in other passages of the *Enneads*, such as II. 1 [40] 5, 18–23, IV. 3 [27] 6, 13–18, and II. 9 [33] 18, 14–17.)

As pointed out above, the fact that Plotinus' embryology allows an equal role for the female and the male procreator is remarkable. Most embryologists in Plotinus' time thought that women had an inferior ability to pass on genetic information compared to men. Faristotle, for instance, considered the male the efficient and formal cause of offspring, while the female was seen as merely the provider of matter and space for the embryo. By assigning different functions to the two parents in procreation, Aristotle has to provide different explanations for how children come to resemble each parent. It is at this point that his theory becomes complicated and confusing. A fuller explanation of the various ancient theories of embryology, along with comparisons to Plotinus, will appear in the commentary; for now, it is important to note that regardless of the biological differences between the two sexes, Plotinus' metaphysics asserts absolute equality between them in heredity,

⁷⁶ Wilberding (2015b: 151–153). For a detailed discussion of the role of the male and the female in ancient theories of reproduction and biological inheritance, see the commentary on pp. 163–206.

This representation is exaggerated and represents the ideal case in Aristotelian embryology, which is often called 'reproductive hylomorphism' (Henry, 2006a). Aristotle allows for the possibility that the mother can also pass on her form to the offspring (GA 767a36–767b8).

which had previously been inconceivable.⁷⁸ In this way, Plotinus is able to explain similarities between children and either parent.

Moreover, his theory also explains how children can exhibit properties that cannot be attributed to either of their parents: since individual souls contain all the *logoi* that exist in the cosmos, *logoi* actualised by neither parent can turn out to be dominant. In this way, children can have peculiar properties that are not contained in the phenotype of their parents. Finally, Plotinus offers (though not explicitly) an explanation for the problem of why malformed babies are born. He sees matter as the cause of the 'unnatural' and the 'ugliness' (V. 7 [18] 2, 15–17). Matter is strongly opposed to the intelligible principles, and the interaction of matter and *logoi* is not always without problems. If matter is unruly towards the impact of the *logoi*, the form of the *logoi* cannot be imparted to matter 'according to nature', resulting in deformations.

d) Stoic influence in V. 7 [18]

Many of Plotinus' arguments in V. 7 [18] were mistakenly interpreted as Stoic. For example, Rist (1966: 230), Armstrong (1977: 56), D'Ancona Costa (2002: 560), and Aubry (2008: 278) argue that Plotinus' theory of individuals intersects with the Stoic doctrine of *idiôs poion*, or 'peculiarly qualified thing'.⁷⁹ Graeser (1996: 190) notes that the concept of an individual's uniqueness is of Stoic origin. Blumenthal (1966: 79), Ferrari (1998: 649–650), Nikulin (2005: 291), and Aubry (2008: 279) argue that in V. 7 [18] Plotinus refers to the Stoic theory of cosmic cycles. Concerning the doctrine of cosmic cycles in particular, Heinemann (1921: 72) writes exaggeratedly: 'One can hardly imagine anything less Plotinian.'80

Although many of the themes of V. 7 [18] were also treated by the Stoics, I argue that the arguments Plotinus advances here are anything but Stoic. For example, Plotinus explains that the cosmos is limited by cosmic cycles, each of which is identical to the previous one. Contrary to most scholars (Blumenthal, 1966; Ferrari, 1998; Nikulin, 2005), I argue that Plotinus aligns himself not with the Stoic but with the Platonic understanding of cosmic cycles, for nowhere in the *Enneads* does he speak of the periodic annihilation (*ekpurôsis*) and rebirth of the cosmos, which is fundamental to the Stoic doctrine. As a matter of fact, Plotinus' theory of cosmic cycles is equivalent to the Platonic notion of the 'perfect year' (*Tim.* 39d2–e1), which

This kind of liberal attitude towards the female sex can also be seen in the *Vita Plotini*. Porphyry reports that after Plotinus arrived in Rome from his failed expedition to Persia, he was placed in the house of a widow, Gemina. There, he looked after protégés, both boys and girls, and lived alongside a number of other women, such as the widow Chione, who, as Porphyry mentions, lived in the same house with her children. In addition, women who 'were greatly devoted to philosophy' attended his lectures (*Vita Plotini*, 9, 1–2). Even though Plotinus lived in a community with many women, he apparently never married, and had no children – at least, the *Vita Plotini* says nothing about any family.

⁷⁹ This translation is suggested by Irwin (1996: 447, fn. 1).

⁸⁰ Heinemann (1921: 72): 'Etwas Unplotinischeres läßt sich kaum vorstellen.'

is completed when all the celestial bodies of our solar system return to their original positions (39d2–e1):

It is none the less possible, however, to discern that the perfect number of time brings to completion the perfect year at that moment when the relative speeds of all eight periods have been completed together and, measured by the circle of the Same that moves uniformly, have achieved their consummation. This, then, is how as well as why those stars were begotten which, on their way through the universe, would have turnings. The purpose was to make this living thing as like as possible to that perfect and intelligible Living Thing, by way of imitating its sempiternity (*Tim.* 39d2–c1, translated by D.J. Zeyl).

Another theme of V. 7 [18] which scholars credit the Stoics with endorsing is individual uniqueness. Like the Stoics before him, ⁸¹ Plotinus argues that individuals, even identical twins and cubs from a litter, are unique and endowed with peculiar properties. What scholars usually fail to take into account is that Plotinus justifies such a theory by an additional argument involving *logoi*-combinations. Indeed, the Stoics maintain that there cannot be identical individuals: firstly, in epistemological terms, because the Stoic sage would not be able to distinguish them; and secondly, from a metaphysical perspective, because this implies that two identical individuals would in fact be one individual in two substrata – a scenario they take to be absurd. ⁸² In V. 7 [18], Plotinus argues that there cannot be identical individuals, because the *logoi*-combinations that produce them are also all unique. According to Plotinus, there is nothing random about the creation and the cosmos. Every living being, be they a human or an ant, originates from the intelligible according to a plan and is produced by a unique *logoi*-combination. The number of individuals is measured

See, for example, Plutarch, *Comm. not.* 1077c—e = 28O LS, Cicero, Acad. 2.77—8 = LS 40D, and the notorious 'identity puzzle' of Dion and Theon posed by Chrysippus in Philo *de immut. mundo* 48 11.397 = LS 28P: 'The question arises which one of them [Dion or Theon] has perished, and his [Chrysippus's] claim is that Theon is the stronger candidate. These are the words of a paradox-monger rather than a speaker of truth. For how can it be that Theon, who has had no part chopped off, has been snatched away, while Dion, whose foot has been amputated, has not perished? "Necessarily", says Chrysippus. "For Dion, the one whose foot has been cut off, has collapsed into the defective substance of Theon. And two peculiarly qualified individuals cannot occupy the same substrate. Therefore it is necessary that Dion remains while Theon has perished" (ibid., pp. 171–2)' (*de immut. mundo* 48 11.397 = LS 28P, translated by Long and Sedley, quoted in Burke, 1994: 129–130).

Eric Lewis (1995: 90–91): 'First, the epistemological motivation. In order to ensure the possibility of infallible knowledge, and so preserve the possibility of the existence of a sage, the Stoics needed to preclude the possibility of two qualitatively indistinguishable individuals. Were there to be qualitatively indistinguishable individuals, a Stoic sage, when faced with one such individual, might very well mistake it for the other. [...] The Stoics buttress their theory of unique qualities with a view concerning individuation. They claim that if there were seemingly two qualitatively indistinguishable individuals, this would in fact be a case of one peculiarly qualified individual in two substrata, something which they take to be simply an absurdity (Plut. CC 1077C= LS 280). They adhere to a related principle, that there could not be two peculiarly qualified individuals in one substrate (this is the famous Dion-Theon passage preserved by Philo, *de immut. mundo* 48 11.397= LS 28P).'

(*memetrêtai*) and corresponds to the number of *logoi*-combinations contained in the soul (i.e. World Soul). The development of the cosmos, and the life within it, are programmed, as it were, by the soul, and it is the soul that runs the cosmic programme by actualising *logoi*. The basic idea is that each *logoi*-combination can appear only once within one and the same cosmic cycle. Identical individuals thus cannot exist, although, as Plotinus says, we are sometimes unable to perceive subtle differences between certain individuals.

However, the influence of Stoicism on Plotinus, and the Stoics as a source of inspiration, is undeniable. One might argue that Plotinus appropriates Stoic theories, substantially transforming them to address certain Platonic problems, such as the issue of individuation of particulars. In doing so, the Stoic *logoi spermatikoi*, which are originally conceived as material, are elevated to a purely intelligible realm and seamlessly integrated into the broader context of Platonic philosophy.

Zucchi's recently published work offers a detailed analysis of how Plotinus engages with both Aristotle and the Stoics in V. 7 [18], closely read in parallel with VI. 1–3 [42–44] (*On the Genera of Being*). As mentioned earlier, I can only briefly address Zucchi's book, as my own work was already completed by the time his was published. Zucchi (2024: 196–201) suggests that Plotinus's exploration of whether Forms exist for individual things occurs within an academic context in which Aristotleian criticism plays a central role. Aristotle famously argued that Platonic Forms are mere duplicates of sensible things and therefore unnecessary (*Metaph*. I 991a8–b20, *Metaph*. XIII 1079b12–1080a8). This critique creates a dilemma: affirming Forms of individuals supports Aristotle's critique, as Forms of individuals would create even more unnecessary duplicates, while denying their existence raises the problem of explaining individuation. Since universal Forms cannot directly cause individuals, individuation and unique properties would require a materialist explanation, akin to Stoic theories.

As Zucchi explains, Plotinus resolves this dilemma by showing that individuality can be maintained within an intelligible framework, avoiding reliance on either Forms of individuals or materialist views. Drawing on Stoic concepts, such as the *logos*, Plotinus transcends the Aristotelian dichotomy between Forms and matter, offering a more nuanced Platonic theory. According to Zucchi, this enables Plotinus to address Aristotelian and Stoic objections while advancing beyond traditional Platonic thought.

Zucchi's approach to V. 7 [18] differs significantly from mine, though we agree on several key points. Like me, Zucchi (2024: 172–180) argues that the central theme of Plotinus's V. 7 [18] is not the question of whether there are Forms for individual things, as traditionally believed, but rather the principle of individuation and the concept of individuality. He interprets the initial question 'Is there also a Form of the individual?' as asking whether it is possible to conceive of an intelligible dimension of individuality, or whether, like the Stoics and Aristotle, we must assert

that the individual is merely a collection of sensible properties. Zucchi and I both contend that Plotinus argues that individual differences are not rooted in matter but rather stem from innumerable particular distinctions tied to distinct *logoi*. These *logoi* function as intelligible principles governing the unique characteristics of individuals, alongside their shared participation in the Form of Human Being.

Nevertheless, our interpretations diverge in important respects. Zucchi rejects the idea of a combination of *logoi*, which is central to my analysis. He offers a more Stoic reading of Plotinus, concluding that Plotinus holds that though an individual is defined by a collection of properties, these properties are not each associated with a distinct intelligible *logos*. Rather, the entire set of properties is linked to a single *logos*, much like in Stoic thought, where each individual is characterised by a set of properties contained within a single, specific *logos spermatikos*. I am confident that this distinction leads Zucchi and me to many other differing conclusions in our analyses, which would be an intriguing subject to explore in another work.

5. FORMS OF INDIVIDUALS IN PLOTINUS? A LENGTHY DEBATE

5.1 THREE READINGS OF V. 7 [18]

This chapter aims at reconstructing the development of the scholarly debate surrounding the treatise V. 7 [18]. As previously mentioned, 83 V. 7 [18] is one of the most controversial of Plotinus' treatises. There are three main schools of thought as to what this treatise is about: (1) V. 7 [18] is about Forms of sensible individuals; (2) V. 7 [18] is about individual intellects or the undescended parts of human souls; (3) V. 7 [18] is about forming principles (logoi) of sensible individuals. In what follows, I shall present and discuss the three readings in more detail and illustrate their chronological development using a table.

The first reading claims that Plotinus postulates transcendent Platonic Forms of sensible individuals in V. 7 [18]. As early as 1921, Heinemann had postulated Forms of individuals in Plotinus, but it was John Rist's 1963 article 'Forms of Individuals in Plotinus' that really sparked the debate. Rist (1963) argues that Forms of individuals, such as the Form of Socrates (*Autosôkratês*, i.e. 'Socrates-Itself' in V. 7 [18] 1, 4), can explain the process of individuation, i.e. how unique sensible individuals come into being. Rist (1963: 223) considers Forms of individuals a 'radical innovation [...] of general philosophical value which also enables Plotinus himself to achieve a greater coherence in his system.' However, in response to Rist's article, Henry J. Blumenthal (1966: 66, 72, 79) points to several treatises (e.g. V. 9 [5] 12, 1–4; VI. 5 [23] 8, 35–42) which demonstrate 'a genuine inconsistency' in Plotinus' work, since they explicitly deny the existence of Forms of individuals.⁸⁴

Blumenthal's objection provoked numerous reactions, and various strategies were employed to explain away the alleged inconsistencies. Mamo (1969) and Rist (1970), for example, see no explicit rejection of Forms of individuals in the passages cited by Blumenthal. Another strategy has been to reinterpret the problematic notion of Forms of individuals in V. 7 [18]. Armstrong (1977), for example, suggests that Forms of individuals should be read as referring to individual in-

 $^{^{83}}$ See the Introduction on pp. 5–6.

W. 9 [5] 12, 1–4: 'But if the Form of man is there, and of rational and artistic man, and the arts which are products of Intellect, then one must say that the Forms of universals are there, not of Socrates but of man' (translated by A.H. Armstrong). VI. 5 [23] 8, 35–42: 'And the Idea, not being scattered [like this], gave nothing of itself to the matter, but was certainly not incapable, being one thing, of forming what is not one by its one and being present to all of it in the way that it is not this piece of it which forms one part and that other another, but it forms each part with the whole of it and as a whole. For it would be absurd to introduce many Ideas of fire in order that each individual fire might be formed by a different one; for in this way the Ideas will be infinite in number' (translated by A.H. Armstrong). Blumenthal (1966: 66–80) also refers to several other passages that may contain implicit denials of Forms of individuals: IV. 3 [27] 5, 8–11; VI. 7 [38] 3, 10; VI. 7 [38] 8, 1–5; VI. 7 [38] 9, 20–46; VI. 7 [38] 11, 14–15; VI. 2 [43] 22, 11–17; VI. 3 [44] 9, 27; III. 2 [47] 7, 6–12.

tellects (the theory of Form-Intellects).85 On this reading, the Form of Socrates (*Autosôkratês*) is nothing but the individual intellect (Form-Intellect) of Socrates residing in the universal Intellect.86 Kalligas (1997a) proposes a similar reading by identifying Forms of individuals with the undescended parts of human souls (the theory of soul-Forms).87 There is a difference between Form-Intellects proposed by Armstrong (1977) and the soul-Forms introduced by Kalligas (1997a). The theory of Form-Intellects implies that, for instance, the individual intellect of Socrates dwells among other Forms in the universal Intellect. In addition to the individual intellect of Socrates, there is also the undescended soul part and the descended soul of Socrates. In contrast to that, the theory of soul-Forms implies that the undescended soul parts are themselves a kind of Form. However, soul-Forms do not 'coincide completely in respect of their ontological status' with universal Forms, for in comparison to universal Forms, soul-Forms do have 'a kind of special relationship with one and only one particular body, endowing it with life and possessing privileged apprehensive access to its sensations and passions' (Kalligas, 1997a: 220–221). The advantage of Armstrong's and Kalligas' readings is that they keep V. 7 [18] consistent with the rest of the *Enneads*. The disadvantage is that neither scholar provides an answer to the philosophical problem of what ultimately individuates sensible individuals.88

Recently, a third reading of V. 7 [18] has been posited which has found widespread acceptance among scholars. Proponents of this interpretation, such as Remes (2007, 2008), Aubry (2008), and Wilberding (2017), agree that Plotinus addresses the question of what principles individuate sensible individuals, but their analyses of the text show that Plotinus rejects Forms of individuals in V. 7 [18]. Instead of

⁸⁵ Plotinus confirms the existence of individual intellects in the universal Intellect in VI. 2 [43] 20, 10–27. But what are these particular intellects? According to Armstrong, they are the individual intellects of human beings, such as, for example, the intellect of Socrates (*Autosôkratês*). Plotinus calls every Form, such as the Form of Human Being or the Form of Horse, an intellect in itself (V. 9 [5] 8, 1–7). How about the intellect of Socrates? Is it also a Form in the universal Intellect? This question cannot be answered simply and requires an in-depth study in its own right.

On the relationship between individual intellects and the universal Intellect see Hutchinson (2018: 17–35). Hutchinson discusses how a self-sculptor (i.e. an intelligent *self*), upon identifying with Intellect, gains direct access to eternal truths and Forms. However, Hutchinson points out that this integration into the intelligible world is only partial, resulting in a narrowed perspective and individualised cognition, akin to how a theorem becomes distinct when analysed.

The theory of undescended parts of the soul is peculiar to Plotinus. The theory states that individual souls do not descend completely into their sensible bodies, but that a part of the soul always resides in the intelligible (IV. 8 [6] 8, 1–3; II. 9 [33] 2, 4; III. 8 [30] 5, 10; V. 1 [10] 10). In this way ensouled beings always have a connection to the intelligible, and it is this undescended part of the soul that allows human beings to contemplate Forms. The theory of undescended soul parts is criticised by later Neoplatonists. On Plotinus' theory of undescended soul parts see Rist (1967a), Blumenthal (1996: 98–99), and Helmig (2012: 195–204). Helmig (2012: 268–270) also discusses the reception of the undescended part of the soul in Proclus. There, Helmig (2012: 269, fn. 33) quotes Steel (1978: 45) who states that 'lamblichus' criticism of Plotinus' thesis regarding the undescended soul was taken over by all later Neoplatonists.'

 $^{^{88}}$ For a more detailed discussion of the theories of Form-Intellects see pp. 61–63, and on soul-Forms, see pp. 61–71.

Forms, they argue, Plotinus introduces *logoi* as principles of sensible individuals. These *logoi* derive from universal Forms, but are primarily located in the Soul and constitute its essence. They give rise to sensible individuals and their properties, and also form the basis for Plotinus' doctrine of transmigration and his theory of embryology. The third reading, then, can not only explain the individuation of sensible individuals, but also manages to elucidate the universal scope of Plotinus' theory of individuation by incorporating psychological and biological aspects of individuals.

The following table attempts to illustrate how the three readings developed chronologically. Altogether, four phases of the debate can be identified. The first phase began with Heinemann (1921) and lasted until Rist (1970). In this phase, all scholars (except Cherniss, 1944)90 adhered to the first reading, i.e. that Plotinus postulates Forms of sensible individuals in V. 7 [18]. Armstrong (1977) initiated the second phase, which lasted until Ferrari (1998). In this period, all scholars (except Graeser, 1996)91 followed the second reading, arguing that V. 7 [18] is not about Forms of sensible individuals, but about Forms of intelligible individuals, which they call either Form-Intellects or soul-Forms. There follows a brief third phase, in which O'Meara (1999), Petit (1999, 2000), and Stern-Gillet (2000) revived the first reading. They drew attention to the context of V. 7 [18], which seems to indicate that Plotinus is asking about the principles that individuate sensible individuals, and that he regards these principles as Forms. Finally, the fourth phase began shortly after the turn of the millennium, with Nikulin's (2006) argument that *logoi*, rather than Forms, are at the heart of V. 7 [18]. After a detailed analysis of logoi in V. 7 [18], Nikulin (2006: 304) concludes that *logoi* perform the function of individuating sensible individuals, rendering Forms of sensible individuals superfluous. Likewise, Remes (2007) reconstructs the line of argument in the first chapter of V. 7 [18] and shows that Plotinus does not in fact postulate the existence of Forms of individuals. Although there is still one study in favour of Form-Intellects (Tornau, 2009) and one in favour of the Forms of sensible individuals (Sikkema, 2009) in the fourth phase, the third reading seems to represent the majority view in recent scholarship.

⁸⁹ VI. 2 [43] 5, 12–13; III. 8 [30] 3, 17–21.

⁹⁰ Cherniss (1944: 508) argues that by Forms of individuals Plotinus means individual souls: 'The "individuals" for which Plotinus posits ideas are not the particular phenomena but only living organisms, and these "ideas of individuals" are simply the individual *souls*.'

⁹¹ Graeser's (1996: 191) contribution again advocates the first reading. He suggests that Plotinus postulates Forms of sensible individuals in response to the Gnostic demonisation of the material world. By showing its direct descent from the divine Forms, Graeser argues, Plotinus tries to restore dignity to the world.

What is at issue in V. 7 [18]?					
Forms of sensible individuals	Form-Intellects / soul-Forms	logoi of sensible individuals and their properties			
Heinemann, F. 1921					
	Cherniss, H., 1944				
Trouillard, J., 1955					
Harder, R., 1956					
Rist, J.M., 1963					
Blumenthal, H.J., 1966					
Arnou, R., 1967					
Mamo, P.S., 1969					
Rist, J.M., 1970					
	Armstrong, A.H., 1977				
	Helleman-Elgersma, W.,				
	1980				
	Gerson, L.P., 1994				
Graeser, A., 1996					
	Kalligas, P., 1997a				
	Ferrari, F., 1997, 1998				
O'Meara, D.J., 1999					
Petit, A., 1999, 2000					
Stern-Gillet, S., 2000					
		D'Ancona Costa, C., 2002			
	Ousager, A., 2004				
		Nikulin, D., 2005			
		Sorabji, R., 2006c			
		Vassilopoulou, P., 2006			
		Remes, P., 2007, 2008			
		Aubry, G., 2008			
Sikkema, J., 2009					
	Tornau, C., 2009, 2010				
		Volkova, N., 2015			
		Wilberding, J., 2017			

In the commentary, I shall argue against the first and second readings and in favour of the third, but first, I shall briefly analyse most of the studies listed in the table using four questions: what motivations underlie each reading? What statements in V. 7 [18] support each reading? What are the philosophical issues that each reading seeks to resolve? How does each reading align with or diverge from the broader context of Plotinus' philosophy?

5.2 FIRST READING: V. 7 [18] IS ABOUT FORMS OF SENSIBLE INDIVIDUALS

According to some scholars, the following passage from V. 7 [18] contains an explicit endorsement of the existence of Forms of sensible individuals:

The question is, is there also a Form of the individual? Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world]. Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates], there will be Socrates-Itself, insofar as, qua soul, individuals exist there [in the intelligible world], as has been said (V. 7 [18] 1, 1–5, my translation).

All proponents of the first reading are convinced that the two phrases 'the principle of every individual, too, is there' and 'there will be Socrates-Itself ($Autos\^{o}krat\^{e}s$)' are evidence that Plotinus is postulating Forms of sensible individuals in this passage. There is, however, an obvious problem with this reading. The theory of Forms of sensible individuals, such as $Autos\^{o}krat\^{e}s$, stands in absolute opposition to the traditional Platonic theory of Forms.

There are some basic tenets that constitute the theory of Forms and which Forms of individuals do not fulfil: (1) Forms are universal; (2) *one* Form is the principle of *many* things (the one-over-many rule);⁹³ and (3) Forms are immutable and eternal. Let me provide an example: consider the Form of the Human Being. This Form is universal, because it represents the human species/genus. Consequently, we have *one* Form represented by *many* (or rather, all) human beings. Even if individual human beings are perishable, the species/genus persists, so that there are constantly human individuals participating in the Form of Human Being.

Forms of individuals, on the other hand, are not universal: the Form of Socrates (*Autosôkratês*), for instance, does not represent a species or genus, but only one individual. This means that *one* Form is represented by only *one* individual (Socrates), violating the one-over-many rule. Moreover, Socrates' existence on earth is tempo-

 $^{^{92}}$ $\,\,$ From now on, when I speak of Forms of individuals, I mean Forms of sensible individuals.

⁹³ Plato, *Rep.* X 596a6–7: 'Do you want us to begin our examination, then, by adopting our usual procedure? As you know, we customarily hypothesize a single form (*eidos*) in connection with each of the many things to which we apply the same name. Or don't you understand?' (translated by G.M.A. Grube, rev. C.D.C. Reeve). See Sedley (2013: 113–137).

rary — he lives for about seventy years. The Form of Socrates is thus instantiated in the sensible cosmos only for a very short time. What does the Form of Socrates do for the rest of eternity when no one participates in it? Is it 'inactive'? The Form of Socrates can hardly serve as a paradigm for other things in the world. As one can see, Forms of individuals raise quite a few problematic questions. As O'Meara (1999: 263) remarks, 'it might appear that the question whether or not there are Forms of individuals must seem to the Platonist about as valid as the question whether or not there are square circles.'

However, supporters of the first reading claim that Plotinus had good reasons for postulating Forms of individuals. One reason often given is that this theory gives humans a significant place in the sensible cosmos: the idea that Socrates' 'personal' archetype exists in the universal Intellect seems somehow to upgrade the significance of Socrates' role as an individual in the universe. 94 Another possible reason is that Plotinus was countering Plato's critics, such as the Peripatetics, who accused Plato of not having a systematic theory of how sensible individuals are caused. 95 Let us now take a closer look at the arguments for the first reading.

a) Heinemann, Trouillard, Harder, Rist

In his summary of V. 7 [18], Heinemann (1921: 63) characterises the treatise as a dialogue between two speakers. The first speaker seeks to raise all possible objections against the existence of Forms of individuals; the second speaker, on the contrary, maintains that there are Forms of individuals, and defends his position against the objections of the first speaker. In his further analysis of the treatise, however, Heinemann (1921: 65-66) concludes that V. 7 [18] could not have been written by Plotinus. He considers the questions, especially of the second and third chapters, ridiculous, and the answers naïve. The entire treatise, according to Heinemann, falls far short of Plotinus' usual standards:

Da wir nun wissen, daß die Diskussion innerhalb der plotinischen Schule so vor sich ging, daß die Schüler den Lehrer fragten, so dürfen wir uns über die Lächerlichkeit der Fragen, insbesondere des zweiten und dritten Kapitels, nicht wundern. [...] Es bleibt also nur zu untersuchen, ob Plotin für die Antworten verantwortlich ist. Nun fällt in ihnen zunächst eine gewisse Unsicherheit auf; wohl wird in den beiden ersten Kapiteln der allgemeine Standpunkt gewahrt, daß es von den Individuen Ideen gäbe, aber zum Schluß des zweiten Kapitels ist der Antwortende so in die Enge gedrängt, daß er sich nicht mehr zu helfen weiß und am Anfang des dritten Kapitels ganz von seinem Standpunkt abweicht, was dann freilich im folgenden wieder korrigiert wird; gerade diese Antworten zeichnen sich denn auch durch eine besondere Naivität aus. [...] Also die einzelnen Antworten sprechen nicht dafür, daß sie in dieser Form von Plotin stammen oder gar von ihm niedergeschrieben sind (Heinemann, 1921: 65–66).

⁹⁴ Compare Rist (1963: 230), Armstrong (1977: 57–58), Graeser (1996: 191), Ferrari (1998: 638).

⁹⁵ Compare Rist (1963: 223, 229), Gerson (1994: 62–63), Ferrari (1998: 633–532).

Heinemann (1921: 67) goes on to investigate whether V. 7 [18] accords with Plotinus' overall philosophy. On the one hand, he finds support for the theory of Forms of individuals in two other passages (VI. 7 [38], VI. 1–3 [42–44]), which he unfortunately does not explain further. On the other hand, Heinemann (1921: 71–72) considers the doctrine of cosmic cycles and the theory of logoi too Stoic to be attributed to Plotinus. At the end of his analysis, Heinemann (1921: 72–73) concludes that Plotinus cannot have written whole treatise, if at all. However, Heinemann seems to be alone in this opinion.

Like Heinemann, Harder (1956: 555) characterises the treatise as a dialogue. Unlike Heinemann, Harder states that it is not an argument between two different speakers, such as a teacher and a student, but rather a monologue, which takes place in Plotinus' head. In this monologue, Plotinus makes his 'Platonic voice' and his 'Stoic voice' converse with one another in such a way that the voices do not seek to refute each other, but to exchange ideas constructively. Unfortunately, Harder, like Heinemann, does not deal extensively with the theory of Forms of individuals, and does not attempt to locate it within the broader context of Plotinus' philosophy.

A more detailed discussion of Forms of individuals can be found in Trouillard (1955). Trouillard (1955: 76–77) begins by pointing to two passages (V. 9 [5] 12, 1–4; VI. 2 [43] 22, 10–13) in which Plotinus makes it clear that the individual is not present in the universal Intellect. However, Trouillard does not take these passages as serious counter-evidence, but instead focuses on the benefits which Forms of individuals offer to Plotinus' overall philosophy. He argues that in contrast to Plato, Plotinus grants individuals an essential existence by binding them to the divine Intellect, the Creator:

Les res singulières ne sont pas des fictions dues à l'expérience trompeuse des sens; elles sont fondées en raison : « Il y a des idées des individus », affirme Plotin contre le platonisme vulgaire ; « les choses singulières sont en Dieu et sont conçues par Dieu », dit Spinoza. La singularité n'est donne pas liée, pour eux, aux conditions de l'existence sensible, à la durée, à la mémoire, à l'imagination ; elle en est dans son essence, en tant qu'elle est rattachée à Dieu, indépendante (Trouillard, 1955: 79 – 80).

Trouillard's main argument is that self-knowledge, to which ancient philosophers constantly appeal, can only be achieved by being fully transparent and clear to oneself, 'comme peut l'être une idée qui est toute lumière et vision':

On voit comment l'ordre de l'esprit donne au moi de sauver son individualité. Transposée en intelligible, elle est à la fois intégrée et intégrante (IV. 4. 2). Par la médiation de l'universel, elle s'atteint directement. Il n'y a de véritable connaissance de soi qu'à ce niveau. La conscience empirique s'aperçoit obscurément à travers des symboles et des constructions disloquées dont elle n'a pas la clef. Se connaitre, c'est se saisir comme vérité éternelle. C'est être présent et transparent à soi, comme peut

l'être une idée qui est toute lumière et vision: « une lumière se voit elle-même » (V. 3. 8, 23) (Trouillard, 1955: 80).

John Rist (1963) is similarly positive about what he sees as Plotinus' exposition of Forms of individuals in V. 7 [18]. Rist (1963: 223) begins his article by pointing out some problems concerning the treatment of individuals in Plato and Aristotle. He argues that in Platonism, the main focus was on the intelligible and the universal, meaning that Plato neglected sensible individuals. In Aristotle (*Metaph.* VII 1036a), meanwhile, we find the statement that individuals cannot be defined. This meant that philosophy was not concerned with the individual except in so far as he was a member of a class' (Rist, 1963: 223). From this, Rist concludes that Plotinus was highly dissatisfied with the treatment of individuals in both Plato and Aristotle and therefore introduced the 'radical innovation of Forms of individuals'.

Rist goes on to investigate what might have motivated Plotinus to postulate such a theory in the first place. According to Rist (1963: 229), Plotinus was reacting to the Aristotelian (*Metaph*. I 990b) criticism of the Platonic theory of Forms: 'One of the more accurate arguments for Forms leads to the supposition that there should be Forms of particular things, which, he [i.e. Aristotle] adds, no Platonist would accept' (Rist, 1963: 229). In essence, Aristotle's critique in this passage focuses on the logical inconsistencies and unintended consequences of the Platonic theory of Forms, arguing that the arguments supporting this theory contradict its own foundational principles and extend the existence of Forms to things that undermine the coherence of the theory. Aristotle refers to Platonists who assume that there are Forms for every subject that a science studies. This implies that Forms are not limited to ideal or perfect entities but could include all subjects of scientific study, broadening the concept of Forms beyond what Platonists typically accept, such as Forms of negations and perishable things.

Furthermore, Rist suggests that Plotinus may have been inspired by 'the second Stoic genus of qualified things (*poia*)', which includes 'the peculiarly qualified things' (*idiôs poion*).⁹⁷ The Stoics held the view that every individual is distinguished

⁹⁶ Aristotle, *Metaph*. VII 1036a1–8: 'for "circle" is the same as "essence of circle", and "soul" the same as "essence of soul". But when we come to the concrete thing, e.g. this circle – which is a particular individual, either sensible or intelligible (by intelligible circles I mean those of mathematics, and by sensible those which are of bronze or wood) – of these individuals there is no definition; we apprehend them by intelligence or perception; and when they have passed from the sphere of actuality it is uncertain whether they exist or not, but they are always spoken of and apprehended by the universal formula' (translated by H. Tredennick).

⁹⁷ Compare Irwin (1996: 460): "The second Stoic genus mentioned by Plutarch consists of qualified things (*poia*), which correspond to qualities (*poiotetes*). Qualities "produce form (*eidopoiein*) and shape (*schêmatizein*) in whatever parts of matter they come to be in" (Plutarch, *Stoic. Rep.* 1054b = LS 47 M). Qualities are divided into common qualities (signified by, for instance, "man") and peculiar qualities (signified by, for instance, "Socrates").' Consider also Irwin (1996: 480, fn. 34): 'Sometimes the Stoics seem to speak of Socrates as a peculiar quality (*idia poiotês*; see DL vii 58 = LS 33 M), sometimes as a peculiarly qualified person (*idiôs poios*) or peculiarly qualified thing (*idiós poion*; *POxy* 3008, line

by at least one peculiar property that they possess for the duration of their lifetime. Matter and peculiar properties were regarded as individuation principles, with the *idiôs poion* imparting individuality to the individual. Rist (1963: 230), however, admits that there are 'enormous differences between a Stoic *idiôs poion* and a Plotinian form, but a possible connexion between the two lies in the recognition of individual rather than specific differentiation.' When comparing the Stoic doctrine of *idiôs poion* with the Plotinian Forms of individuals, Rist (1963: 230) favours Plotinus:

While the Stoics only recognised individuality as an aspect of every object which could be grasped in the abstract, Plotinus realised that its role is fundamental and that the reality of the object is so closely bound up with it that it must be given a place in the Ideal World. Where the Stoics made specific qualities prior to individual, Plotinus has given the Forms of individuals parity with the genera and species.

In sum, Rist's appreciation of Plotinus' 'radical innovation' on the theory of the individual can be seen as a significant development in Plotinian scholarship. As is widely acknowledged in contemporary research, Plotinus elaborated a sophisticated theory of the individual which included discussions of the self and consciousness; Rist's contribution was important in drawing attention to this.

b) Blumenthal, Mamo, Rist

Henry J. Blumenthal (1966) responded to Rist with an extensive article presenting textual evidence (V. 9 [5] 12 and VI. 5 [23] 8) that Plotinus explicitly rejects the existence of Forms of sensible individuals. Blumenthal (1966: 62) argues that the theory of Forms of individuals in V. 7 [18] is 'inconveniently sandwiched between two denials' in V. 9 [5] 12 and VI. 5 [23] 8. In total, Blumenthal discusses ten passages that are (more or less) clear denials of Forms of individuals. ⁹⁸ Unlike his predecessors, Blumenthal takes the counter-evidence more seriously and draws out inconsistencies in the *Enneads*.

Blumenthal's article provoked many reactions from scholars who sought to defend Plotinus' work against the accusation of inconsistency. The first to react was Mamo (1969), followed by Rist (1970) and Armstrong (1977). While Mamo and Rist attempted to show that the passages pointed out by Blumenthal are ambiguous and therefore do not necessarily rule out Forms of individuals, Armstrong suggests reinterpreting the concept of Forms of individuals so that it better fits into the broader context of the *Enneads* (1977: 56). He contends that the Forms of individuals

^{6 =} LS 28 C); see LS i, p. 172.' For more detail on *idiôs poion* and the Stoic theory of individuals, see pp. 154–158 and 226–227. See also Kerferd (1972), Sedley (1982), Burke (1994), Lewis (1995), Irwin (1996), Frede (1999a), and Hankinson (2003).

 $^{^{98}\}quad V.\ 9\ [5]\ 12,\ 1-4;\ VI.\ 5\ [23]\ 8,\ 35-42;\ IV.\ 3\ [27]\ 5,\ 8-11;\ VI.\ 7\ [38]\ 3,\ 10;\ VI.\ 7\ [38]\ 8,\ 1-5;\ VI.\ 7\ [38]\ 9,\ 20-46;\ VI.\ 7\ [38]\ 11,\ 14-15;\ VI.\ 2\ [43]\ 22,\ 11-17;\ VI.\ 3\ [44]\ 9,\ 27;\ III.\ 2\ [47]\ 7,\ 6-12.$

uals mentioned in V. 7 [18] are really the intellects or the higher selves of human individuals (the theory of Form-Intellects):

But there seems from our discussion to be no inconsistency with what is said anywhere else in the explicit statement that the higher self of a man has an individual Form for its principle, that there is a Form of Socrates as well as a Form of man, and I think we can take it that this is the considered opinion of Plotinus. Individual Forms are to be assumed wherever a real formal difference can be detected, as it can be clearly in the case of the true, higher selves of individual men (and of course of higher spiritual beings, gods and daemones): they should not be assumed where such differences cannot be observed, and it seems to have been Plotinus's normal thought that they should not be supposed to exist in the case of human bodies or anything lower than animal bodies in the scale of formal distinctiveness and complexity (Armstrong, 1977: 56).

In this way, Armstrong manages to avoid the problem of inconsistency in Plotinus. We shall deal with Armstrong in more detail later on. For now, I would like to present some examples of how Mamo and Rist deal with passages that seem to challenge the theory of Forms of sensible individuals:

But if the Form of man is there, and of rational and artistic man, and the arts which are products of Intellect, then one must say [chrê legein] that the Forms of universals are there, not of Socrates but of man. But we must enquire about man whether the individual is there; there is individuality, because the same [individual feature] is different in different people: for instance, because one man has a snub nose and the other an aquiline nose, one must assume aquilinity and snubness to be specific differences in the form of man, just as there are different species of animal; but one must also assume that the fact that one man has one kind of aquiline nose and one another comes from their matter. And some differences of colour are contained in the formative principle but others are produced by matter and by different places of abode (V. 9 [5] 12, 1–11, translated by A.H. Armstrong, slightly adapted to M. Vorwerk's German translation).⁹⁹

And the Idea, not being scattered [like this], gave nothing of itself to the matter, but was certainly not incapable, being one thing, of forming what is not one by its one

⁹⁹ M. Vorwerk's (2001) translation of the same passage: 'Wenn aber die Idee des Menschen dort ist – d.h. (wenn) die des vernünftigen dort ist und des kunstfertigen und die Künste, die 'Erzeugnisse des Geistes' (Plat. Nomoi 890 D 7) sind, (dort sind) – man andererseits aber auch sagen muß, daß es nur von allgemeinen Dingen Ideen gibt, nicht von Sokrates, sondern vom Menschen, ist nun hinsichtlich des Menschen zu untersuchen, ob auch Individuelles dort ist. Das Individuelle ist dort, weil nicht dasselbe bei jedem anders ist: Weil zum Beispiel der eine stumpfnasig, der andere hakennasig ist, muß man annehmen, daß die Hakennasigkeit und die Stumpfnasigkeit (spezifische) Unterschiede in der Spezies des Menschen sind, wie es auch beim Lebewesen (spezifische) Unterschiede gibt; daß es andererseits aber auch von der Materie herrührt, daß der eine diese, der andere jene Hakennasigkeit hat. Auch bei den Unterschieden der Hautfarben ist anzunehmen, daß die einen auf einem Formprinzip beruhen, die anderen hingegen die Materie und der je unterschiedliche Ort hervorruft.'

and being present to all of it in the way that it is not this piece of it which forms one part and that other another, but it forms each part with the whole of it and as a whole. For it would be absurd to introduce many Ideas of fire in order that each individual fire might be formed by a different one; for in this way the Ideas will be infinite in number (VI. 5 [23] 8, 35–42, translated by A.H. Armstrong).

For Blumenthal (1966: 79), the passage V. 9 [5] 12, 1–3 is the most conclusive evidence for Plotinus' rejection of Forms of individuals, at least when he wrote this particular treatise. Mamo (1969: 80), on the other hand, claims that this passage does not represent Plotinus' real view on the matter: Plotinus is merely summarising the traditional Platonic view according to which there are only Forms of universals. The crux of this argument is the expression *chrê legein* (i.e. one must say), which, according to Mamo (1969, 80), indicates that Plotinus is simply referring to the established 'Platonic-Aristotelian dogma'; Mamo (1969: 80–81) argues that when Plotinus gives his own opinion, he tends to prefer the expression *legomen* (i.e. we say). However, Mamo does not substantiate this claim with further examples from the *Enneads*.

Another argument, originally proposed by Trouillard (1955),¹⁰⁰ then by Mamo (1969: 81–82) and later also by Rist (1970), is that in V. 9 [5] 12 Plotinus initially rejects Forms of individuals, but then rethinks his denial. After stating 'that the Forms of universals are there, not of Socrates but of man', Plotinus goes on to consider whether in the case of man one must rather say that 'there [i.e. in the intelligible] is individuality, because the same [individual feature] is different in different people.' Trouillard, Mamo, and Rist believe that by the end of V. 9 [5] 12, Plotinus allows for the possibility of Forms of individuals. Rist (1970: 298–299), for example, argues that Plotinus thinks it

necessary to posit Ideas (i.e., Forms) of individuals [...] only presumably if the individuals are unique and not to be understood entirely in terms of class-membership. But in 5.9 the only differences which Plotinus seems to recognise between members of a species are their physical characteristics, such as having snub or hooked noses. If that is the only type of differentiation within a species, Ideas of individuals are unnecessary. Plotinus says no more in this chapter. The sum of his thought here is that there is the possibility of Ideas of individuals, but it should be rejected if individuality is only present in physical differences (Rist, 1970: 299).

Trouillard (1955: 76): 'Dans le premier (V. 9. 12), Plotin termine un traité sur le monde intelligible en répondant à des difficultés ou à des doutes. Et d'abord, il semble affirmer qu'il n'y a pas d'idée de Socrate, mais seulement de l'homme et des universaux (V. 9. 12, 3–4). Puis, il reprend le problème des la phrase suivante et attribue les différences individuelles en partie à la matière, en partie à l'idée ou à la raison séminale. [...] Aussi peut-on penser que la première affirmation est une question ou une objection insérée dans l'exposé, comme cela arrive souvent dans les Ennéades.'

But if Forms of individuals do not account for physical individuality, what purpose do they serve? Unfortunately, Rist does not elaborate on this matter.

Similarly, Rist (1970: 300) sees no objection to the theory of Forms of individuals in the passage VI. 5 [23] 8, 21–42, and argues instead that Plotinus here rejects only Forms of individual instances of fire, and probably by extension Forms of any elemental manifestation. Thus, the passage does not invalidate Forms of human individuals.

In this way, Rist (1970: 298-303) goes through all the passages from the *Enneads* which Blumenthal claims are incompatible with Forms of individuals and reinterprets them in favour of the theory.

c) Struggling with the doctrine of transmigration

Another factor which causes great difficulties for the first reading is the doctrine of transmigration; indeed, in V. 7 [18] Plotinus himself puts transmigration forward as an argument against the existence of Forms of individuals. After introducing the question of whether there are Forms of individuals (V. 7 [18] 1, 1), Plotinus replies that such a theory would make sense if, for example, the soul of Socrates always existed as the individual Socrates:

Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates], there will be Socrates-Itself, insofar as, qua soul, individuals exist there [in the intelligible world], as has been said (V. 7 [18] 1, 3–5).

This passage implies that if there were a Form of Socrates, then the soul of Socrates would only have the possibility of being born as Socrates. Immediately afterwards, Plotinus introduces the doctrine of transmigration, according to which the soul of Socrates is periodically reborn as different individuals (e.g. Pythagoras) (V. 7 [18] 1, 5–7). Thus, the doctrine of transmigration makes the existence of a Form of Socrates impossible:

If, however, the soul of Socrates is not always [Socrates], but being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras or someone else, then this individual will no longer be there [in the intelligible world] (V. 7 [18] 1,5-7).

The argument of transmigration poses a huge problem for proponents of the first reading, which they try to mitigate as best they can. For example, Rist (1963: 224) calls the introduction of the doctrine of transmigration in V. 7 [18] a 'difficult additional remark'. Later (1963: 228), he argues that chapter three of V. 7 [18] resolves the tension between the theory of Forms of individuals and the doctrine of transmigration, in the sense that although Socrates and Pythagoras may have the same soul, there can still be a Form of Socrates and a Form of Pythagoras in the universal

Intellect. Rist (1963: 228) believes that in V. 7 [18] 3 Plotinus aims to show that identical twins are not the same person and, therefore, that each of them must be caused by an individual Form. He then argues (1963: 228) that since Socrates and Pythagoras are also different persons, one must posit a different Form for each of them. Finally, he states that if one were to read the first chapter of V. 7 [18] without chapter three, one would have to reject not the theory of Forms of individuals but rather the doctrine of transmigration in Plotinus:

Yet he does not in fact mention the numerical distinction of individuals until 5.7.3, and this makes 5.7.1 a little misleading. Without the argumentation of chapter 3, chapter 1 would in fact lead to a denial of reincarnation. It is likely that Plotinus was not considering the full consequences of his position in 5.7.1.5.7.3, however, resolves his problem without the need to assume that his system at this point must be pronounced inherently inconsistent (Rist, 1963: 228).

To avoid the uncomfortable implications of the doctrine of transmigration, Mamo (1969: 95) refuses to take Plotinus' 'magical' theory of reincarnation seriously:

What Plotinus rules out as incompatible with the idea of an eternal form of Socrates is the magical transformation of Socrates to Pythagoras, which would, in effect, mean the end of Socrates as a conscious self. If then, the continuity (mnemonic and qualitative) of this self can be severed, the self would disappear, its connection with the Nous lost. There would be no possibility of recovery, of return. If this can happen, the metaphysical demands of the system can still be satisfied, as Rist suggests; but the religious demands of the self can never be. The myth of reincarnation has no place in the mystical system of Plotinus, except in its most innocuous form.

Reincarnation implies that the individual Socrates ceases to exist after his death. Mamo's concern is that this destroys Socrates' 'religious demands' for individual immortality as Socrates. With each death and reincarnation, Socrates' self-identity becomes discontinuous and fragmented. In the end, Socrates, who all his life had hoped for union with the divine Intellect, will no longer experience this union as Socrates.

Rist (1963: 228): 'Plotinus certainly appears to be giving the impression in 5. 7. 1 that a doctrine of reincarnation would be fatal to this theory. Yet we know that he accepted reincarnation when he wrote *Ennead* 3. 4 – which on Porphyry's account is almost contemporaneous with 5. 7 – and in many other treatises. Is it necessary here to convict him of a radical inconsistency and leave the problem at that? Such a solution or lack of solution would seem to be warranted by 5. 7. 1, but 5. 7. 3 resolves the difficulty, and in doing so opens our eyes to an important general principle in Plotinus' thinking. We have already pointed out that in this section Plotinus regards numerical, non-qualitative distinction as a mark of existential difference. Even two exactly identical twins, could such exist, would not be the same person, but different people, and would therefore presuppose different Forms. Similarly even if the soul of X became the soul of Y in course of time, the fact that it had existed as X is sufficient to guarantee the existence of a corresponding Form. Hence although X is reincarnated as Y, he can never blot out that former X-ness that did in fact exist. Once existence has occurred, so to speak, it cannot be eliminated.'

Mamo, however, does not realise that Plotinus conceives the phenomenon of self-identity in a much broader sense, as something that transcends physical individuality. For example, Socrates' true self transcends his body and thus also his nationality, gender, profession, even the human species. The true self of Socrates is not limited to Socrates but is, as it were, a whole intelligible cosmos. 102 The 'magical' part of the doctrine of transmigration implies that we are much more than our physical manifestations on earth during our lifetimes: subtract everything that defines you as a concrete individual, and what remains is the true self. Thus, when the soul of Socrates becomes the soul of Pythagoras, this in no way implies a discontinuity of the soul's self-experience. Plotinus demonstrates this with the example of actors performing different characters by changing their costumes: 'If, then, death is a changing of body, like changing of clothes on the stage, or, for some of us, a putting off of body, like in the theatre the final exit, in that performance, of an actor who will on a later occasion come in again to play, what would there be that is terrible in a change of this kind, of living beings into each other? [...] And even if Socrates, too, may play sometimes, it is by the outer Socrates that he plays' (III. 2 [46] 15, 24-29; 59-60, translated by A.H. Armstrong). Even though an actor on stage has to embody different characters with different personalities, appearances, and attitudes, the actor's own identity will not be erased, and nor will the actor experience a discontinuity of the self. In this way, the individuals Socrates and Pythagoras are two different roles played by the same soul.

d) Graeser, O'Meara, Petit, Stern-Gillet, Sikkema

For about thirty years after John Rist's second article (1970), the second reading remained the orthodoxy. ¹⁰³ But towards the end of the millennium, there were various

In her monograph *Plotinus On Self*, Remes (2007) explains that Plotinus posited a dual nature of the human self. First, there is the bodily self, and then there is the 'true self' that transcends the body and is purely intelligible: 'Although Plotinus allows for a use of self which includes the bodily, he maintains that the true self is the paradigmatic perfect knower. Why separate and reify a self above the whole embodied person? Plotinus saw the peculiarity of the human self in its desire and capacity to consciously strive towards goodness and towards its own development and integration through the use of reason. In this he firmly follows a general trend in ancient philosophy where human flourishing is connected with the aspiration to become "as godlike as possible". For Plotinus, every person has a single rational and self-aware soul. The self-aware thinker is the unitary core of every changing and complex person. One dimension of the thinker is a principle and an ideal of thought, an atemporal, self-identical, complete and fully coherent thought activity, connected with the divinely organised essential structures of the universe. This paradigm has an embodied and temporal counterpart, the subject of fallible reasoning, capable of reflecting on itself as well as the contents within its mind. The embodied self has knowledge, coherence, unity and flourishing as its telos, but the innate powers it has from the higher and paradigmatic aspect secure that it can pursue them with success' (Remes, 2007: 11).

As a reminder, the second reading is put forward by Armstrong in 1977 in response to Blumenthal's remark that the theory of Forms of individuals is rejected in many other passages, leading to inconsistencies in Plotinus' work. Armstrong proposes to reinterpret Forms of individuals in V. 7 [18] in terms of intellects of human individuals. Subsequently, Kalligas proposes to read Forms of the individuals in terms of the undescended parts of souls.

attempts (Graeser, 1996; O'Meara, 1999; Petit, 1999, 2000; Stern-Gillet, 2000; and Sikkema, 2009) to resurrect the first reading by arguing that in V. 7 [18] Plotinus was looking for principles to account for individuation of sensible individuals and their individual properties. In this chapter, I shall briefly discuss these arguments.

Andreas Graeser (1996: 191) assumes that Plotinus introduced Forms of individuals as a counterpoint to the Gnostics' demonisation of the world, in an effort to 'preserve the dignity of the world as a world'. Thus, Forms of individuals ensure that earthly things are essentially an expression of the noetic cosmos:

Namentlich da, wo er auf Attacken gnostischer Denker reagieren muss und sich von der Vorstellung bedrängt sieht, dass die irdische Welt nur ein chimärenhaftes Produkt dämonischer Mächte sei, die uns von der Flucht in die eigentliche Heimat fernhalten wollen, tendiert er zur Lobpreisung der Welt als Teil der göttlichen Emanation aus dem Ur-Einen. Und es ist im Rahmen dieser Reaktion, dass er die irdischen Verhältnisse ihrerseits als Ausdruck ideeller Verhältnisse überhöht! Was würde hier näher liegen als die Annahme, dass sogar Einzeldinge archetypisch vorgegeben seien? Mit diesen Gedanken wäre erstens die Würde der Welt als Welt gewahrt und zweitens das Inventar der raumzeitlichen Wirklichkeit als Teil des göttlichen Intellektes begreiflich (Graeser, 1996: 191).

Furthermore, Graeser (1996: 191) suspects that Plotinus was inspired by the Stoics, who were keenly interested in showing 'that God has arranged the world well and according to plan'. Forms of individuals fit particularly well with the Stoic doctrine that no two things in the world are identical because 'God has designed all things in the world in a unique way'. Indeed, in V. 7 [18] 3, Plotinus also endeavours to show that there are no identical things in the world. But while dealing with this subject, he makes no reference to Forms of individuals. Graeser's argument accordingly focuses on showing the circumstances that might have motivated Plotinus to postulate Forms of individuals, rather than on the treatise V. 7 [18] itself.

Dominic J. O'Meara (1999), in his short contribution, does not discuss the treatise V. 7 [18], but rather tries to point to other passages that supposedly support Forms of individuals in Plotinus' philosophy:

All the things, then, which exist as forms in the world of sense come from that intelligible world; those which do not, do not (V. 9 [5] 10, 1–2, translated by A.H. Armstrong).

But it is said that even the heaven – and many living beings are manifest in it – does not think worthless the nature of all living things, since also this All here has all of them. From where, then, does it have them? Does then the world there have everything that is here? Yes, everything that is made by forming principle (*logos*) and according to form (*eidos*) (VI. 7 [38] 11, 1–5, translated by A.H. Armstrong).

Based on these texts, O'Meara (1999: 268) argues that it is not enough to assume Forms of human individuals or living beings only. Instead, he proposes a 'wider reading' which 'extend[s] the range of individuals to include other sensible particulars', such as 'every formal determination, including what distinguishes one individual from another and which is not explainable by reference to matter' (O'Meara, 1999: 268). He thus claims that Plotinus would also accept Forms of peculiar properties that distinguish one individual from another. As far as I am aware, O'Meara is the sole proponent of this 'wider reading'.

Suzanne Stern-Gillet (2000) examines Plotinus' attitude towards *mimesis*¹⁰⁴ (i.e. imitation) in art. Plato's criticisms of mimetic poetry (*Rep*. Books II, III, X; *Ion*; partly also in *Gorg.* and *Phaedr*.)¹⁰⁵ are the basis for Plotinus' own views, which can be found throughout the *Enneads* (IV. 3 [27] 10, 17ff.; VI. 2 [43] 1, 23–25; VI. 3 [44] 15, 29–39).¹⁰⁶ In the *Vita Plotini* (1, 4–19), Porphyry recounts a particularly striking episode revealing Plotinus' negative attitude to mimetic art:

And he [Plotinus] objected so strongly to sitting to a painter or sculptor that he said to Amelius, who was urging him to allow a portrait of himself to be made: 'Why really, is it not enough to have to carry the image in which nature has encased us, without your requesting me to agree to leave behind me a longer-lasting image of the image, as if it was something genuinely worth looking at?' (*VP*, 1, 4–19, translated by A.H. Armstrong).

To uncover the root of Plotinus' deprecating attitude towards art and especially towards his own portrait, Stern-Gillet refers to the scholarly debate on the theory of Forms of individuals in V. 7 [18]. Indeed, in the first chapter of V. 7 [18], Plotinus states that 'it is unlike the way images (*eikones*) of Socrates relate to their archetype (*archetupon*). No, the difference in production needs to stem from different forming principles' (V. 7 [18] 1, 21–23, my translation). Based on this passage, Stern-Gillet (2000: 33) concludes that there must be a connection between Plotinus' attitude towards mimetic art and his views on Forms of individuals. She argues that the theory of the Forms of individuals, as allegedly outlined in V. 7 [18], 'ontologically grounds the Plotinian distinction between the true self and the inferior self' (Stern-Gillet, 2000: 33). Consequently, as Stern-Gillet (2000: 34) explains, portraits or busts do

 $^{^{104}\,}$ On mimesis, see Brogan's (1993) entry 'Representation and Mimesis' in the New Princeton Encyclopedia of Poetry and Poetics.

On Plato's discussion of rhetoric and poetry, see Griswold (2020): https://plato.stanford.edu/entries/plato-rhetoric/#RhaInsPoePha. This entry offers an extensive bibliography on mimesis in Plato, the most important items being Belfiore (1983, 1984), Bernadete (1991), Destrée & Herrmann (2011), Ferrari (1989), Gadamer (1980), Halliwell (2000a, 2000b, 2011), Murray (1996), Nadaff (2002), and Urmson (1997).

 $^{^{106}\,}$ On mimesis in Plotinus, see Edwards (1993), Halfwassen (2007), Porter (2010), Beierwaltes (2013), Yoffe (1980), Zovko (2018).

¹⁰⁷ Stern-Gillet (2000: 33): 'La théorie des formes des individus, telle qu'elle se trouve esquissée en V, 7 [18], fonde ontologiquement la distinction plotinienne entre le moi véritable et le moi inferieur.'

not represent the true self; on the contrary, they distract from the model's true self, which is why Plotinus disparages them: 'En fin de compte, aurait pu dire Plotin, le plus réaliste des bustes de l'empereur, modelé par le meilleur sculpteur, ne lui ressemble ni plus ni mieux que la grossière effigie dont sont frappées, pendant son règne, les pièces de monnaie' (Stern-Gillet, 2000: 34).

The most recent contribution in favour of Forms of individuals is the article by James Sikkema (2009). Sikkema (2009: 141) argues that Plotinus considers Forms of individuals to be necessary if individuals are to be unique and distinguishable from one another: 'One simply needs to consider what would happen if this was not the case: if all men participated in the form of Man in the same way, then there would be no recognizable distinction in their appearance, and with no distinction in look (eidos) there would be no means of rendering such men intelligible.' He presents a model according to which Forms of individuals 'do not exist, as such, in the intelligible cosmos, but they are contained there in potentia; that is, individual forms of ideas exist in the intelligible cosmos as possibilities of the forms from which they will draw to create (via soul) a particular composite within the sensible cosmos, and do not exist independently of the universals to which they primarily belong (VI. 7.11)' (Sikkema, 2009: 143). To justify his model, Sikkema (2009: 142, 143, 144) refers several times to the final sentence of V. 7 [18]: 'Or maybe in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles that in the Soul become available' (V. 7 [18] 3, 22-23).

Sikkema (2009: 142) interprets Plotinus' statement that there is an 'unlimitedness of those principles' in the Intellect in terms of a division of the universal Forms into a multiplicity of individual Forms: 'Each form contains within it every conceivable possibility of its expression through *logos* and is also the condition for the possibility of being acted upon by *logos*.' Thus, Sikkema (2009: 140–141) does acknowledge that *logoi* interact with matter, endowing it with properties and shaping it into sensible objects. He maintains, however, that Forms of individuals are necessary to determine the unique appearance of individuals produced by *logoi*: 'Logos is able to express its form uniquely because of the infinite possibilities inherent within and among the perfect, immutable Forms' (Sikkema, 2009: 152).

5.3 SECOND READING: V. 7 [18] IS ABOUT FORMS OF INTELLIGIBLE INDIVIDUALS (FORM-INTELLECTS AND SOUL-FORMS)

As we have seen, Blumenthal (1966) presents several passages from the *Enneads* in which Plotinus explicitly denies the existence of Forms of sensible individuals. ¹⁰⁸ Blumenthal (1966: 70, 79) singles out the passage V. 9 [5] 12, 3–4 as the most explicit

See the discussion on Blumenthal's contribution on pp. 53–56.

denial: 'one must say that the Forms of universals are there, not of Socrates but of man' (translated by A.H. Armstrong). In response to Blumenthal, Mamo (1969) and Rist (1970) attempt to downplay the passages that deny Forms of individuals by claiming that they do not contain clear denials and that they can be interpreted differently.

Armstrong (1977) takes a different approach to resolving the alleged tension between V. 7 [18] and the other passages. He proposes to interpret the Forms of individuals in terms of individual human intellects (Form-Intellects). Accordingly, Armstrong thinks that V. 7 [18] is not about Forms of *sensible* individuals, but about Forms of *intelligible* individuals. Armstrong's suggestion is accepted by Lloyd P. Gerson (1994) and Christian Tornau (2009).

A similar reading, with a slight modification, is proposed by Paul Kalligas (1997a) and Franco Ferrari (1997). These scholars argue that by Forms of individuals, Plotinus means the undescended parts of human souls (soul-Forms). Like the theory of Form-Intellects, soul-Forms as a concept focuses on the rational capacity of human beings. Neither the Form-Intellects nor the soul-Forms are principles that individuate sensible individuals, but rather represent alternative designations for the human being's 'higher' or intelligible self. The major difference is that Armstrong et al. consider the Form-Intellects as existing as such in the universal Intellect, whereas Kalligas explains that soul-Forms do not exist as such in the universal Intellect, but they only have the capacity to contemplate the universal Intellect. In what follows, I shall explain the contributions of Armstrong (1977), Gerson (1994), Kalligas (1997a), and Tornau (2009) in greater detail.

a) Armstrong, Gerson

Armstrong (1977: 56) attempts to eliminate the inconsistency flagged up by Blumenthal (1966: 79) by claiming that the first chapter of V. 7 [18] is about the 'higher selves', 109 i.e. the individual intellects of human beings: 'But there seems from our discussion to be no inconsistency with what is said anywhere else in the explicit statement that the higher self of a man has an individual Form for its principle, that there is a Form of Socrates as well as a Form of man, and I think we can take it that this is the considered opinion of Plotinus'. Armstrong (1977: 51, 62) proposes that we think of the Form-Intellect of Socrates, for example, as a genus of all individuals into which Socrates' 'true self' will transmigrate in the course of world history (such as Socrates, Pythagoras, the dog Fido, etc.). In this way, the doctrine of transmigration of souls, which is at odds with the Forms of sensible individuals, is now compati-

Helleman-Elgersma agrees with Armstrong that in V. 7 [18] 'the object of interest is not in the first place the embodied soul, but the true self which cannot simply be identified with the empirical person' (1980: 345). She also concludes that the introduction of Form-Intellects, which are 'the source for various embodiments', makes Forms of intelligible individuals compatible with reincarnation: 'Even if a person could change and be reincarnated as a different person, this would not erase the existence of that first person; thus P. must have accepted a different form for every individual person which existed' (Helleman-Elgersma, 1980: 344).

ble with Form-Intellects (Armstrong, 1977: 51). Armstrong (1977: 61) explains that Form-Intellects do not include properties of the body or 'distinctive features of "personality" or "character": all these qualities Plotinus regards as conditioned by 'heredity and environment'. What really belongs to the true self is the possibility of making 'moral decisions and finding in them the way back to self-realisation and self-transcendence' (Armstrong, 1977: 61).

Armstrong is right in saying that the distinction between the higher or true self on the one hand, and the sensible or historical self on the other, plays an important role in Plotinus' philosophy. In V. 7 [18], however, this distinction is irrelevant. Plotinus usually refers to the true self using the word *hêmeis*, i.e. 'we'. But this term does not occur once in the whole treatise. The words 'Form' (*idea*) and 'Intellect' (*nous*) occur only once each. The terms which do appear frequently – 'differences' (*diaphora*), 'living being' (*zôon*), 'cosmic cycles' (*periodos*), and *logoi* – suggest that sensible individuals are the real focus of V. 7 [18].

Like Armstrong, Gerson (1994: 65) thinks that V. 7 [18] is about Forms of intelligible individuals, i.e. individual human intellects: "Absolute Socrates" [*Autosôkratês* in V. 7 [18] 1, 4] refers to the intellect of Socrates, which eternally resides in the community of intellects. The intellect of Socrates is a Form because Socrates uniquely instantiates a single disembodied intellect.' Gerson also thinks that it is possible for multiple individuals, such as Socrates and Pythagoras, to share one Form or intellect, providing that these individuals do not exist simultaneously (Gerson, 1994: 65–66). In contrast to Armstrong, Gerson (1994: 65) places much more emphasis on the rational capacity of human beings, arguing that there can only be Forms of human individuals: 'It [i.e. the theory of Form-Intellects] does not refer to individuals without intellect, like a particular rose.' Nor can there be Forms of individual animals on this interpretation. Gerson (1994: 66) attempts to make his reading compatible with the transmigration of human souls into animal bodies by arguing that 'a Form of Dog and a Form of Socrates would suffice for the reincarnation of Socrates as a dog. There would be no need for an additional Form of Fido' (Gerson, 1994: 66).

The main objection to this is that while rationality does play an important role in human individuality, the theory of Form-Intellects does not solve the problem of the individuation of sensible individuals. Assuming that there is such thing as an intellect of Socrates among other Forms in the universal Intellect, this still does not explain why Socrates has this particular appearance and why, after his death, he reincarnates as Pythagoras, who has quite different physical and character traits.

b) Kalligas, Ferrari, Tornau

Kalligas (1997a) proposes a different reading in favour of the Forms of intelligible individuals, suggesting that the Forms of individuals in V. 7 [18] actually refer to the undescended parts of human souls — the theory of soul-Forms. Like Gerson (1994), Kalligas (1997a: 210, 212) emphasises that the key quality of the human soul

is the rational capacity through which it can ascend (*anagôgein*) to the realm of the divine Forms: 'Here [i.e. in V. 7 [18] 1, 1–3¹¹⁰] it is the ability of each individual man to return to his intelligible origin by making use of these essential features [i.e. rationality] that makes it necessary to postulate a different form for each human being.' However, the soul's ability to ascend to the intelligible does not suffice to make it 'an integral part of *Nous*' structure' (Kalligas, 1997a: 225). In other words, soul-Forms do not reside in the universal Intellect, and thus differ from Platonic Forms. This is supported with reference to III. 6 [26] 4, 26–35, which, Kalligas claims, shows that 'each of these soul-forms contains both appetitive and affective faculties, the projection of which on the organic body enables the latter to engage in the corresponding activities. All these indications point towards a conception of these soul-forms not as Platonic ideal archetypes' (Kalligas, 1997a: 221).

Like Kalligas, Franco Ferrari (1998: 631) argues that the treatise V. 7 [18] is an attempt to present, discuss, and resolve the difficulties involved in asserting the existence of Forms of individual human souls:

Diversamente dai Platonici che lo hanno preceduto e da quelli che lo seguiranno, e per certi aspetti diversamente perfino da come egli stesso impostò il problema nel trattato V.9, in V.7 Plotino non considera affatto la questione relativa all'esistenza di forme di enti particolari come una parte della problematica più ampia dedicata all'estensione del cosmo eidetico. Dal suo punto di vista, la domanda intorno alia possibilità che nel mondo intellegibile esistano forme di individui non è un aspetto della topica relativa all'estensione del *kosmos noetos*. Al contrario, egli definisce immediatamente l'ambito teorico entro cui va inquadrata tale questione, nel problema della collocazione dell'anima individuale e nell'esigenza di garantire a quest'ultima la possibilità dell'ascesa al mondo intellegibile (άναγωγή επί τό νοητόν, V.7.1,1–3) (Ferrari, 1998: 631).

In his detailed analysis, Ferrari (1998: 638–644) points to numerous passages in the *Enneads* in which the soul is closely associated with the Intellect.¹¹¹ He argues that Plotinus seeks to raise the undescended parts of human souls to the status of divine Forms, and that the existence of Forms of intelligible individuals is a direct consequence of the doctrine of undescended souls (Ferrari, 1998: 644). According to Ferrari (1998: 638), 'there is no doubt that, from the beginning of his work, Plotinus intended to free the individual soul from its rigid affiliation with the sensible world and to connect it more closely with the intelligible sphere'.¹¹² In contrast to Kalligas

¹¹⁰ V. 7 [18] 1, 1–3: 'Perhaps, if I and every individual trace back (*anagôgê*) to the intelligible, the principle of every individual, too, is there [in the intelligible world]' (my translation).

 $[\]begin{array}{ll} {\rm III.~4~[15]~3,~21-24;~V.~3~[49]~6,~3ff;~V.~3~[49]~8,~47ff;~V.~3~[49]~4,~3-13;~V.~3~[49]~7,~27-29;~IV.~7~[2]~1;}\\ {\rm I.~1~[53]~7,~22;~I.~1~[53]~13,~6-8;~IV.~7~[2]~10,~27ff;~IV.~7~[2]~13,~12-13;~IV.~8~[6]~8,~1-6;~IV.~3~[27]~30,~14-15;~IV.~3~[27]~12,~1-5;~IV.~3~[27]~5,~1-14;~VI.~2~[43]~22,~11-12;~VI.~5~[23]~7,~1-8;~VI.~4~[22]~14,~20.} \end{array}$

Ferrari (1998: 638): 'non ci sono dubbi sul fatto che, fin dagli inizi della sua produzione, Plotino ebbe del tutto chiaro nella mente il disegno di svincolare l'anima individuale da una appartenenza

(1997a: 221), who claims that soul-Forms are not present in the universal Intellect, Ferrari (1998: 652) argues that 'the constituents of the second hypostasis, besides the Forms of universal entities like Human Being and Triangle, should be the souls of individuals endowed with intellect. [...] [A]longside the Form of Human Being, there is also the Form of Socrates, since the soul of Socrates thinks noetically'. 13

Tornau (2009: 338),¹¹⁴ meanwhile, draws attention from undescended souls back to individual intellects, emphasising that it is difficult to tell the difference between the soul and the intellect when the soul has ascended to the intellect and is united with it in noetic thought:

Les séparer trop nettement des Formes platoniciennes et donc de l'Intellect total qui embrasse toutes choses me semble douteux pour de nombreuses raisons. Premièrement, si la connaissance de l'âme parvenue jusqu'à l'Intellect et unie à lui peut être qualifiée de noétique au sens réel du terme, en raison de l'unité du connaissant et du connul, on voit difficilement comment on pourrait encore différencier une telle âme de l'Intellect. L'Intellect est la seule réalité à laquelle Plotin reconnaît une connaissance de soi de ce type ; ce qui a une connaissance de soi noétique ne peut être qu'un intellect (Tornau, 2009: 338).

Accordingly, Tornau (2009: 351) aims to show that Plotinus identifies undescended souls with individual intellects. He does not focus on V. 7 [18], but on other treatises such as IV. 3 [27] and VI. 4–5 [22–23]. In his analysis of the passage VI. 5 [23] 7, 1–8, Tornau (2009: 352) explains that the ability to ascend (*anagôgein*), which Plotinus also mentions in V. 7 [18] 1, 1–3, in fact presupposes Forms of intelligible individuals: 'dans la mesure où nous pouvons effectuer cette ascension, nous sommes toujours déjà enracinés dans le monde intelligible et qu'en dernière instance, nous ne devons faire qu'un avec lui.' In the remainder of his discussion of VI. 5 [23] 7, 1–8, Tornau (2009: 354) draws three ambitious conclusions from the phrase 'we are all and one' (VI. 5 [23] 7, 8, translated by A.H. Armstrong) in favour of Forms of intelligible individuals. First, Tornau infers the unity of all selves with each other; second, the unity of the self with all things; and third, the unity of the self (*hêmeis*) with the Platonic Forms. It follows, according to Tornau (2009: 354), that the intelligible self (*hêmeis*) must be a Form.

rigida al mondo sensibile e di collegarla in qualche modo al piano intellegibile dell'essere.'

Ferrari (1998: 652): 'I componenti della seconda ipostasi dovrebbero essere, accanto alle forme di entità universali come uomo e triangolo, le anime degli individui dotati di intelletto, le quali sono in numero limitato e sempre le stesse ehe si incarnano in cicli cosmici successivi: perciò, accanto all'idea di uomo, esiste anche l'idea di Socrate, in quanto l'anima di Socrate pensa noeticamente ed e intelletto. Contenuti poi nelle anime – intelletti ci sono tutti i principi formali che, agendo nel cosmo, danno luogo a tutti gli esseri empirici con le loro differenze.'

 $^{^{114} \}quad There is also a German version of the French article 'Qu'est-ce qu'un individu? Unité, individualité et conscience de soi dans la métaphysique Plotinienne de l'âme' available at http://www.tabvlarasa.de/40/Tornau.php#sdfootnote1sym.$

5.4 THIRD READING: V. 7 [18] IS ABOUT LOGOI OF SENSIBLE INDIVIDUALS

The first article questioning Plotinus' intention to introduce Forms of individuals in V. 7 [18] was that of Cristina D'Ancona Costa (2002). However, in her extensive study, she devotes only a very brief analysis to the first sentences of V. 7 [18]. Plotinus establishes that if individuals 'trace back (anagôgê) to the intelligible, the principle of every individual, too, is there [in the intelligible world]' (V. 7 [18] 1, 1–3); on this point, D'Ancona Costa (2002: 532) notes that Plotinus 'does not proceed to argue in favour or against the claim that there is such a principle, but explores the possible ways to explain the arising of individual features in the world of coming-to-be and passing away.¹¹¹¹⁵ Unfortunately, her analysis of V. 7 [18] ends here and she fails to demonstrate the central role of logoi in causing sensible individuals and their properties. In fact, D'Ancona Costa does not mention logoi once in her essay.

Dmitri Nikulin (2005: 299–304) offers a detailed elaboration of logoi and logical difference, discussing V. 7 [18] alongside other treatises (such as IV. 3 [27] 5–8 and V. 9 [5] 12). Nikulin (2005: 302) concludes that the principles causing individuals and their individual properties are logoi, and that this is precisely what V. 7 [18] is about: 'Although v 7 [18] supports the existence of forms of individuals, which is denied elsewhere, still it is not the form, eidos, but rather its implementation in the soul, logos, that is responsible for individual difference(s) (δεῖ τὴν διάφορον ποίησιν ἐκ διαφόρων λόγων: v 7 [18], 1.23)'. ¹¹⁶ Accordingly, he concludes that Forms of sensible individuals become irrelevant, since logoi are the immediate and primary principles of individuation of sensible individuals:

The answer to the much debated question of whether there are forms of individuals or only those of universals, in the end, might not be that important for the account of individuation. Indeed, the difference would consist in explaining the implementation of either this particular *logos*, or a set of *logoi*: if there are forms of particulars, then each form activates a *logos* that is responsible for individual differences. If there is a universal form, then a whole multiplicity of various *logoi*, which account for *kathekasta* (i.e. individuals), are already established within such a form. The result, however, will be the same in both cases, namely, the production of individual differences (*diaphorai*) through a *logos* that is potentially related to all other *logoi* (Nikulin, 2005: 304).

Richard Sorabji (2006c) also aims to bring out the principle of individuation in Plotinus' philosophy. He notes that the consensus in the scholarly literature is that

Remes (2007) and the present study reach a similar conclusion, with the major difference that Remes and I detect arguments both for and against Forms of individuals in Plotinus (V. 7 [18] 1, 3–5 and V. 7 [18] 1, 5–7 respectively). Plotinus resolves the dilemma by rejecting Forms of individuals and introducing logoi as principles of individuation.

 $^{^{116}}$ $t\hat{e}n$ diaphoron $poi\hat{e}sin$ ek $diaphor\hat{o}n$ $log\hat{o}n$ = the difference in production needs to stem from different forming principles (my translation).

in V. 7 [18] 'Plotinus seems to have accepted Forms of individual human souls' (i.e. soul-Forms, as proposed by Kalligas, 1997a, and Ferrari, 1997, 1998) (Sorabji, 2006b: 122). However, he denies that the theory of soul-Forms clashes with the doctrine of transmigration, which Plotinus undoubtedly believed in. Most importantly, Sorabji (2006b: 122) thinks that the theory of soul-Forms does not explain how human individuals and their individual properties come into being: soul-Forms do not provide an explanation of how the phenomenon of individuation occurs in the first place.¹¹⁷

a) Vassilopoulou, Remes, Aubry, Wilberding

The brief contributions by D'Ancona Costa (2002), Nikulin (2005), and Sorabji (2006c) on V. 7 [18], despite not going into much detail on the argument of the treatise, are essential for the development of the debate on Forms of individuals. All three contributions question or at least cast doubt on the premise that V. 7 [18] postulates Forms of sensible/intelligible individuals. Subsequent works by Panayiota Vassilopoulou (2006), Gwenaëlle Aubry (2008), and Pauliina Remes (2007), which analyse the treatise V. 7 [18] in more detail, agree that Plotinus does not postulate Forms of individuals either in V. 7 [18] or elsewhere in the *Enneads*. All three scholars acknowledge that Plotinus introduces intelligible forming principles (*logoi*) in V. 7 [18] to account for individuation of sensible individuals and their properties. Moreover, all three authors refer to the treatise II. 6 [17], which precedes V. 7 [18] chronologically, and point out that the two treatises are thematically related:

If in v 9.12 Plotinus simply says that 'aquilinity' and 'snubness' are formal characteristics, then what he has in mind may not be a distinction between Form and matter, but between substance and quality. This claim finds support in a related passage in the short treatise 'On Substance or on Quality' (ii 6[17]) which, it should be noted, immediately precedes v 7(18) in the order of composition. Plotinus refers, among other examples, to 'snubnosedness' (*simon*, ii 6.2.11) in order to advance the view that although certain characteristics might appear as qualities in the material spatio-temporal existence of entities, these qualities, whether essential (as in the case of the white in the lead) or accidental (as in the case of the white or snub nose of a human being), are in fact substances in Nous (Vassilopoulou, 2006: 377).

[T]out d'abord, si Plotin affirme bien, dans le traité 18, qu'il existe un principe intelligible de l'individu, rien n'autorise à identifier ce principe à une Forme. Le texte indique qu'il s'agit d'un *logos*, ce que confirme l'analyse du traité qui le précède immédiatement, le traité 17 (II, 6); — ensuite, de même que le principe intelligible

Sorabji (2006b: 122): 'How do we remain distinct from each other in the intelligible world? It does not help, I believe, that Plotinus seems to have accepted Forms of individual human souls. Although this seems recently to have become the consensus, it does not help, because Plotinus also believes in reincarnation. Socrates may be the reincarnation of Pythagoras. The form is the form of the individual soul that was once the soul of Pythagoras and later the soul of Socrates. Hence it does not distinguish Socrates from Pythagoras, as Plotinus himself is aware (5.7 [18] 1).'

de l'individu ne peut être identifié à une Forme, de même il ne peut être identifié à l'individu (Aubry, 2008: 273).

Somewhat misleadingly, I think, Porphyry has placed this treatise together with the treatises which deal with the Intellect and its contents, the forms. In the chronological ordering, however, this *Ennead* comes after II.6 titled *On Substance, or On Quality* in which the central claim is that essential differentiations, like two-footed/four-footed, should be regarded not as Aristotelian qualities, but as activities of substance and formative principle. Even many qualities, like white, are due to *logoi*; they are just not necessary for the specific essence of things which can, say, have other colours as well (Remes, 2007: 78).

Treatise II. 6 [17] deals with essential and non-essential properties and claims that they are caused by *logoi*. This topic is further discussed in V. 7 [18] within the context of what role *logoi* play in the differentiation of individuals and in biological heredity.

Vassilopoulou (2006: 371) and Aubry (2008: 271) bemoan the fact that research on Plotinus' theory of sensible individuals and individuality has been reduced almost exclusively to the question of whether Plotinus accepts Forms of individuals. While Vassilopoulou (2006) focuses on reconstructing the scholarly debate on V. 7 [18] and debunking arguments for Forms of sensible individuals, Aubry (2008) examines the role of the logoi in depth. Aubry's analysis goes beyond the arguments of V. 7 [18] and explores the relationship between logoi, individual souls, sensible individuals, and the self ($h\hat{e}meis$). Both scholars emphasise that there is an essential difference between logoi and Forms. Vassilopoulou (2006: 374) points out that the debate so far has not focused on logoi because they have very often been conflated with Forms:

In order for the conclusion of this argument to be that in addition to the 'Form of human being' there are Forms of individual human beings, to explain the individual differences between human beings, the proponents of this view rely upon a further major assumption which I should treat as the third assumption, (3) the term *logoi* mentioned throughout this paragraph is treated as synonymous with the term *tou kathekaston idea* [i.e. Form of each individual] (which Plotinus used in the opening question of the treatise V. 7 [18] 1, 1), and so identified with the Forms of individual human beings (Vassilopoulou, 2006: 374).

Aubry points to three levels of being of the human individual and describes their interrelation: 'tout d'abord, le « premier homme », purement âme et pensée, uni à la totalité de l'être; ensuite, le « deuxième homme », « soumis au devenir du temps »; enfin, le « nous (hêmeis) », qui est composé de leur addition. [...] C'est donc par l'adjonction du deuxième homme au premier que l'individu devient véritablement un « particulier », c'est-à-dire qu'il n'est lui-même qu'en étant non plus seulement distinct, mais séparé des autres. On a là un deuxième moment, déterminant, du processus d'individuation, qui n'est plus seulement une distinction intelligible, mais bien une séparation spatiale et temporelle' (Aubry, 2008: 281–282).

Aubry (2008: 273) also emphasises that Forms and *logoi* are fundamentally different principles, as Forms are principles of the universal Intellect whereas *logoi* are principles of the Soul. The former are purely transcendent and do not interact with matter; the latter are inherent in living beings, mediated by the Soul that animates bodies:

[T]out d'abord, si Plotin affirme bien, dans le traité 18, qu'il existe un principe intelligible de l'individu, rien n'autorise à identifier ce principe à une Forme. Le texte indique qu'il s'agit d'un *logos*, ce que confirme l'analyse du traité qui le précède immédiatement, le traité 17 (II, 6); — ensuite, de même que le principe intelligible de l'individu ne peut être identifié à une Forme, de même il ne peut être identifié à l'individu. Il n'y a d'individuation à proprement parler que quand ce principe se trouve instantié dans un corps vivant, c'est-à-dire, plus précisément, quand l'âme et le *logos* individuels se lient à un corps déjà animé par le *logos* de l'âme du Monde. On pourrait ici, pour sa commodité et indépendamment de la théorie qu'elle porte, reprendre la terminologie leibnizienne, et faire la part entre un « principe de distinction » présent en l'Intellect, et un « principe d'individuation » qui se donne à la conjonction de celui-ci et de son instantiation dans un corps particulier (Aubry, 2008: 273).

This passage, like Aubry's entire article, suggests that one *logos* (i.e. a single forming principle) produces a whole individual, e.g. one *logos* brings forth the person Socrates. However, Plotinus' system is more complex than that. In V. 7 [18], he indicates – though he is not explicit – that the *logos* of a human being is itself constituted of a multitude of *logoi*, each of which is responsible for a peculiar property of that human being. ¹¹⁹ Socrates' *logos*, for example, is a combination of *logoi*, one of which produces Socrates' specific snub nose, another his specific skin colour, and so on. The *logoi*-combination of Socrates can in turn be regarded as one single *logos* of Socrates (VI. 7 [38] 10, 10–13). The *logos* of Socrates is in a sense a unity, which is not simple but manifold. Like Aubry, Vassilopoulou fails to highlight this complex structure of the *logoi* that individuate sensible individuals. Remes (2007: 81–83), on the other hand, deals extensively with the phenomenon, which she calls 'collections of *logoi*'.

In her monograph *Plotinus on Self*, Remes (2007) offers an insightful analysis of Plotinus' concept of the self (*hêmeis*). In addition to a comprehensive elaboration of *logos/logoi* in Plotinus' philosophy,¹²⁰ Remes (2007: 76–85) provides a detailed discussion of the first half of the first chapter of V. 7 [18], and considers whether Plotinus postulates Forms of sensible individuals or soul-Forms; her analysis of

The embryological model that Plotinus presents in the second chapter of V. 7 [18] suggests that a living being is produced by a multiplicity of logoi. Plotinus states that 'the mixtures of forming principles of male and female produce different offspring' and that 'nothing prevents them [the parents] from producing according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand' (V. 7 [18] 2, 1–7). In the first chapter of V. 7 [18], Plotinus explains that a human being is a conglomerate of many peculiar differences (lidikais diaphorais) and must accordingly be produced by many different forming principles (V. 7 [18] 1, 20–23).

¹²⁰ Remes (2007: 68-70).

the first few sentences of V. 7 [18] clearly shows that, in her view, Plotinus rejects Forms of individuals and instead advocates *logoi* as principles of individuals. She concludes that neither Forms, nor Intellect, nor the 'self' of individuals are central to the treatise; rather, the tract 'ponders on individuation, individual characteristics, and their passing on in generation', and revolves around *logoi*, which play the central role in all three of these topics.¹²¹ My own analysis draws heavily on this preliminary work. However, Remes' interests are mainly psychological: her examination of V. 7 [18] does not include embryological issues, and nor does she consider how the self is constituted in the process of transmigration.

As we have seen, Remes points out that individuals are produced by 'collections of logoi'. These collections of logoi contain information about individual properties, which are then instantiated in matter. Like Vassilopoulou (2006) and Aubry (2008), Remes (2007: 81) emphasises that these collections of logoi are not Forms, or at least are 'forms only in a very loose sense of the word'. Logoi are unfolded Forms at the level of the Soul. They interact with matter by forming it into entities and imparting properties onto it. Moreover, Remes (2007: 81-82) stresses that logoi cannot be combined arbitrarily: there must be laws or principles that dictate what logoi may and may not be combined. 122 Forms, Remes (2007: 83-84) continues, play an essential role in the formation of these collections of *logoi*, by determining which logoi can be combined to produce, for example, a human being. Human individuals, then, are not arbitrary collections of randomly assembled *logoi*: by virtue of their participation in the Form of Human Being, human individuals can develop only those properties that are contained in the Form of Human Being, which excludes all 'possibilities that belong to the forms of other species'. 123 It is also the Forms that give unity to 'bundles' of human properties:

But, again, this does not mean that the individual is just a bundle of *logoi* because he is unified by participating in the form of human being. He has the same basic structure as every living being of that kind, but his individuality is determined by the actualised human *logoi* only (Remes, 2007: 84).

The form of human being contains the forming principles needed for the genesis of different individual human bodies, as well as for most psychological features and characteristics of human beings. Inside the form of human being there are all combinations of forming principles that at least once have been or can be actualised in one instantiation (Remes, 2007: 85).

¹²¹ Remes (2007: 78).

¹²² See pp. 225-228.

Remes (2007: 83): 'And yet that there is such a thing as the form of human being or the form of horse is not in doubt, nor is the fact that every human is human because of the participation relationship he has to the form of human being. That participation, presumably, determines that in humans only *logoi* appropriate to human beings are actualised, ruling out any possibilities that belong to the forms of other species. But it also gives the bundle of human-like properties unity.'

James Wilberding (2017: 56), whose interest in V. 7 [18] lies primarily in its embryological discussion, accepts Remes' reading of V. 7 [18] and her remarks on 'collections of *logoi*'.¹²⁴ He also emphasises that since Plotinus is more interested in biological individuals in this treatise, his questions are about principles that operate on the level of nature:

In *Ennead* 5.7 [18] *On Whether There are Ideas of Particulars* he does indeed advance a theory of forms of individuals, but these are best not understood as intelligible Forms residing in the Intellect on a par with the Forms of Human Being and Beauty. For he is operating for the most part in this treatise at the level of nature, and so the forms that correspond to individuals would also seem to belong to this level. That is to say, he is thinking of the 'form' of Socrates as a bundle of *logoi* at the level of nature, *logoi* that correspond to the particular features of his body's parts (Wilberding, 2017: 48).

In sum, Vassilopoulou, Aubry, Remes, and Wilberding all agree that V. 7 [18] is about the principles of sensible individuals, and that these principles are not Forms but (collections of) *logoi*. The theory of sensible individuality based on *logoi* 'not only makes it unnecessary to introduce Forms of individual human beings', as Vassilopoulou (2006: 372) puts it, 'but also offers a much more dynamic understanding of individuation that would be entirely missed if we agreed on the existence of Forms of individuals'.

5.5 SUMMARY OF THE SCHOLARLY DEBATE

This chapter has attempted to outline the extensive debate on the question of Forms of individuals in V. 7 [18], in three stages. First, I grouped the scholarship according to three main interpretations of V. 7 [18], namely: (1) V. 7 [18] is about Forms of sensible individuals; (2) V. 7 [18] is about individual intellects or undescended parts of human souls; and (3) V. 7 [18] is about forming principles (logoi) of sensible individuals. Then, with the help of a table, I tried to illustrate the chronological development and popularity of each reading. Finally, I went over most of this scholarship, highlighting in particular the reasons why the first reading was problematic – leading to the introduction of the second reading – and why eventually the first and second readings were both replaced by the third. To reiterate briefly:

Wilberding (2017: 56, fn. 101): 'Here I believe I am in agreement with Remes' excellent discussion in (2007: 76ff.). Remes ultimately describes Forms of individuals as "collections of *logoi*" which "are forms only in a very loose sense of the word [...] they are logical parts of forms, that is, possibilities within the form of human being" (81). [...] On the reading being proposed here, Plotinus is focused on bodies and not souls and is establishing "forms" of them but at the level of nature and not Intellect.'

First reading: In V. 7 [18], the principles individuating sensible individuals are Forms (Trouillard, 1955; Harder, 1956; Rist, 1963; Mamo, 1969).

Problem: Blumenthal (1966: 66, 72, 79) finds passages in the *Enneads* that deny the existence of Forms of sensible individuals (V. 9 [5] 12, 3–4: 'then one must say that the Forms of universals are there, not of Socrates but of man', translated by A.H. Armstrong). A second problem is the doctrine of transmigration, which is put forward by Plotinus as an argument against the existence of Forms of individuals (V. 7 [18] 1, 5–7), but is not taken seriously by advocates of the first reading – Rist (1963: 224) calls the argument a 'difficult additional remark'; Mamo (1969: 95) claims that Plotinus did not really believe in transmigration.

Solution: (i) reinterpret the problematic passages pointed out by Blumenthal (1966) (Rist, 1970; Mamo, 1969); or (ii) reinterpret the problematic notion of Forms of individuals (i.e. propose a different reading of V. 7 [18]).

Second reading: V. 7 [18] is about Forms of intelligible (human) individuals, which are identified either with individual intellects (Form-Intellects: Armstrong, 1977; Gerson, 1994; Tornau, 2009), or with undescended souls (soul-Forms: Kalligas, 1997a; Ferrari, 1998).

Problem: Forms of intelligible individuals seem to be restricted to human individuals. In V. 7 [18], however, Plotinus deals not only with human beings but also with animals. Moreover, the main focus of the treatise is sensible individuals. For this reason, arguments in favour of the first reading were revived for a short time (Graeser, 1996; O'Meara, 1999; Stern-Gillet, 2000). But the problems of Plotinus' rejection of Forms of sensible individuals, and the first reading's incompatibility with the doctrine of transmigration, remained.

Solution: While proponents of the first and second readings had focused almost entirely on the first chapter, scholars now began to examine the whole treatise. Looking at all three chapters of V. 7 [18], one realises that it is not Forms at all, but rational forming principles (*logoi*), that are central to the text (Nikulin, 2006; Vassilopouplou, 2006; Remes, 2007; Aubry, 2008; Wilberding, 2017). Moreover, scholars have considered the treatise in its chronological context and found that V. 7 [18] is thematically very much related to the preceding treatise, II. 6 [17], which considers qualities and their intelligible principles, the *logoi* (Vassilopoulou, 2006; Remes, 2007; Aubry, 2008). In view of all this, the third reading has been proposed, which seems to represent the *communis opinio* at the present time.

Third reading: V. 7 [18] deals with the question of what principles individuate sensible individuals. First, Plotinus clarifies that these principles cannot be the Forms, because Forms of sensible individuals are not compatible with the doctrine of transmigration. Next, Plotinus argues that the *logoi* in the soul are very well suited as mechanisms of individuation, because they do not conflict with the doctrine of

transmigration. According to the model Plotinus presents in V. 7 [18] 1, 8-12, 'if the soul of each individual possesses the forming principles of all those individuals it ensouls in succession, then again all will be there (in the intelligible world); that as many forming principles as the cosmos possesses, each soul also possesses.'

The third reading maintains that *logoi* cause sensible individuals and their individual properties by interacting directly with matter. For example, in order to produce Socrates, the *logoi* must impart to matter both human-specific properties (such as two-legged, haired, rational, living being, etc.) and individual properties (such as snub-nosed, blue-eyed, etc.) that distinguish Socrates from other human individuals. Thus, it takes a combination of different logoi to produce a complex individual like Socrates. It is important to understand that *logoi* are not Forms. However, logoi somehow are derived from Forms - they are unfolded Forms at the level of the Soul. Since *logoi* originate from and depend on Forms, they cannot be arbitrarily combined to produce individuals. Which logoi may and may not be combined is predetermined by the Forms from which they originate. Accordingly, human individuals can develop only those properties that are contained in the universal Form of the Human Being, and human beings can only pass on human properties to their children. Although Plotinus asserts in V. 7 [18] 2, 5-7 that 'nothing hinders them [the parents] from producing according to different ones [forming principles], since they have all the forming principles' (i.e. all the forming principles that there are in the universe), parents do not pass on random logoi to their offspring. Plotinus states that 'each time [when they reproduce, parents have] other principles at hand', implying that there is a mechanism behind heredity, which he unfortunately does not explain further. Then, in V. 7 [18] 3, 13–16, Plotinus clarifies that all possible *logoi*-combinations already exist in the intelligible so that 'there is a measure of how many individuals there are to be' and what those individuals will look like. The generation of individuals is thus not random but 'determined by the unrolling and the unfolding of the sum-total of forming principles' which in turn gain their structure from the Forms (V. 7 [18] 3, 14-15).

In conclusion, I would like to quote Remes' (2007: 85) concise summary of the connection between the individual, the *logoi*, and the Forms:

The form of human being contains the forming principles needed for the genesis of different individual human bodies, as well as for most psychological features and characteristics of human beings. Inside the form of human being there are all combinations of forming principles that at least once have been or can be actualised in one instantiation (Remes, 2007: 85).

Part II.

Synopsis, Greek Text, and Translation

1. SYNOPSIS

Chapter 1: What are the intelligible principles of individuals and individual properties, and how many principles are there?

- A. V. 7 1, 1–8 Question: are there Forms of sensible individuals? Argument in favour: eternal existence of individuals Counter-argument: the doctrine of transmigration of souls Compromise: there are forming principles (*logoi*) of human individuals in the soul.
 - V. 7 1, 1 Introductory question: are there Forms of sensible individuals?
 - V. 7 1, 1-3 ("H ϵi ...) Neoplatonic Premise: the principle of human individuals must lie in the intelligible.
 - V. 7 1, 3–5 ("H εἰ μὲν ...) Argument to justify the existence of Forms of individuals: given that the soul of Socrates exists eternally as Socrates, there must be a 'Socrates-Itself' (*Autosôkratês*, i.e. a Form of Socrates) in the intelligible.
 - V. 7 1, 5–7 (Ei 8' ...) Counter-argument based on the doctrine of transmigration: if the soul of Socrates becomes different individuals at different times, there can be no Form of Socrates. Thus the doctrine of transmigration conflicts with the existence of Forms of individuals.
 - V. 7 1, 7–8 (Άλλ' εί ...) Compromise on the basis of forming principles (*logoi*): the soul of each human individual possesses the forming principles (*logoi*) of all human beings. In this way, individual souls can transmigrate into different people, and all individuals will be present in the intelligible not as individual Forms, but as (combinations of) *logoi*.
- B. V. 7 1, 9–23 'All souls are one': each soul possesses as many *logoi* as the cosmos does Consideration of the number of *logoi* and sensible individuals First proposition: an unlimited number of *logoi* Objection: periodic cosmic cycles Second proposition: fewer *logoi* than there are individuals Objection: peculiar differences Answer: different individuals must be produced by different *logoi*.
 - V. 7 1, 9–10 (ἐπεὶ καὶ λέγομεν) 'All souls are one': each soul possesses as many *logoi* as the cosmos does.
 - V. 7 1, 10–12 (Ei ovv ...) First consideration of the number of *logoi*: since there are *logoi* not only of human beings but also

of every single living being, there could be an unlimited number of *logoi*.

- V. 7 1, 12–13 (ϵ i μ $\dot{\eta}$...) Objection based on periodic cosmic cycles: if the cosmos repeats in periodic cycles and the cycles are finite, then there must also be a finite number of individuals within one cycle. Accordingly, the number of logoi will also be finite.
- V. 7 1, 13–18 (Εἰ οὖν ...) Second consideration of the number of *logoi*: if in all cycles together (ὅλως) there are more individuals than models (παραδείγματα), i.e. *logoi*-combinations, then it is possible that even in one cycle a small number of *logoi*-combinations will produce all the individuals, just as a small number of souls can incarnate into an infinite number of people.
- V. 7 1, 18–20 (Ἡ ... οὐδὲ ... ἀλλὰ καὶ) Objection: one and the same *logos* cannot produce different individuals (just as one and the same *logos* cannot produce differences within an individual). Nor can one model (παράδειγμα), i.e. the *logoi*-combination of a particular human being, produce separate human beings with various differences between them.
- V. 7 1, 21–23 (οὐ γὰρ ... ἀλλὰ δεῖ) Correspondence Premise: individuals do not relate to their models in the same way that portraits of Socrates relate to their archetype: different individuals must result from different logoi (and differences within an individual must also result from different logoi).
- C. V. 7 1, 23–26 Conclusion of chapter 1: the whole cosmic cycle contains all the *logoi* Remark on unlimitedness: the intelligible is a whole without parts, and it emanates and manifests itself in the sensible world when it is actualised.
 - V. 7 1, 23–24 Premise based on the doctrine of cosmic cycles: the whole cosmic cycle contains all the *logoi* and in each cosmic cycle the same things are generated according to the same *logoi*.
 - V. 7 1, 24–26 Remark on unlimitedness: one should not worry about unlimitedness in the intelligible, because the whole is without parts. The intelligible principles emanate, as it were, and manifest themselves in the sensible world when they are actualised.

1. SYNOPSIS 79

Chapter 2: How are *logoi* passed on from parents to offspring in reproduction and what role does matter play in the formation of the embryo?

- A. V. 7 2, 1–6 Embryological argument against the 'one *logos*, one individual' model Rejection of the 'traditional' (Aristotelian) embryology Plotinus' embryology: parents produce children according to many different *logoi*.
 - V. 7 2, 1–3 Embryological argument against the 'one *logos*, one individual' model: if the mixtures of paternal and maternal *logoi* produce different offspring, there cannot be only one *logos* for each child that is born.
 - V. 7 2, 3–5 Rejection of 'traditional' (Aristotelian) embryology: it is not the case that children are produced by one *logos*, either their own or their parents'.
 - V. 7 2, 5–6 Plotinus' embryology based on *logoi*-combinations: nothing prevents the parents from producing offspring according to different *logoi*. Since each soul possesses all the *logoi* existing in the cosmos (V. 7 1, 9–10), different *logoi* are available each time the parents produce children.
- B. V. 7 2, 7–12 The question of family resemblance: how is it that children from the same parents differ from one another? Answer: different *logoi* are dominant Remark: male and female are equally involved in biological heredity.
 - V. 7 2, 7 The question of family resemblance: how is it that children from the same parents differ from one another?
 - V. 7 2, 7–8 Answer: in every instance of conception, there is an imbalance between the paternal and maternal *logoi*.
 - V. 7 2, 8–12 Remark on the answer: the differences do not result from the fact that one parent passes on more *logoi* to the offspring than the other. Both parents pass on their whole sets of *logoi*, but the *logoi* of one can end up dominating the matter of the embryo.
- C. V. 7 2, 12–17 Question: is matter the reason why individuals in different places look so different? Answer: all natural differences are caused by *logoi* Remark on matter: matter is only responsible for unnatural differences such as ugliness and deformity.
 - V. 7 2, 12–13 Question: why do individuals look different in different places (ἐν ἄλλη χώρα, taking into account different phenotypes peculiar to certain geographical regions

or climatic conditions)? Is it because matter is not equally affected by *logoi* in many places?

- V. 7 2, 13–15 Answer: all differences due to matter are unnatural. In those cases where different phenotypes are beautiful, they are natural, i.e. they are produced by different *logoi*.
- V. 7 2, 15–17 Additional remark on matter: matter can only be responsible for ugliness and deformity. But even in cases of ugliness and deformity, the whole set of *logoi* is present in a hidden state.
- D. V. 7 2, 17–23 Premise: all logoi-combinations must be different Question: why is it necessary for there to be as many logoi-combinations as there are individuals in one cosmic cycle, if individuals look different even though the same logoi are present? Answer: individuals look different because each individual actualises a different logoi-combination Questions leading to chapter 3: is it possible for the same logoi-combination to appear more than once in one cosmic cycle? Or is there absolutely nothing identical in one cosmic cycle?
 - V. 7 2, 17–18 Premise: all combinations of dominant *logoi* must be different.
 - V. 7 2, 17–21 Question: why is it necessary for there to be as many different *logoi*-combinations as there are individuals born in one cosmic cycle if individuals appear different even though they all possess the same *logoi*? Answer: individuals look the same insofar as the *logoi* are given as a whole set, but each individual actualises a different combination of dominant *logoi* from this set.
 - V. 7 2, 21–23 Questions leading to chapter 3: is it possible for the same *logoi*-combination to dominate multiple times and produce multiple identical individuals in one cosmic cycle? Or is it the case that the absolutely identical follows in the next cycle, but there can be nothing absolutely identical in the same cycle?

1. SYNOPSIS 81

Chapter 3: Are identical twins produced by the same *logoi*-combination?

- A. V. 7 3, 1–6 Question: are twins and cubs born in the same litter produced by the same *logoi*-combination or by different *logoi*-combinations? Intuitive answer: seemingly identical offspring are produced by the same *logoi*-combination Problem with the Correspondence Premise: the number of individuals will not equal the number of *logoi*-combinations Confirmation of the Correspondence Premise.
 - V. 7 3, 1-3 Question: are twins and cubs born in the same litter produced by the same logoi-combination as their siblings?
 - V. 7 3, 3 Intuitive answer: in the case of seemingly identical twins, there must be the same *logoi*-combination.
 - V. 7 3, 4–5 Intuitive answer contradicts the Correspondence Premise: if seemingly identical twins are produced by the same *logoi*-combinations, then the number of individuals born in a cosmic cycle would not equal the total number of *logoi*-combinations.
 - V. 7 3, 5–6 Confirmation of the Correspondence Premise: there are as many *logoi*-combinations as there are different individuals.
- B. V. 7 3, 6–13 Argument for the Correspondence Premise: there is nothing to prevent seemingly identical individuals from actualising different *logoi*-combinations Example: a craftsman distinguishes his seemingly identical products using logical difference Comparing the craftsman to nature: nature uses *logoi* to distinguish its products.
 - V. 7 3, 6–7 Argument for the Correspondence Premise: what prevents seemingly identical individuals from having been produced by different *logoi*-combinations?
 - V. 7 3, 7–10 Example: a craftsman distinguishes his seemingly identical products by logical differentiation. He applies differences to the same products in order to distinguish them.
 - V. 7 3, 10–13 Comparing a craftsman to nature: nature distinguishes its products not by discursive reasoning (μὴ λογισμῷ), but by *logoi*. The differences are so subtle that we cannot see them.

- C. V. 7 3, 13–23 Corollary of the Correspondence Premise: the number of individuals and the size of the cosmos is determined by the number of *logoi*-combinations Return to the question of unlimitedness Repeat of the remark on unlimitedness from chapter 1: one should not fear unlimitedness in seeds and *logoi* Conclusion: in the Intellect and the Soul, an unlimited
 - V. 7 3, 13–18 Corollary of Correspondence Premise: the number of products and the size of the cosmos is defined from the beginning by the unrolling and unfolding of the *logoi*, by the actualisation of all *logoi*-combinations, and by the Soul.

number of principles are always available for use.

- V. 7 3, 18–20 Return to the question of unlimitedness: even in the case of animals, which beget an enormous number of offspring, there is an individual *logoi*-combination for each of them.
- V. 7 3, 20–22 Repeat of the remark on unlimitedness from chapter 1: one should not fear unlimitedness in seeds and *logoi*, since the Soul contains them all.
- V. 7 3, 22–23 Conclusion: in the Intellect, as in the Soul, there is an unlimitedness of principles, all of which are actual in Soul.

2. GREEK TEXT OF V. 7 [18]

The Greek text presented, translated, and annotated in this work is borrowed from the *editio minor* of Paul Henry and Hans-Rudolf Schwyzer (H $-S^2$, Clarendon Press, 1964-1982: 264-267) and is basically the same text as in Arthur Hilary Armstrong's edition (Harvard University Press, 1966-1988). The text is 'in accordance with the latest published changes and corrections' (H $-S^3$, Oxford, 1982: 304-307) and 'is believed on good grounds to represent faithfully the text of Porphyry's edition' (Armstrong, 1989: xxix). The Greek text does not attempt to engage with the various manuscripts but serves the sole purpose of presenting a good-quality text. The aim of the translation is to render Plotinus' arguments as clearly as possible while keeping close to the wording of original Greek. The primary aim of the commentary is to provide a philosophical analysis of the treatise. It is therefore less concerned with philological exegesis. The main concern is to fathom the structure of the argument and to discuss Plotinus' philosophical preoccupations.

a) Consulted editions, translations, and commentaries

Armstrong *Plotinus Enneads*. Translated by Arthur Hilary Armstrong, 7 vols.

Cambridge - Massachusetts - London: Harvard University Press,

1966-1988.

Atkinson *Plotinus Ennead V. 1: on the three principal hypostases.* Translated

with a commentary by Michael Atkinson. Oxford: Oxford Univer-

sity Press, 1983.

Bréhier Plotin, Ennéades. Translated by Émile Bréhier, 3 vols. Paris: Les

Belles Lettres, 1924–1925.

Brisson Plotin Traités. Translated by Luc Brisson, 3 vols. Paris: GF Flam-

marion, 2002-2004.

Casaglia et al. *Plotino, Enneadi.* Translated by Mario Casaglia, Chiara Guidelli,

Alessandro Linguiti, and Moriani Fausto, with an introduction

by Francesco Moriani. Torino: UTET, 1997.

Cilento Plotino Enneadi. Prima versione integra e commentario critic.

Translated by Vincenzo Cilento, 3 vols. Bari: Laterza, 1947–1949.

Gerson et al. *Plotinus. The Enneads.* Edited by Lloyd P. Gerson, translated by

George Boys-Stones, John M. Dillon, Lloyd P. Gerson, R.A.H. King, Andrew Smith, and James Wilberding. Cambridge: Cam-

bridge University Press, 2018.

Harder et al. Plotins Schriften. Translated by Richard Harder, 6 vols., reworked

with commentary by Richard Harder (vol. 1), Rudolf Beutler and

Willy Theiler (vols. 2-6). Hamburg: Meiner, 1956-1971.

H-S¹ Plotini Opera, editio maior. Edited by Paul Henry and Hans Rudolf

Schwyzer (H-S1), 3 vols. Paris – Brussels – Leiden: Desclée de

Brouwer- Edition universalle, 1951-73.

H–S² Plotini Opera, editio minor. Edited by Paul Henry and Hans Rudolf

Schwyzer (H-S²), 3 vols. Oxford: Clarendon Press 1964-82.

H–S³ Plotini Opera, addenda et corrigenda ad textum et apparatum lec-

tionum. Edited by Paul Henry and Hans Rudolf Schwyzer (H-S3).

Oxford, 1982.

Kalligas Plotinus. The Enneads of Plotinus. Translated into Greek by Paul

Kalligas (1994), translated into English by Elizabeth Key Fowden and Nicolas Pilavachi, vol. 1. Princeton – Oxford: Princeton Uni-

versity Press, 2004.

MacKenna Plotinus, the Enneads. Edited by John Dillon, translated by Ste-

phen MacKenna, with an introduction and notes by John Dillon.

Penguin Books: London, 1991.

Vorwerk Plotins Schrift 'Über den Geist, die Ideen und das Seiende': Enne-

ade V 9 (5). Translated with a commentary by Matthias Vorwerk.

München: Saur, 2001.

Wilberding Plotinus' Cosmology: A Study of Ennead II.1 (40). Translated with

an introduction and commentary by James Wilberding. Oxford

- New York: Oxford University Press, 2006.

b) Dictionaries

Höffe Höffe, Otfried, ed. Aristoteles-Lexikon. Stuttgart: Kröner, 2005.

Bonitz Bonitz, Hermann. Index Aristotelicus. Darmstadt: Wissenschaft-

liche Buchgesellschaft, 1955 [1870].

LSJ Liddell, Henry George, Scott, Robert, and Henry Stuart Jones.

A Greek English lexicon (9th ed.), edited, revised and augmented throughout by Henry Stuart Jones. Oxford: Clarendon Press, 1996.

Sleeman, John H., and Gilbert Pollet. *Lexicon Plotinianum*. Leiden:

Brill, 1980.

c) Remarks on Plotinus' works and style

Beierwaltes Beierwaltes, Werner. 'Plotins Erbe.' Museum Helveticum 45, no. 2

(1988): 75-97.

Schwyzer Schwyzer, Hans-Rudolf. 'Plotinos.' Realencyclopädie der Clas-

sischen Altertumswissenschaft XXI, no. 1 (1951): 471-592

3. ENNEAD V. 7 [18]

V. 7 [18] ΠΕΡΙ ΤΟΥ ΕΙ ΚΑΙ ΤΩΝ ΚΑΘΕΚΑΣΤΑ ΕΙΣΙΝ ΙΔΕΑΙ¹²⁵

1. Εί καὶ τοῦ καθέκαστόν ἐστιν ίδέα; ἢ εί ἐγὼ καὶ ἕκαστος τὴν ἀναγωγὴν ἐπὶ τὸ νοητὸν ἔχει, καὶ ἑκάστου ή άρχη έκεῖ. ἢ εί μὲν ἀεὶ Σωκράτης καὶ ψυχη Σωκράτους, ἔσται Αὐτοσωκράτης, καθὸ ἦ¹²⁶ ψυχὴ καθέκαστα καὶ <ὡς λέγεται> ἐκεῖ [ὡς λέγεται ἐκεῖ]127. εἰ δ΄ οὐκ ἀεί, ἀλλὰ 5 άλλοτε άλλη γίγνεται ὁ πρότερον Σωκράτης, οἷον Πυθαγόρας ή τις ἄλλος, οὐκέτι ὁ καθέκαστα οὖτος κάκεῖ. ἀλλ εί ἡ ψυχὴ ἐκάστου ὧν διεξέρχεται τοὺς λόγους ἔχει πάντων, πάντες αὖ ἐκεῖ· ἐπεὶ καὶ λέγομεν, ὅσους ὁ κόσμος ἔχει λό-10 γους, καὶ ἑκάστην ψυχὴν ἔχειν. εἰ οὖν καὶ ὁ κόσμος μὴ ἀνθρώπου μόνου, άλλὰ καὶ τῶν καθέκαστα ζώων, καὶ ἡ ψυχή· ἄπειρον οὖν τὸ τῶν λόγων ἔσται, εἰ μὴ ἀνακάμπτει περιόδοις, καὶ οὕτως ἡ ἀπειρία ἔσται πεπερασμένη, ὅταν ταὐτὰ ἀποδιδῶται. εἰ οὖν ὅλως πλείω τὰ γινόμενα τοῦ παραδείγματος, τί δεῖ εἶναι τῶν ἐν μιᾶ περιόδω πάντων 15 γινομένων λόγους καὶ παραδείγματα; ἀρκεῖν γὰρ ἕνα ἄνθρωπον είς πάντας άνθρώπους, ὥσπερ καὶ ψυχὰς ὡρισμένας άνθρώπους ποιούσας άπείρους. ἢ τῶν διαφόρων ούκ ἔστιν εἶναι τὸν αὐτὸν λόγον, οὐδὲ ἀρκεῖ ἄνθρωπος πρὸς 20 παράδειγμα τῶν τινῶν ἀνθρώπων διαφερόντων ἀλλήλων οὐ τῆ ὕλη μόνον, ἀλλὰ καὶ ἰδικαῖς διαφοραῖς μυρίαις οὐ γὰρ ὡς αἱ εἰκόνες Σωκράτους πρὸς τὸ ἀρχέτυπον, ἀλλὰ δεῖ τὴν διάφορον ποίησιν ἐκ διαφόρων λόγων. ἡ δὲ πᾶσα περίοδος πάντας ἔχει τοὺς λόγους, αὖθις δὲ τὰ αὐτὰ πάλιν κατὰ τοὺς αὐτοὺς λόγους. τὴν δὲ ἐν τῶ νοητῶ ἀπειρίαν οὐ 25 δεῖ δεδιέναι· πᾶσα γὰρ ἐν ἀμερεῖ, καὶ οἶον πρόεισιν, ὅταν ένεργῆ.

¹²⁵ The line breaks are from H−S².

In H-S¹, the term is written as $\dot{\eta}$ (i.e. as the article), but it has been changed to $\tilde{\eta}$ in H-S².

¹²⁷ In H–S¹: καθὸ ἦ ψυχὴ καθέκαστα καὶ ἐκεῖ ὡς λέγεται <ἑκεῖ>. In H–S², the phrase 'ὡς λέγεται <ἑκεῖ>' was bracketed, indicating its removal, and instead, <ὡς λέγεται> was inserted between καὶ and ἑκεῖ.

5

10

15

20

2. Άλλ εί αὶ μίξεις τῶν λόγων ἄρρενος καὶ θήλεος διαφόρους ποιοῦσιν, οὐκέτι τοῦ γινομένου ἑκάστου λόγος τις ἔσται, ὅ τε ἑκάτερος γεννῶν, οἶον ὁ ἄρρην, οὐ κατὰ διαφόρους λόγους ποιήσει, άλλὰ καθ ἔνα τὸν αὑτοῦ ἢ πατρὸς αύτοῦ. ἢ οὐδὲν κωλύει καὶ κατὰ διαφόρους τῶ τοὺς πάντας ἔχειν αὐτούς, ἄλλους δὲ ἀεὶ προχείρους. όταν δὲ ἐκ τῶν αὐτῶν γονέων διάφοροι; ἢ διὰ τὴν οὐκ ἴσην ἐπικράτησιν. ἀλλ ἐκεῖνο, ὅτι οὔ, κἂν εἰ ἐν τῷ φαίνεσθαι, ότὲ μὲν κατὰ τὸ ἄρρεν τὸ πλεῖστον, ότὲ δὲ κατὰ τὸ θῆλυ, ἢ κατὰ τὸ ἴσον μέρος ἔδωκεν ἑκάτερος, ἀλλ όλον μὲν ἔδωκε καὶ ἔγκειται, κρατεῖ δὲ τῆς ὕλης μέρος έκατέρου ἢ θάτερον. οἱ δὲ ἐν ἄλλη χώρα¹²⁸ πῶς διάφοροι; ἆρ οὖν ἡ ὕλη τὸ διάφορον οὐχ ὁμοίως κρατουμένη; πάντες ἄρα χωρὶς ἑνὸς παρὰ φύσιν. εἰ δὲ τὸ διάφορον πολλαχοῦ καλόν, οὐχ εν τὸ εἶδος. ἀλλὰ τῷ αἴσχει μόνῳ ἀποδοτέον τὸ παρὰ τὴν ὕλην κάκεῖ τῶν τελείων λόγων κεκρυμμένων μέν, δοθέντων δὲ ὅλων. ἀλλ ἔστωσαν διάφοροι οἱ λόγοι τί δεῖ τοσούτους, ὅσοι οἱ γινόμενοι ἐν μιᾳ περιόδω, εἴπερ ἔνι τῶν αὐτῶν διδομένων διαφόρους ἔξωθεν φαίνεσθαι; η συγκεχώρηται των όλων διδομένων, ζητεῖται δέ, εί τῶν αὐτῶν κρατούντων. ἆρ οὖν, ὅτι τὸ ταὐτὸν πάντη ἐν τῆ ἑτέρα περιόδω, ἐν ταύτη δὲ οὐδὲν πάντη ταὐτόν;

¹²⁸ In Armstrong: ὥρα, i.e. season.

3. Πῶς οὖν ἐπὶ πολλῶν διδύμων διαφόρους φήσομεν τοὺς λόγους; εί δὲ καὶ ἐπὶ τὰ ἄλλα ζῶά τις ἴοι καὶ τὰ πολύτοκα μάλιστα; ή, ἐφ ὧν ἀπαράλλακτα, εἶς λόγος. άλλ εί τοῦτο, ούχ, ὅσα τὰ καθέκαστα, τοσοῦτοι καὶ οἱ λόγοι, ἢ ὄσα διάφορα τὰ καθέκαστα, καὶ διάφορα οὐ τῶ ἐλλείπειν κατὰ τὸ εἶδος. ἢ τί κωλύει καὶ ἐν οἶς άδιάφορα; εἴπερ τινὰ ὅλως ἐστὶ πάντη ἀδιάφορα. ὡς γὰρ ο τεχνίτης, καν άδιάφορα ποιῆ, δεῖ ὅμως τὸ ταὐτὸν διαφορᾶ λαμβάνειν λογικῆ, καθ ἣν ἄλλο ποιήσει προσφέρων διάφορόν τι τῷ αὐτῷ: ἐν δὲ τῆ φύσει μὴ λογισμῷ γινομέ-10 νου τοῦ ἐτέρου, ἀλλὰ λόγοις μόνον, συνεζεῦχθαι δεῖ τῶ εἴδει τὸ διάφορον: ἡμεῖς δὲ λαμβάνειν τὴν διαφορὰν άδυνατοῦμεν. καὶ εί μὲν ἡ ποίησις ἔχει τὸ εἰκῆ τοῦ ὁποσαοῦν, άλλος λόγος εί δὲ μεμέτρηται, ὁπόσα τινὰ εἴη, τὸ ποσὸν ώρισμένον ἔσται τῆ τῶν λόγων ἀπάντων ἐξελίξει καὶ ἀνα-15 πλώσει· ὥστε, ὅταν παύσηται πάντα, ἀρχὴ ἄλλη· ὁπόσον γὰρ δεῖ τὸν κόσμον εἶναι, καὶ ὁπόσα ἐν τῷ ἑαυτοῦ βίω διεξελεύσεται, κεῖται έξαρχῆς ἐν τῷ ἔχοντι τοὺς λόγους. ἆρ οὖν καὶ ἐπὶ τῶν ἄλλων ζώων, ἐφ ὧν πλῆθος ἐκ μιᾶς 20 γενέσεως, τοσούτους τοὺς λόγους; ἢ οὐ φοβητέον τὸ ἐν τοῖς σπέρμασι καὶ τοῖς λόγοις ἄπειρον ψυχῆς τὰ πάντα έχούσης. ἢ καὶ ἐν νῷ, ἦ ἐν ψυχῆ, τὸ ἄπειρον τούτων ἀνάπαλιν τῶν ἐκεῖ¹²9 προχείρων.

5

ἐκεῖ refers to ἐν τῆ ψυχῆ, i.e. in the Soul.

4. ENGLISH TRANSLATION

V. 7 [18] On the question of whether there are also Forms of individuals

- 1. The question is, is there also a Form of the individual? Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world]. Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates], there will be Socrates-Itself, insofar as, qua soul, individuals exist
- there [in the intelligible world], as has been said. If, however, the soul of Socrates is not always [Socrates], but being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras or someone else, then this individual will no longer be there [in the intelligible world]. But if the soul of each individual possesses the forming principles of all those individuals through which it passes in succession, then again all will be there [in the intelligible world]; for we do also say that as many forming
- principles as the cosmos possesses, each soul also possesses. Consequently, if the cosmos possesses [the forming principles] not only of the human being, but also of individual living beings, so, too, does the soul; the whole of the forming principles, then, will be unlimited unless it keeps turning in periodic cycles, and thus the unlimitedness will be limited, whenever the same result is produced. If, then, in all
- cycles together the things that come into being are greater in number than their model, why should there be forming principles, that is, models for all things that come into being in [just] one cycle? For one 'human being' [as a model] suffices for all human beings, just as a limited number of souls, too, produces an unlimited number of human beings. Or perhaps, there is not the same forming principle for different individuals, nor does 'human being' serve as a model for particular human beings who differ from each other not only in matter, but in a vast number of peculiar differences; it is unlike the
- way images of Socrates relate to their archetype. No, the difference in production needs to stem from different forming principles. Perhaps, the whole cosmic cycle contains all the forming principles, and again the same things are produced according to the same forming principles. One must not fear unlimitedness in the intelligible world; for the whole unlimitedness is contained in the indivisible, as it were, and comes forth,
- 25 the whole unlimitedness is contained in the indivisible, as it were, and comes forth, whenever it actualises.

5

2. If, however, the mixtures of forming principles of the male and female produce different offspring, there will not be some particular forming principle [logoi^{comb}] for each individual that is born, and each of the parents, for instance the male, will produce not according to different forming principles, but according to one [logoi^{comb}], his own or his father's. Maybe, nothing prevents them [the parents] from producing also according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand. What about the cases where those of the same parents are different? Maybe [it is] because of the dominance that is unequal. But the thing is that it is not the case – even if it appears so – that sometimes most of the forming principles come from the male, at other times from the female, or that each of them contributes an equal part of forming principles. No, both of them contribute the whole, and it is then embedded [in the embryo], but either the part of the one or the other dominates over the matter. Why are individuals, who live in other places, different? Is it really matter that makes the difference, because it is not being dominated in a similar way? All [individuals] are in that case unnatural except one. But if the difference is beautiful in many places, the form is not one. That which is on the side of matter must be linked to the ugliness alone, and even there the perfect forming principles are concealed, but given as wholes. But let the forming principles be different: why is it necessary that there be as many $[logoi^{comb}]$ as there are individuals born in one cosmic cycle, when it is possible that outwardly individuals look different even though the same forming principles are present? In fact, this has been granted insofar as [the forming principles] are given as wholes, but it is now asked whether [it is possible] if the same forming principles dominate [in several individuals in one cosmic cycle]. Is it the case, then, that the absolute identity is possible across different cosmic cycles, while in the same cosmic cycle, there is nothing absolutely identical?

3. How, then, can we say in the case of many twins that the forming principles are different? And also if one turns to other living beings, especially those who give birth to many cubs in a litter? Perhaps in the case of those who are indiscernible, the forming principle [logoi^{comb}] is one. But if this is so, then there are not as many forming principles [logoi^{comb}] as there are individuals. But maybe, there are as many [logoi^{comb}] as the individuals are different, and as these are different not on account of a lack of form. Or maybe, what prevents there being different forming principles also in indiscernibles? For there are generally individuals who are absolutely indiscernible. Just as a craftsman, even when he makes indiscernible things, must nevertheless conceive the product that is identical by means of a logical difference, according to which he will make another product by adding a difference to that which is the same. In nature, where the other [product] is not created by discursive reasoning, but solely by forming principles, the difference must be linked to the form; but we are unable to perceive the difference. And if the creation process involves a random number of individuals, another explanation will be necessary; but if there is a measure of how many individuals there are to be, the quantity [of individuals] will be determined by the unrolling and unfolding of the sum-total of forming principles; so that when all things come to an end, there will be another beginning. For how vast the cosmos has to be, and how many individuals it [the cosmos] will pass through in the course of its life, is grounded from the very beginning in that which contains the forming principles. And is it also the case with other animals that produce a huge number of 20 offspring from one birth, that there are as many forming principles [logoi^{comb}] [as individuals]? Maybe, there is no need to fear unlimitedness in seeds and forming principles, since the Soul contains them all. Or maybe in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles that in the Soul become available.

Part III. Commentary

1. V. 7 [18] 1: PRINCIPLES OF INDIVIDUALS – FORMS OR LOGOI?

The treatise is known to us by the Greek title $\Pi EPI TOY EI KAI T\Omega N KA\Theta EKA\Sigma TA EI\Sigma IN I\Delta EAI (H-S^2)$, i.e. 'On the question of whether there are also Forms of individuals', which is most probably based on the opening question of the treatise. It is noticeable that the title does not entirely correspond to the first sentence. In the title, both 'individuals' (kathekasta) and 'Forms' (ideai) are in the plural, whereas in the first sentence, 'individual' (kathekaston) and 'Form' (idea) are in the singular. However, the use of the plural instead of the singular does not affect the meaning. It is worth noting that Plotinus himself did not give titles to his treatises: the titles either came from Porphyry or from students of Plotinus among whom the treatises circulated, with Porphyry then adopting these established titles. This was the case for at least the first twenty-one treatises, as Porphyry informs us:

From the first year of Gallienus Plotinus had begun to write on the subjects that came up in the meetings of the school: in the tenth year of Gallienus, when I, Porphyry, first came to know him, I found that he had written twenty-one treatises, and I also discovered that few people had received copies of them. The issuing of copies was still a difficult and anxious business, not at all simple and easy; those who received them were most carefully scrutinised. These were the writings, to which, since he gave them no titles himself, each gave different titles for the several treatises. The following are the titles which finally prevailed (VP4, 8–19, translated by A.H. Armstrong).

In the *Vita Plotini*, Porphyry offers two versions of a list featuring titles of all the treatises, adding, as he says, 'the first words of the treatises to make it easy to recognise from them which treatise is indicated by each title' (VP 4, 19–22, translated by A.H. Armstrong). The first version lists the treatises in their chronological order, i.e. the order in which Plotinus wrote them (VP 4–6). The second version shows the order of the treatises as they appear in the *Enneads* (VP 24–26). It is conspicuous that the title of V. 7 [18] is different in the two lists. ¹³⁰

First version: 'ιη' Εί καὶ τῶν καθέκαστά εἰσιν ἰδέαι· οὖ ἡ ἀρχή· εἰ καὶ τοῦ καθέκαστον' (*VP* 4, 57–58); '18. Whether There are Ideas of Particulars' (translated by A.H. Armstrong).

 $^{^{130}}$ That the titles in the two lists differ is not only the case with V. 7 [18], but also with some other treatises, such as I. 9 [16], II. 6 [17], IV. 5 [29], and others.

96 COMMENTARY

There are two main differences between the two versions. The first difference – a rather insignificant one – concerns the $\Pi \varepsilon \rho i \ \tau o \tilde{v}$ (peri tou), i.e. 'On whether', which is not present in the first version but is added in the second. It is the rule in the *Enneads* – with only a few exceptions – that titles begin with peri tou. By itself, the addition of peri tou has no effect on the meaning. The second difference, however, is more interesting from a philosophical perspective. The two versions of the title use different terms for 'Forms'. In the first version, the Greek word $i\delta \acute{e}a\iota$ (ideai) is used, which also occurs in the opening sentence of V. 7 [18]. In the second version, the Greek word for 'Forms' is $\varepsilon i\delta \eta$ (eidê). ¹³¹ The reason that Porphyry changed the term from ideai to eidê in the second list is not obvious. Both terms, however, appear in the treatise – idea in the introductory question (V. 7 [18] 1, 1), and eidos (the singular form of eidê) a total of three times (V. 7 [18] 2, 15; V. 7 [18] 3, 6; V. 7 [18] 3, 11). ¹³²

It is important to note that in Plotinus, as in Plato, the term *idea* is used exclusively for transcendent Forms on the level of the universal Intellect (Sleeman). In addition to *idea*, Plotinus, like Plato, frequently uses the term *eidos* to refer to Forms. The term *eidos*, however, can also have other meanings, such as 'form in general, especially specific form' (Sleeman). In other contexts, *eidos* can refer to a form as 'contrasted or associated with' matter (*hylê*) (Sleeman); in an Aristotelian context, it can also mean 'kind, sort, species' (Sleeman).

The alternative meanings of *eidos* offer great potential for different interpretations, which is reflected in the different translations of V. 7 [18]. While Sleeman identifies all three instances of eidos in V. 7 [18] as referring to Platonic Forms, Arthur H. Armstrong and Luc Brisson translate eidos in all three cases as 'form' in its general sense. Richard Harder, on the other hand, follows Sleeman and translates eidos in all three passages as 'Idee' (i.e. the Platonic Form). Gerson, meanwhile, understands eidos as 'transcendent Form' only in the passage V. 7 [18] 2, 15; in the other two passages, V. 7 [18] 3, 6 and V. 7 [18] 3, 11, he translates eidos as 'form'. In my translation, I understand eidos in all three cases not as the transcendent Platonic Form, but as 'form' in general, i.e. the form imprinted by *logoi* on matter. In the second chapter (V. 7 [18] 2, 15), eidos appears in connection with the question of whether matter (hylê) has an influence on the development of individual properties. Plotinus argues that matter is only capable of causing ugliness (aischos) and deformity; thus, if individuals can be distinguished by beautiful physical features, they must each have a different form caused by different *logoi*. Similarly, the context of the two passages in the third chapter (V. 7 [18] 3, 6; V. 7 [18] 3, 11) suggests that

¹³¹ It is also noteworthy that Ficino gives us the second version of the title, i.e. with eidê.

¹³² V. 7 [18] 2, 16: 'But if the difference is beautiful in many places, the form is not one.' V. 7 [18] 3, 5–6: 'But maybe, there are as many [*logoi-combinations*] as there are different individuals; and these are different not on account of a lack of form.' V. 7 [18] 3, 10–13: 'In nature, where the other [product] is not created by discursive reasoning, but solely by forming principles, the difference must be linked to the form; but we are unable to perceive the difference.'

eidos must refer not to the transcendent Form but to the form of sensible individuals caused by *logoi*. There, Plotinus argues that although twins and animals may look identical, their forms (*eidos*) must be different, because they were produced by different *logoi*-combinations, but we cannot perceive the very subtle differences between them with the naked eye.

Neither version of the title accurately reflects the content of the treatise, since they both give the false impression that the whole text is devoted to the question of whether there are Forms of individuals. At first sight, it seems to be a great advantage of the first and second readings (i.e. Forms of sensible individuals and soul-Forms/Form-Intellects) that they do not have to problematise the initial question at all, and a disadvantage of the third reading (i.e. logoi as principles of individuals) that it has to problematise the initial question. After all, only the third reading leads to the assumption that the initial question does not exhaustively represent the content of the treatise - right? But it is not a mere assumption of the third reading that the opening question is only relevant to the first few sentences (V. 7 [18] 1, 1–10) – it is a fact. The term 'Form' (idea) occurs only once in the entire treatise, namely in the opening question itself. Throughout the rest of the treatise, Plotinus is mainly concerned with embryological questions. This discrepancy between title and content has been noted by D'Ancona Costa (2002: 532), who states that the initial question of the existence of Forms of individuals 'is not dealt with in itself. It comes as no surprise that the reader of V 7 [18] is baffled and disappointed, if he looks at this treatise as to the place where the question of the status of an intelligible individual is settled'.133 Nevertheless, the title draws attention to an element that is essential to the treatise: even if V. 7 [18] is not primarily about Forms, it is certainly concerned with individuals, and it is on this concept (kathekaston, i.e. the individual) that the title should really focus.

ARGUMENT OF V. 7 [18] 1

A brief look at the overall structure of the first chapter reveals a striking phenomenon. Immediately after the opening question, Plotinus systematically strings together eight if-sentences. In the Greek text, both word-semantic and contextual clues indicate that all eight if-sentences serve a specific purpose in the chain of argumentation. The first five if-sentences (V. 7 [18] 1, 1–10) deal with the question 'What are the principles of individuals?' The next three if-sentences (V. 7 [18] 1, 10–16) address the problem 'What is the number of forming principles in relation

¹³³ In a footnote, D'Ancona Costa adds: 'The title of the treatise [...] gives room to the expectation that it deals with the problem of ideas of individuals, but this is only due to the fact that it is an editorial title, chosen by Porphyry, who gave to the treatises the most current title or, as it happens here and in several other cases, a title which reproduces the first words of the work.'

98 COMMENTARY

to the number of individuals?' The following section (V. 7 [18] 1, 16-23) gives the answer to the question of the number of forming principles. The last section of the first chapter (V. 7 [18] 1, 23-26) asserts once again that there is no numerical unlimitedness in the intelligible. The first chapter can thus be divided into three sections: (I) V. 7 [18] 1, 1-10; (II) V. 7 [18] 1, 10-23; and (III) V. 7 [18] 1, 23-26.

- (I) If-sentences (i), (ii), (iii), (iv), (v) dealing with the question 'What are the principles of individuals?' (V. 7 [18] 1, 1–10)
 - (i) The question to be examined: 'Is there also (*ei kai*) a Form (*idea*) of the individual?' (V. 7 [18] 1, 1).
 - (ii) The beginning of the analysis: the first if-sentence ($ei\ eg\^o\ kai\ hekastos$) asserts that there must be a principle ($arch\^o$) of every individual in the intelligible world ($epi\ to\ no\^oton$), on the grounds that every individual can be traced back to the intelligible world. I call this assertion the Neoplatonic Premise because it is characteristic of all Neoplatonism that the ontological and causal principles of all things reside in the intelligible, or in other words, that all material reality emerges from the intelligible (V. 7 [18] 1.1–3).

The Neoplatonic Premise is followed by three if-sentences. They represent considerations about the ontological status of human individuality in relation to the individual soul. The first two considerations are met with counter-arguments; accordingly, in the third consideration, Plotinus offers a compromise in which he sets out what the principles of individuals are.

- (iii) First consideration: the first consideration introduced by *ei men* suggests that the soul of Socrates exists eternally as Socrates. Were this the case, then there would be a 'Socrates-Itself' (*Autosôkratês*). The first consideration, then, seems to be an argument in favour of the existence of Forms of sensible individuals (or soul-Forms/Form-Intellects) (V. 7 [18] 1, 3–5).
- (iv) Second consideration: the second consideration, introduced by *ei de*, shows that an eternal identification of individuals with their souls is incompatible with the Platonic doctrine of transmigration. As soon as the soul of Socrates reincarnates as another individual, the individual Socrates ceases to exist. Consequently, the doctrine of transmigration implies that human individuals and their individuality do not exist in the intelligible. Therefore, there can be no Forms of individuals either. The second consideration is thus an argument against the existence of Forms of individuals. This consideration, however, contradicts the Neoplatonic Premise, and therefore cannot be valid in its present form (V. 7 [18] 1, 5–7).

The Greek formulations *ei men* to introduce the first consideration, and *ei de* to introduce the second, correspond to the English expressions 'on the one hand – on the other hand'. Plotinus uses this formulation to highlight the opposing arguments – the argument for the Forms of individuals and the counter-argument based on the doctrine of transmigration. The introduction of the doctrine of transmigration

thus presents Plotinus with a dilemma. On the one hand, Plotinus believes in the transmigration of souls; on the other hand, the doctrine of transmigration seems to make the existence of individuals and individuality in the intelligible impossible – in other words, the doctrine of transmigration seems to conflict with the Neoplatonic Premise. Plotinus therefore proposes a compromise to reconcile the doctrine of transmigration with the Neoplatonic Premise.

(v) Plotinus' solution: in the third consideration, introduced by *all' ei* ('but if'), Plotinus presents a model of the intelligible principles of human individuals that explains the mechanisms of transmigration. According to this model, the soul of each individual possesses the forming principles (*logoi*) of all individuals into which it will successively be born. In this way, human individuality can be present in the intelligible despite transmigration. Although Plotinus does not say this explicitly, it is evident that Forms of individuals are rejected at this point, because they would still contradict the doctrine of transmigration. ¹³⁴ Moreover, *logoi* have been postulated as principles of individuals and now play the central role. The term 'Form' (*idea*), on the other hand, no longer appears in the treatise from this point onward (V. 7 [18] 1, 7–10).

My interpretation of the structure of this passage differs drastically from the reading proposed by John Rist (1963: 224–225). Rist's version has generally been adopted, with slight modifications, by scholars such as Blumenthal (1966), Mamo (1969), Armstrong (1977), Gerson (1994), and Kalligas (1997a). Without questioning Rist's basic structure of the first chapter, they all accept his suggestion that Forms are at the centre of V. 7 [18]. Unlike my proposed reading, Rist does not distinguish between arguments for and against the existence of Forms of individuals. He also ignores the fact that the doctrine of the transmigration of souls precludes Forms of individuals, and that Plotinus introduces other principles, the *logoi*, precisely for this reason: for Rist (1963: 224), the doctrine of transmigration represents merely a 'difficult additional remark' – difficult because he believes that every statement is accepted by Plotinus, even if that means admitting self-contradiction. Rist's structure of the first few sentences of V. 7 [18] is based on Armstrong's translation:

- (I*) Rist's structure (V. 7 [18] 1, 1–8):
- (i) The question to be examined: 'Is there an idea of each particular thing?' (V. 7 [18] 1, 1).
- (ii) The answer: 'Yes, [...] the principle of each of us is there' (V. 7 [18] 1, 1–3).
- (iii) The first argument: 'If [...] the soul of Socrates always exists, there will be an absolute Socrates (*Autosôkratês*) [...] in the intelligible world' (V. 7 [18] 1, 3–5).

¹³⁴ For the explanation of the argument, see pp. 122–131.

100 COMMENTARY

- (iv) A difficult additional remark: 'But if Socrates does not always exist, but [...] becomes different people at different times, [...] then there will not be this particular person Socrates also in the intelligible world' (V. 7 [18] 1, 6–7).
- (v) Second argument: 'But if the soul of each individual possesses the rational forming principles of all individuals [...], then again on this assumption all will exist there' (V. 7 [18] 1, 7-8).

After the opening question, Rist skips over the discussion of the first if-sentence. For Rist, it is a clear affirmation by Plotinus that Forms of individuals really exist. He then identifies the second if-sentence as the first argument in favour of Forms of individuals. According to Rist, the argument implies that 'there must be a Form of Socrates in the Intelligible World, since, presumably, there are Forms corresponding to whatsoever is eternal' (Rist 1963: 224). The first argument is followed by the proposition that introduces the doctrine of transmigration. As stated, Rist classifies this statement as a 'difficult additional remark' (Rist 1963: 224). At this point, Rist does not acknowledge that this remark cancels out the first argument: even if the soul of Socrates is immortal, this does not mean that Socrates must also exist on the level of the Intellect, for at its next reincarnation the soul becomes the soul of another individual. In other words, the soul of Socrates does not exist eternally as Socrates. Socrates is transient, and therefore there can be no Form of Socrates. Rist (1963: 228), however, argues that the doctrine of transmigration does not really cancel out the theory of Forms of individuals:

even if the soul of X became the soul of Y in course of time, the fact that it had existed as X is sufficient to guarantee the existence of a corresponding Form. Hence although X is reincarnated as Y, he can never blot out that former X-ness that did in fact exist. Once existence has occurred, so to speak, it cannot be eliminated (Rist, 1963: 228).

It seems that Rist is aware that the introduction of the doctrine of transmigration militates against the theory of Forms of individuals, but he still tries to save the latter, although there is no explicit textual evidence to support his argument.

Furthermore, Rist identifies the fifth if-sentence as the second argument in favour of Forms of individuals: 'The second argument to resume is that since each soul contains all the $\lambda \acute{o}yo\iota$ (Reason-Principles) that there are in the cosmos, its archetype must be in the Intelligible World' (Rist 1963: 224). He thus sees the *logoi* as a kind of guarantee for the existence of Forms of individuals which he designates as archetypes. This, however, is not what the text says: 'But if the soul of each individual possesses the forming principles of all those individuals through which it passes in succession, then again all will be there [in the intelligible world]' (V. 7 [18] 1, 8–9). The phrase 'all will be there [in the intelligible world]' does not refer to Forms of

individuals, but to the individuals, i.e. individual sensible bodies which are stored in the form of intelligible information, i.e. *logoi*, in the soul. Plotinus in fact denies the existence of individuals in the intelligible on account of the transmigration of souls: 'then this individual [i.e. Socrates] will no longer be there [in the intelligible world]' (V. 7 [18] 1, 7–8). Thus, what Rist calls a second argument for Forms of individuals is really an argument against them.

In sum, Rist argues that the entire passage proves that Plotinus does indeed postulate Forms of individuals in V. 7 [18], but Rist's outline of the chapter is inaccurate. It is unclear how exactly the 'first argument' and the 'second argument' are related, especially given that they are interrupted by 'the difficult additional remark' on the doctrine of transmigration, which precludes Forms of individuals.

Let us now return to the structural survey of the first chapter:

- (II) If-sentences (vi), (vii), (viii) and the section (ix): what is the ratio of the number of forming principles (logoi) to the number of individuals? (V. 7 [18] 10–23).
 - (vi) First suggestion regarding the number of logoi: after Plotinus proposes logoi as principles of human individuals, he observes in the sixth if-sentence $(ei\ oun)$ that the cosmos contains not only logoi of human beings but also of animals. This observation leads to the conjecture that there must be an infinite (apeiron) number of logoi. Since the universe is unlimited, the number of individuals and their corresponding forming principles must also be unlimited (V. 7 [18] 1, 10–12).
 - (vii) Second suggestion regarding the number of *logoi*: Plotinus brings in the theory of cosmic cycles. A cosmic cycle since it has a beginning and an end contains a limited number of individual living beings. Consequently, the number of forming principles must also be limited. Hence, the second suggestion, introduced by *ei mê* ('unless'), negates the first suggestion (V. 7 [18] 1, 12–13).
 - (viii) First proposal regarding the number of logoi in relation to the number of individuals: having established that both the number of individuals and the number of logoi are limited, Plotinus proceeds to examine the number of logoi in relation to the number of individuals. The first assumption is that the number of logoi and models (paradeigmata) is smaller than the number of individuals. The term 'model' (paradeigma) is meant to clarify that the correspondence between logoi and individuals is not a one-to-one correspondence, such as 'one logos creates a whole individual'. In order to produce a complex individual, such as a human being, a combination of different logoi is required, each logos being responsible for a particular property in the human individual. A logoi-combination is thus the model of a human individual. The proposal (viii), then, is that one and the same model of a human individual can produce many individuals. As an argument for this thesis, Plotinus gives the example of reincarnation: just as a small number of souls can ensoul an infinite number of individuals in the course of reincarnation, so too should a small number of *logoi* suffice to bring forth all living beings in a cosmic cycle (V. 7 [18] 1, 13–16).

The suggestion (viii) is the last if-clause of the first chapter. It is introduced with the Greek expression *ei oun* ('if then'), just like the first suggestion about the number of *logoi* (vi). And just like (vi), (viii) is immediately negated in the following section (ix).

(ix) Second proposal regarding the number of logoi in relation to the number of individuals: first, proposal (viii) is rejected here on the grounds that a single logos or model cannot produce different individuals who differ from each other in a variety of peculiar properties (idikais diaphorais muriais). The proposal, then, is that the number of models must be equal to the number of individuals. This is justified by the fact that the relation between an individual and an intelligible model is not the same as, say, that between Socrates and his portraits. It is necessary that a given property be caused by its corresponding logos (so that the number of logoi = the number of properties). Therefore, the number of logoi-combinations (models) must be equal to the number of individuals generated in a cosmic cycle (V. 7 [18] 1, 16–23).

Interestingly, Rist regards this passage as consisting of 'a number of objections to the proposition he [Plotinus] has put forward' — the proposition, according to Rist, is that there are Forms of individuals. Thus, for Rist, the introduction of cosmic cycles is an argument against Forms of individuals: '[I]f there are periodic returns of the Reason-Principles (logoi), it would appear that one Form can in fact account for more than one particular, even in the case of mankind. Why should there then be a need for more than one archetype to account for all the men in a single cosmic period?' (Rist, 1963: 225). What Rist refers to as 'archetype' is the term paradeigma, which I translate as 'model'. While I understand paradeigma as a logoi-combination, Rist identifies paradeigma with the Platonic Form. For this reason, Rist thinks that this section still refers to the theory of Forms of individuals.

Identifying *paradeigma* as transcendent Forms presents difficulties that Rist himself acknowledges.¹³⁵ He characterises Plotinus' response to the obstacle presented by cosmic cycles as inadequate: 'But this objection is shallow, and Plotinus points out its weaknesses – though in a rather too abbreviated fashion which fails to mention one of the premises. The missing premise is that even if two men in different cosmic periods may be identical, no two are identical within the *same cosmic period*' (Rist, 1963: 224–225). Moreover, he does not know how to classify Plotinus' further arguments:

Let us consider the possibility that *paradeigma* refers to a Platonic Form. If this is the case, Plotinus argues in this passage that the Form of Human Being cannot serve as a direct model for particular individuals, for the reason that the Form of Human Being can only produce a general form. Since Plotinus asserts that individuals 'differ from each other not only in matter, but in a vast number of peculiar differences' another principle is required to generate this vast number of peculiar differences among individual human beings. Therefore, intermediary rational forming principles – *logoi* – are necessary between the Form of the Human Being and individual humans (= 'the difference in production needs to stem from different forming principles', V. 7 [18] 1, 21–22). Implicit in this argument is the idea that if matter were indeed responsible for individual differences, a singular Form of the Human Being would suffice to generate all distinct individuals without the help of the intermediary *logoi*.

Within any one period, Plotinus indicates, one Reason-Principle is insufficient to account for differences. Human beings (in the same period) must in fact differ not only materially but by countless variations from the ideal (*idikais diaphorais muriais*). It is not quite clear what this last phrase means (Rist, 1963: 225).

Unfortunately, Rist does not notice that Plotinus is no longer concerned with the question of Forms of individuals. In this passage, Plotinus is primarily concerned with how many forming principles there are and the relationship between the number of forming principles and the number of individuals in a cosmic cycle. Once we understand this, it becomes clear that there are neither 'missing premises' nor unclear statements in Plotinus' argumentation.

- (III) Sentence (x): the problem of unlimitedness in the intelligible (V. 7 [18] 23–26).
- (x) In the last section of the first chapter, Plotinus deals with unlimitedness in the intelligible. First, he clarifies that the entire cosmic cycle contains all the *logoi*, of which there are only a limited number. In the next sentence, however, he points out that we should not be afraid to assume unlimitedness in the intelligible. This unlimitedness is, of course, not a numerical one, but an indivisible one. It seems that in V. 7 [18], we are dealing with two different attitudes to unlimitedness. The first kind is the numerical unlimitedness, which is indeed a problem and is eliminated with the theory of cosmic cycles. But in this passage (and in V. 7 [18] 3, 21–24), unlimitedness is spoken of in terms of the creative power of the Soul and Intellect.

1, 1 The question is, is there also a Form of the individual?

Plotinus commonly introduces his treatises with a question.¹³⁶ Usually, the introductory question states the problem to be examined throughout the entire treatise. In this case, too, the introductory question certainly points to the main subject of the treatise; the emphasis, however, is not on the notion of 'Form' (*idea*) but on the notion of 'individual' (*kathekaston*). The overall content of the treatise confirms this impression. Individuals are examined under various aspects, such as individuality, biological heredity, uniqueness, and whether the number of individuals is determined or not.¹³⁷ Forms, on the other hand, are no longer relevant after this section,

 $^{^{136}}$ To his credit, Atkinson (1983: 1) has compiled a list of all the treatises which begin with a question: 'I 1, I 3, I 4, I 5, I 7, II 2, II 6, II 8, III 3, III 8, IV 4, IV 8, IV 9, V 1, V 3, V 5, V 7, VI 4, VI 6, and IV 8 begin with a direct question; and in I 2, I 6, II 5, II 7, III 2, VI 3, VI 7 and VI 9 an introductory statement is followed by a question.'

In the introduction to his commentary on V. 7 [18], Kalligas (2023: 330–331) describes the topic of the treatise as following: In this treatise, P. tackles one of the consequences of his peculiar theory on the soul as spelled out in his treatise "On the Descent of the Soul into Bodies" (IV 8 [6]), where it is made clear that the soul does not come into direct contact with the body, nor is it affected by it, always retaining its ontological alterity and its consequent impassibility. Whereupon the question arises: What is the soul's relation to the intelligible Forms, especially in view of its "experiential" ability to become integrated among these (as described in the prologue of that treatise)? In this way he opens up a whole field of philosophical thinking on whether it is possible to identify individual beings in the supra-sensible realm, which would later bring to the fore important questions surrounding the issue

as *logoi* are brought to the fore as the intelligible forming principles of human individuals. As stated earlier, the term *idea* occurs only once in the entire treatise, namely in the introductory question.¹³⁸

One problematic aspect for Platonists was the uncertainty regarding which things have Forms. Plato mentions some examples in his dialogues, such as the Form of Good (Rep. 502c-509c), the Form of Beauty, the Form of Human Being (Parm. 130a-e), and even the Form of Bee (Men. 72b-c), but the examples collected represent a rather sparse list. Many Platonists tried to come up with further examples, but it was not always possible to find appropriate justifications for those ideas purely on the basis of the dialogues. Regarding this question, Plato himself did not give any clear answers. The most detailed treatment of this problem can be found in the *Parmenides*. In this dialogue, the young Socrates and the elderly Parmenides engage in a discussion on the problem of unity and multiplicity. In the course of the conversation, the young Socrates develops ideas for his new theory of Forms, which is supposed to explain the problematic relationship between unity and multiplicity. Parmenides promptly puts the theory of Forms to the test by asking whether there are also Forms of inferior things, like dirt or hair. Socrates rejects Forms of inferior things. Afterwards, however, Parmenides points out to Socrates that with age he would understand how to appreciate even seemingly inferior things. Thus the reader is still faced with a riddle. This question has been widely discussed in Platonism. In the second century AD, the Middle Platonist Alcinous (or Albinus) wrote a didactic handbook on Plato's philosophy (the *Didaskalikos*). In the introduction, he gives a brief overview of what does not have a Form. This includes particulars and human individuals, such as Plato or Socrates:

Form is defined as an eternal model of things that are in accordance with nature. For most Platonists do not accept that there are forms of artificial objects, such as a shield or a lyre, nor of things that are contrary to nature, like fever or cholera, nor of individuals, like Socrates and Plato, not yet of any trivial thing, such as dirt or chaff, nor of relations, such as the greater or the superior. For the forms are eternal and perfect thoughts of God (*Didaskalikos* 9. 2, translated by J. Dillon, 1993: 17).

An interest in the question of Forms of individuals is not an entirely new subject for Plotinus. In V. 9 [5] 12, that is, the fifth treatise chronologically, he had already discussed the subject, and made his position very clear:

of personal identity.' And also later he writes: 'Examining it we can clearly infer that the theme P. is concerned with is not whether Forms of particulars exist in general (which is what Ferrari 1997, 61, and O'Meara 1999b, 267–68 apparently believe), but more specifically the ideal character of the soul of individual people.' This introduction serves to support Kalligas (1997a) theory of soul-Forms and unfortunately does not address at all the important issues at the heart of the treatise, such as the *logoi* and what role they play in biological inheritance, transmigration of souls and the general constitution of individuals.

¹³⁸ See p. 6.

But if the Form of man is there, and of rational and artistic man, and the arts which are products of Intellect, then one must say that the Forms of universals are there, not of Socrates but of man (V. 9 [5] 12, 1–4, translated by A.H. Armstrong).

One might wonder, then, why Plotinus takes up this subject again. Does he have something new to say about it, perhaps a change of heart? Blumenthal (1966: 62) suggests that it is very likely that Plotinus was in doubt for a while concerning the theory of Forms of individuals. A good reason for Blumenthal (1966: 62) to believe this is the fact that shortly after Plotinus supposedly postulates Forms of individuals in V. 7 [18] — as assumed by Blumenthal — he again speaks out against them:

For it would be absurd to introduce many Ideas (*pollas ideas*) of fire in order that each individual fire might be formed by a different one; for in this way the Ideas will be infinite in number (VI. 5 [23] 8, 40–42, translated by A.H. Armstrong).

In contrast to Blumenthal – who sees a clear inconsistency between V. 9 [5], V. 7 [18], and VI. 5 [23] – Mamo (1969), Rist (1970), and Armstrong (1977) are at pains to show that there are no textual inconsistencies between these three passages. Armstrong (1977: 52-53) argues that the statement at V. 9 [5] 12, 1–4, if punctuated differently, leaves 'the way still open for Plotinus, without inconsistency, to adopt the view that there are Forms of individual men expounded in the later treatise V. 7':

We must now turn to the first and most important of the passages which seem to deny explicitly that there are Forms of individuals. This is at the beginning of the twelfth chapter of the treatise On Intellect, the Forms and Being (V 9 [5]). This terse early essay (the fifth in Porphyry's chronological order) rather gives the impression that it was written hurriedly to deal with the problems of some member of his circle whose Platonic education was in a somewhat elementary stage and who had difficulties of an obvious sort about the doctrine of Forms. This however is speculative and fanciful, and I would not wish to ignore or take lightly the evidence of the passage if it was in any way decisive. But if it is read, as I think it should be, with the older punctuation as interpreted by Igal (now accepted by Henry and Schwyzer), and if careful attention is paid to the context, it seems to leave the way still open for Plotinus, without inconsistency, to adopt the view that there are Forms of individual men expounded in the later treatise V 7 (Armstrong, 1977: 52–53). 139

In the case of VI. 5 [23] 8, Rist (1970: 301) also seems to find a way to accept Forms – not of individual fires – but at least of individual human beings. He points out that the statement in VI. 5 [23] rejects only Forms of individual manifestations of elements, arguing that 'the problem about fires and the problem about men are quite different':

 $^{^{139}}$ $\,$ For a detailed discussion of the various ways of punctuating this passage, see Vorwerk (2001: 157–158).

As we have noticed, in this section of the *Enneads* Plotinus thinks that individual fires are exactly alike in character. If there were Ideas of individual fires, therefore, these Ideas would also be exactly alike. Thus in the case of fire, if there were individual Ideas, there would be no need for a specific Idea of fire at ail to account for particulars. This is what Plotinus seems to be getting at when he says that it would be ridiculous to introduce many Ideas of fire. This makes it clear that the problem about fires and the problem about men are quite different. Socrates partakes both of the specific Idea Man and the individual Idea which gives him his individual characteristics; a particular fire only partakes of Fieriness, and thus of only one Idea. This Idea would be either individual or specific, but since the individual Ideas would be indistinguishable from one another, the specific Idea is obviously adequate to account for all possible fires (Rist, 1970: 300–301).

However, in VI. 5 [23] 8, Plotinus never explicitly says that it would be absurd to assume Forms of individual fires because the individual fires are exactly alike in character. Rather, Plotinus sees the problem in the fact that one would have to assume an infinite number of Forms of individual fires.

Thus, these scholars attempt not only to uphold the theory of Forms of individuals in Plotinus, but also to eliminate possible inconsistencies.¹⁴⁰

One cannot deny, however, that V. 9 [5] 12 and VI. 5 [23] 8 present major problems for those who read Forms of individuals in V. 7 [18]. The fact that Plotinus first rejects and then postulates Forms of individuals, only to reject them again shortly afterwards, is a clear sign that the question of Forms of individuals in V. 7 [18] has been mishandled. Vorwerk (2001: 160-161), in his commentary on V. 9 [5], denies that there is any possibility of reading V. 9 [5] 12 in accordance with the theory of Forms of individuals. Vorwerk (2001: 157) argues that specific properties of human beings, such as a snub nose or a hooked nose (V. 9 [5] 12, 6), are in some way inherent in the universal Form of Human Being, making additional Forms of individuals unnecessary. There are also good reasons for not reducing the statement in VI. 5 [23] 8 to manifestations of fires or other elements. The broader context of the treatise shows that these example of Forms of individual fires can be generalised to any Form of any individual. Basically, in VI. 5 [23], Plotinus discusses the problem of the unity of Form on the one hand and the multiplicity of sensible individuals on the other (the problem of One and Many), which had originally been discussed by Plato in the Parmenides (130a-134e). In VI. 5 [23] 8, Plotinus denies Forms of individual fires, arguing instead that a universal Form of fire is sufficient to produce every manifestation of sensible fire. In the same way, a little earlier in VI. 5 [23] 6, Plotinus

In his response to Blumenthal's reproach of inconsistency in Plotinus, John Rist (1970: 298–303) examines eleven passages that seem to conflict with V. 7 [18]. These passages are V. 9 [5] 12; VI. 4 [22] 14, 17ff.; VI. 5 [23] 8, 21–42; IV. 3 [27] 5, 8–11; IV. 3 [27] 6, 15–17; VI. 7 [38] 3, 10; VI. 7 [38] 8, 1–5; VI. 7 [38] 11, 14–15; VI. 2 [43] 22, 11–17; VI. 3 [44] 9, 27ff.; and III. 2 [47] 7, 6–12. In each case, Rist suggests arguments that attempt to resolve these inconsistencies. See the scholarly debate on pp. 50–58.

describes the Form of Human Being as a seal-imprint acting on the many sensible human beings. Thus, the point of VI. 5 [23] 6 is that a single Form of Human Being is sufficient to produce many individual human beings.

I would like to return to the question of why Plotinus, at the beginning of V. 7 [18], once again takes up the question of Forms of individuals, having already rejected their existence in V. 9 [5] 12. The answer is that Plotinus had made certain statements about the individual and individual properties in V. 9 [5] 12, which he then revised and supplemented in V. 7 [18]. Let us look at what Plotinus has to say about individuals in V. 9 [5] 12 so that we can briefly outline the revisions he makes in V. 7 [18]:

But we must enquire about man whether the individuality is there [i.e. in the intelligible world]; there is individuality, because the same [individual feature] is different in different people: for instance, because one man has a snub nose and the other an aquiline nose, one must assume aquilinity and snubness to be specific differences of man, just as there are different species of animal; but one must also assume that the fact that one man has one kind of aquiline nose and one another comes from their matter. And some differences of colour are contained in the formative principle ($log\hat{o}$) but others are produced by matter and by different places of abode (V. 9 [5] 12, 3–10, translated by A.H. Armstrong with slight modifications based on the translation by Vorwerk).

In this section, Plotinus presents three factors that influence the formation of individuals: (1) the intelligible forming principles (logoi); (2) matter ($hyl\hat{e}$); and (3) geographical and climatic factors (topoi). First, Plotinus states that individuality must be rooted in the intelligible, because 'the same individual features are different in different people'. For example, every person has a nose, but every nose has a different shape, such as a snub nose or an aquiline nose. To produce basic differences in shape or colour, Plotinus explains, requires an intelligible forming principle (logos) (V. 9 [5] 12, 9), whereas the differences between two aquiline noses – one coarser, the other finer – are due to matter. Finally, differences in colour can also be caused by 'different places of abode'; Plotinus is probably thinking of different skin colours that develop under different climatic conditions in different geographical regions. ¹⁴¹

In V. 7 [18], Plotinus revises these three factors, i.e. (1) intelligible forming principles (logoi); (2) matter ($hyl\hat{e}$); and (3) different geographical and climatic factors

¹⁴¹ Erich S. Gruen (2011: 197–220), in his book *Rethinking the Other in Antiquity*, devotes a chapter to the reception of Ethiopians (*Aithiops* – a term for black Africans, meaning 'sunburnt face') in antiquity. Gruen writes that many Ancient Greek and Latin authors – including Homer, Hesiod, Herodotus, Lucian, and Heliodorus – showed great interest in people with black skin. For example, Heliodorus tells a story of an Ethiopian royal couple who produced a light-skinned child, 'because at the moment of conception the queen was looking at an image of light-skinned Andromeda' (Wilberding, 2017: 68). This account was of particular interest to Neoplatonic embryologists, as it served as a proof for their theory of *ideoplasty*, 'that is, the phenomenon of the physical appearance of the offspring being influenced by the representations that the mother entertains at conception' (Wilberding, 2017: 68).

(*topoi*). When asked whether place (*chôra*) and matter (*hylê*) also have an influence on the formation of individuals (V. 7 [18] 2, 14), Plotinus answers that the difference 'which is on the side of matter must be linked to the ugliness alone' (V. 7 [18] 2, 16–17), and 'if the difference is beautiful in many places, the form is not one' (V. 7 [18] 2, 16). Plotinus thus rejects geographical and climatic factors along with matter as principles of individuation, contrary to his earlier assertion, and instead attributes individuation to intelligible forming principles (*logoi*) alone. This point will be discussed in more detail later in the commentary.¹⁴² For the moment it is sufficient to be aware that Plotinus revisits the question of Forms of individuals from V. 9 [12] because he wishes to revise his position.

1, 1-3 Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world].

This sentence contains several key terms (anagôgê, noêtos, archê) and proves decisive with regard to the existence of Forms of individuals. For the proponents of this theory, this sentence is one of the most important pieces of evidence showing that Plotinus does indeed postulate Forms of individuals in V. 7 [18], since it directly follows the question 'is there also a Form of each individual', and is translated as an affirmative answer by Arthur H. Armstrong, Émile Bréhier, and Luc Brisson. Other scholars, such as Christian Tornau (2009) and Paul Kalligas (1997a: 208–209), agree with the affirmative translation and consider this sentence as evidence for the existence of Forms of individuals in Plotinus. Moreover, Tornau (2009) and Kalligas (1997a) use the examples of human individuals in this sentence ('I and every individual') as further evidence that Plotinus postulates Forms only of human individuals here. Kalligas (1997a: 212) comments on this sentence as follows:

The reason propounded at the very beginning of the treatise for the acceptance of forms for each particular makes it clear that Plotinus has in mind only forms of individual human beings. [...] What guarantees the existence of each one of us in the intelligible realm is our capability of 'ascending' back there either through philosophy or by means of some other theoretical activity (Kalligas, 1997a: 212). 143

Similarly, Tornau (2009: 336) writes that 'elle [i.e. the theory of Forms of individuals] n'a de sens que si elle concerne des individus humains pensants et si l'on se rappelle

¹⁴² See pp. 202-207.

In his latest commentary on V. 7 [18], Kalligas (2023: 331–333) maintains his theory of soul-Forms: 'It becomes immediately evident that the motive behind P.'s engagement with this subject is to examine whether an individual person can ascend to the realm of the intelligibles, as described in the experiential prologue to treatise IV 8 [6]. This is only possible if the core of the individual's identity is ideal, and consequently akin to the intelligible Forms. A man's immortal soul, when it becomes rid of the accretions that bring it into contact with corporeality, retains its identity – in fact, the soul then becomes even more itself; cf. I 1.12.13–20, IV 7.9.23–29. Even in the case of reincarnation, its identity remains unchanged, although the person changes.'

le présupposé plotinien selon lequel chaque âme individuelle a toujours un contact immédiat avec l'Intellect.'

The sentence itself, however, does not indicate that it should be translated in an affirmative sense, and as will be shown below, it is not evidence for the existence of Forms of individuals.¹⁴⁴ It is what one might call a Neoplatonic Premise: since all reality has its origin (*ten anagôgên echei*) in the intelligible world (*epi ton noêton*), the principle (*archê*) of each of us (*hekastou*) must be in the intelligible (*ekei*).¹⁴⁵

In the *Enneads* Plotinus develops a concept of emanation that fundamentally constitutes the metaphysics of all Neoplatonism. Emanation epitomises the procession of the lower hypostases, Intellect and Soul, from the First Principles – the One - as well as the procession of the sensible cosmos from the intelligible cosmos. Armstrong (1937: 61) characterises 'emanation' as 'a spontaneous and necessary efflux of life or power from the One, which leaves their source in itself undiminished'. The Greek terms Plotinus uses to describe emanation are 'to flow out' (ekreô) or 'to overflow' (huperplêmmureô). Gerson (1993: 559–560) points out that emanation should not be understood as creation but rather as a 'non-creationist metaphysics'. As he explains: 'One proposal sometimes made in order to differentiate a non-creationist from a creationist metaphysics is that in the former creatures exist of necessity whereas in the latter they do not'. Sometimes creation also implies that something was created that was not there before (for example *creation ex nihilo*). Emanation, on the other hand, is a continuous process. And while creation sometimes implies a certain separation of the created from the creator, in emanation what is emanated is always connected to that from which it emanates. Thus, the sensible cosmos is always connected with its intelligible origin by being ensouled.

It is also worth noting that Plotinus speaks of the principle in the singular in this passage. Whether this principle is an individual Form, such as the Form of Socrates, or a universal Form, such as the Form of Human Being, or even another principle, such as the One itself, is not explained further at this point.

1, 1 Perhaps, if I and every individual

Sleeman notes that the particle $\hat{\eta}$ (or "H capitalised at the beginning of the sentence, pronounced as \hat{e}) is considered 'Plotinus' favourite particle'. This particle is 'very common in a reply' and 'often takes its precise meaning from the context' (Sleeman). ¹⁴⁶ The usual translations Sleeman suggests for $\hat{\eta}$ are 'perhaps', 'it would seem

¹⁴⁴ See pp. 113-114.

¹⁴⁵ It is debatable whether matter also emanates from the One. There are, however, good arguments presented by Denis O'Brien (2011a, 2011b) supporting this view. On emanation see Armstrong (1937), Gerson (1993), Brunner (1973), and Müller (1914).

Consider, for example, the following passage, which consists of a sequence of questions and answers, which Plotinus introduces with H. Each time, H means something different depending on the context: 'It is', 'No' and 'Yes' respectively. I. 1 [53] 13, 1–5: 'What is it that has carried out this investigation? Is it "we" or the soul? It is (H) "we", but by the soul. And what do we mean by "by the soul"?

that', and 'the fact is'. The fact that the meaning of the particle must be derived from the context gives Armstrong, Bréhier, and Brisson the freedom to translate $\ddot{\eta}$ in this sentence in a strongly affirmative way:

Armstrong: Yes, if I and each one of us...

Bréhier: Oui, puisque moi, ainsi que chaque individu...

Brisson: Oui, c'est le cas: si moi-même et chacun de nous...

Harder, on the other hand, translates $\ddot{\eta}$ neutrally, i.e. assuming that this statement following the question does not imply a direct answer:

Harder: Nun, wenn ich und jeder einzelne...

I continuously attempt to translate the particle neutrally as 'Perhaps' or 'Maybe', understanding it as a marker that introduces a possible answer to the preceding question. Similarly, Lloyd P. Gerson (1994: 64-65), despite reading this statement as a clear affirmation of the existence of Forms of individuals, concedes that it does not by itself affirm that there is a Form for each individual. It only asserts that the principle of individuals is in the intelligible. Gerson translates thus: 'In fact, there is, if I and everyone else...'. D'Ancona Costa (2002: 532) is also against giving 'to this particle a strongly affirmative meaning', or indeed any definite answer to the question just raised, preferring instead 'to understand η as expressing the certainty of the implication which Plotinus wants to establish, instead of pointing to the solution of the problem at hand'. Moreover, D'Ancona Costa quotes two Italian translations which both provide a neutral response: in Vincenzo Cilento's version, the sentence is rendered as 'Ecco, se la mia persona e ogni altra', while Chiara Guidelli has 'Se io e ogni altro individuo'. Thus, the interpretation of $\ddot{\eta}$ as an affirmative answer to the previous question seems to be an overly creative reading. In reality, the sentence itself does not give any direct answer to the question posed.

It is true that the example of human beings (I and every individual) shows that Plotinus initially has only the principles of human individuals in mind. His focus, however, broadens as he proceeds – first to individual animals (V. 7 [18] 1, 11), and then more generally to peculiar properties of individuals (V. 7 [18] 1, 21). This broadening of the discussion clearly works against the theories of soul-Forms and Form-Intellects, since these theories only apply to human souls or intellects.

Did "we" investigate by having soul? No (\mathcal{H}) , but insofar as we *are* soul. Will soul move then? Yes (\mathcal{H}) , we must allow it this sort of movement, which is not a movement of bodies but its own life' (translated by A.H. Armstrong).

1, 2 trace back to the intelligible

In the *Enneads*, Plotinus uses the term $anag \hat{o}g \hat{e}$ in two senses: first, in the sense of an ascent of the soul to the upper levels of the intelligible sphere $(epi\ to\ no \hat{e}ton)$ – the Intellect or the One – by reasoning or contemplation (I. 3 [20] 1, 1–5); and second, in the sense of tracing or referring back an intermediate principle (e.g. soul, logoi) to a higher intelligible principle (e.g. the Intellect or the One itself) (III. 1 [3] 4, 18; V. 4 [7] 1, 1–4; VI. 8 [39] 21, 22) (Sleeman). The first meaning is used in epistemological contexts. It concerns only rational souls of human beings, since only they are able to ascend from lower levels of perception (i.e. sense perception) to higher levels of cognition (e.g. rational ability, thinking/thought). The second meaning is used in ontological contexts. It refers to all things and living beings in the universe. Basically, the term $anag \hat{o}g \hat{e}$ in the ontological sense implies that the sensible world has its essence in the intelligible, i.e. that all things are caused by intelligible principles.

Vorwerk (2001: 73), in his commentary on V. 9 [5] ('On Intellect, the Forms and Being'), clarifies that the soul's ascent to the Intellect is to be understood rather as a contemplative method by which the soul rises above its discursivity to contemplate the Forms in the *Nous*. At the same time, the ascent represents a Platonic way of life, which is a turning away from the pleasures or struggles of the physical world and towards the truth in the intelligible. Vorwerk (2001: 75) points out that Plotinus frequently uses terms and phrases from Plato's *Symposium* in such contexts, describing the ascent in Platonic terms through the love of the beautiful. We find the clearest description of the *anagôgê* as a dialectical method in the introduction to the treatise 'On Dialectic': 'What art is there, what method or practice, which will take us up there where we must go? Where that is, that it is to the Good, the First Principle, we can take as agreed and established by many demonstrations; and the demonstrations themselves were a kind of leading up (*tês anagôgês*) on our way' (I. 3 [20] 1, 1–5, translated by A.H. Armstrong).

The term *noêtos* refers generally to the intelligible (I. 3 [20] 1, 14–17; II. 9 [33] 1, 16; III. 4 [15] 3, 20–27; IV. 3 [27] 17, 1), which stands in contrast to the material world (Sleeman). This contrast becomes particularly significant when it comes to the Soul. As a mediator between the intelligible and the material world, the Soul can move between the two realms – either ascending (anagôgê) from the material to the intelligible (noêton), or descending (kathodos) from the intelligible world (noêtos) down to matter (hylê). 148

See VP 2, 26–27, for Plotinus' famous last words: 'Try to bring back (*anagein*) the god in us to the divine in the All!' For discussion, see Pépin (1976: 85–97), Henry (1953: 116–120), Igal (1972: 441–462), and D'Ancona Costa (2002: 517–565).

Plotinus devoted an entire treatise to the subject of the descent of souls: IV. 8 [6], 'On the Descent of the Soul into Bodies'. He often compares the descent of souls into the material world to the 'fall of souls': 'fall out into matter' (V. 1 [10] 7, 32); 'it is a law that sinful souls should fall into this world' (IV. 8 [6] 1, 18–19, translated by A.H. Armstrong). Nevertheless, it should always be borne in mind that

In response to the introductory question, Plotinus now replies that if human individuals originate from the intelligible, their origin and principles are to be sought there, and not anywhere else, such as in matter. The question of what constitutes the principle of individuation (*principium individuationis*) for sensible individuals was much debated among ancient philosophers. Sorabji (2004a: 169–175; 2006c: 149) mentions several possibilities that were proposed: 'distinctive qualities', 'place' (i.e. two different individuals must be in two distinct places), and 'matter'. The Stoics, for example, considered all three as *principia individuationis* (Sorabji, 2004: 149–151). Plotinus, on the other hand, explicitly denies that matter can serve as a principle of individuation. ¹⁴⁹ For Plotinus, matter is not a substance. He even doubts that matter can exist independently of the soul; indeed, he says that matter borders on non-being (II. 5 [25] 4, 4–12; III. 9 [13] 3, 7–12), that it lacks unity and power (II. 4 [12] 14, 13–17; IV. 7 [2] 3, 6–25; VI. 1 [42] 27), and is therefore incapable of accounting for individuation. ¹⁵⁰

Scholars who claim that the opening question asks about the Forms of intelligible individuals emphasise the epistemological aspect of $anag \hat{o} g \hat{e}$ in their reading of V. 7 [18] 1, 1–3. They understand the term $anag \hat{o} g \hat{e}$ in terms of the ascent of rational human souls to the Intellect ($Nous = epi \ to \ no \hat{e} to n)$. Accordingly, they believe that the opening question asks not about the causation of sensible individuals, but about the origin of the rational faculty of human individuals: 'is there also an individual intellect (in the universal Intellect) of each (human) individual?' When dealing with this sentence, Christian Tornau (2009: 354) refers to a passage in V. 9 [5] 8 which states that 'each individual Form is an individual intellect.' Tornau sees a clear connection between this statement and the beginning of V. 7 [18] in the sense that if each Form is an individual intellect, then each individual intellect, such as the intellect of Socrates, must also be a Form.

This is not surprising, for Plotinus repeatedly affirms the existence of particular intellects in the universal Intellect. It is not certain, however, that the Forms of individuals spoken of in V. 7 [18] are really to be equated with individual intellects. Moreover, it is questionable whether *anagôgê* is really to be understood here in the sense of an ascent of human souls to the universal Intellect. The treatise V. 7 [18] is

the ascent and descent of souls is not to be understood spatially, but as a turning of the soul's activity either towards the intelligible or the material. See Caluori (2015, 134–151).

¹⁴⁹ See Kalligas (2011: 765-767).

 $^{^{150}}$ On matter in Plotinus see Corrigan (1986, 1988), O'Brien (1991, 1996, 1999), Opsomer (2001), Pang-White & White (2001), Phillips (2009), O'Brien (2011a, 2011b), and Noble (2013a). See also the discussion of V. 7 [18] 2, 13–18 on pp. 202–210.

¹⁵¹ See the discussion of Forms of intelligible individuals, and the articles by Armstrong (1977), Gerson (1994), Kalligas (1997a), and Tornau (2009), on pp. 62–65. Kalligas (1997a: 212): 'Here (in the sentence under discussion) it is the ability of each individual man to return to his intelligible origin by making use of these essential features (rationality) that makes it necessary to postulate a *different* form for each human being.'

¹⁵² Compare IV. 8 [6] 3, 10–16; V. 9 [5] 8, 4–7; VI. 2 [43] 20, 9–23; VI. 7 [38] 9, 30–35.

mainly concerned with embryological questions, such as how *logoi* are passed on from parents to offspring, whether matter can be regarded as the *principium individuationis*, and whether identical twins are caused by the same *logoi*-combination. Rationality is not mentioned once. This suggests that *anagôgê* should preferably be read in terms of an ontological and causal derivation of the sensible human beings from the intelligible, and should therefore be translated as 'tracing back' rather than 'ascent'.¹⁵³

1, 2-3 the principle of every individual, too, is there [in the intelligible world]

The ordinary meaning of *archê* is 'beginning' or 'starting point' (Sleeman), but it was also used as a technical term to denote the 'first principle', 'cause', or 'origin'. The first Presocratic philosopher to employ *archê* in the sense of 'first principle' was Anaximander¹⁵⁴ (LSJ). Later, it was adopted by Plato and Aristotle.¹⁵⁵ In Plotinus, it is central as the term denoting 'origin' or 'cause' (Sleeman). Sleeman shows that *archê* is most often used in connection with the first principle, i.e. the One, the Good, the First (*to hen, to agathon, to prôton*). There are also passages in which *archê* refers to the Intellect or the Soul, i.e. to the second and third principle, respectively. The term occurs in many contexts: Plotinus speaks of the 'cause' or 'principle' of living things, matter, people, plants, and numbers. The term *archê* can also refer to the genus. In 'logic and philosophical inquiries', as Sleeman indicates, *archê* usually means 'principle', and this meaning fits perfectly into the context of V. 7 [18], for here Plotinus is exploring the question of what is the 'principle' of human individuals (*hekastou hê archê*). As stated earlier, it is important to keep in mind that Plotinus does not specify at this point what exactly the principle is.¹⁵⁶

 $^{^{153}}$ V. 4 [7] 1,1–4; V. 1 [10] 7,19–23. A comparable statement, which also contains the term $anagôg\hat{e}$, explains the fact that all existing things owe their existence to the One through their participation in the One, and are thus referred back $(anagôg\hat{e})$ to the One. VI. 8 [39] 21, 22: 'But his (the One) holding himself together must be understood, if one is to say it correctly, as meaning that all the other things that exist are held together by this; for they exist by some kind of participation in him (the One), and it is to this that their origin is to be traced $(h\hat{e} \ anagôg\hat{e})$ ' (translated by A.H. Armstrong). In V. 7 [18], we now deal with a more concrete question: what are the principles that cause human individuals? Are these principles individual Forms or are they different principles?

¹⁵⁴ Simplicius in Phys. 150.23.

Plato, *Phaedr.* 245d–e: 'This then is why a self-mover (i.e., the soul) is a source (*archê*) of motion' (translated by A. Nehamas and P. Woodruff). Plato, *Rep.* 511b–c: 'Then also understand that, by the other subsection of the intelligible, I mean that which reason itself grasps by the power of dialectic. It does not consider these hypotheses as first principles but truly as hypotheses – but as stepping stones to take off from, enabling it to reach the unhypothetical first principle (*archê*) of everything. Having grasped this principle, it reverses itself and, keeping hold of what follows from it, comes down to a conclusion without making use of anything visible at all, but only of forms themselves, moving on from forms to forms, and ending in forms' (translated by G.M.A. Grube, rev. C.D.C. Reeve). Aristotle, *Metaph.* I 981b28f: '[T]he reason for our present discussion is that it is generally assumed that what is called Wisdom is concerned with the primary causes (*aitia*) and principles (*archas*)' (translated by H. Tredennick). On *archê* in Aristotle, see the *Aristoteles-Lexikon* by Otfried Höffe (ed. 2005).

¹⁵⁶ See p. 109.

The term *ekei* generally means 'there' (Sleeman). In debates, *ekei* can also be used to refer to an argument, and may be translated as 'in that case' or 'in the other matter' (Sleeman). Like *archê*, Plotinus frequently uses *ekei* in technical expressions. In these cases, *ekei* replaces phrases such as 'in the intelligible' (*en tô noêtô*), 'in the Good' (*en tô agathô*), and 'in the One' (*en tô heni*) (Sleeman). In the sentence in question, Plotinus is speaking of the intelligible, meaning that for the rest of the treatise, *ekei* stands for the intelligible world, as I clarify using brackets.

Now that all the key terms have been clarified, we can be confident that the statement (V. 7 [18] 1, 1-3) neither affirms the previous question ('is there also a Form of the individual?'), and nor does it contain any indication that Plotinus accepts Forms of individuals. Rather, Plotinus declares in general terms that because human individuals originate from the intelligible (to noêton), the principle of their existence is to be sought in the intelligible world (ekei). This reading is accepted by D'Ancona Costa (2002: 532) and Gerson (1994: 64-65), with the latter conceding that the sentence 'does not assert that there is a different principle of each one of us [...] By itself, it could simply be taken to mean that there is one principle, say the Form of Man, for all.' However, Gerson (1994: 64) goes on to argue that given the appearance of the term 'Autosôkratês' in the next sentence (V. 7 [18] 1, 3-5), there is 'little doubt that he [Plotinus] means to affirm a different principle for each individual'. D'Ancona Costa (2002: 532), on the other hand, does not come to the same conclusion: 'After this statement, Plotinus does not proceed to argue in favour or against the claim that there is such a principle, but explores the possible ways to explain the arising of individual features in the world of coming-to-be and passing away'. My reading is consistent with D'Ancona Costa's view as it avoids prematurely attributing to Plotinus a position on the existence of individual Forms. Plotinus appears more concerned with the mechanisms that generate individual characteristics in the physical world, rather than asserting the existence of distinct Forms for each individual.

1, 3–5 Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates], there will be Socrates-Itself, insofar as, qua soul, individuals exist there [in the intelligible world], as has been said.

Most advocates of Forms of individuals understand this sentence – as well as the preceding one – as an argument in favour of Forms of individuals.¹⁵⁷ They claim that Plotinus acknowledges the existence of Forms of individuals by referring to the phrase 'there will be Socrates-Itself (*Autosôkratês*)', i.e. the Form of Socrates. However, the exact meaning of the conditional phrase (*ê ei men aei Sôkrates kai*

¹⁵⁷ In his interpretation of the structure of V. 7 [18], Rist (1963: 224) calls this sentence 'the first argument' in favour of Forms of individuals. See my outline of Rist's structure on pp. 99–101.

psychê Sôkratous) is not so clear. While all scholars agree on the reading of the consequent (or *apodosis*), the meaning of the antecedent (or *protasis*) is ambiguous.

antecedent: Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates],

consequent: there will be Socrates-Itself, insofar as, qua soul, individuals exist there [in the intelligible world], as has been said.

There are at least three ways of reading the conjunction *kai* in the antecedent. While *kai* is usually translated as the copulative conjunction 'and', Armstrong suggests reading *kai* as the specifying element 'that is' – the so-called epexegetical use of *kai*. I, too, have chosen to translate *kai* epexegetically. However, influenced by the translations of Harder and Cilento, I also inserted a third 'Socrates' in square brackets; otherwise, the sentence would not make much sense. Let us take a look at all three implementations of *kai* and discuss the results.

1, 3–4 *Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates]* Harder and Brisson translate *kai* as the copulative 'and':

Harder: Allerdings, wenn Sokrates **und** die Seele des Sokrates immer Sokrates ist, dann muß es einen Sokrates an sich geben...

Brisson: Si Socrate **et** l'âme de Socrate existent toujours, il y aura, comme on dit, un Socrate en soi...

Let us consider what the antecedent would mean, were *kai* to be translated as 'and': 'If Socrates and the soul of Socrates exist eternally, then there will be Socrates-It-self...'. What exactly is meant by the first 'Socrates' at the very beginning of this sentence? Intuitively one would think that 'Socrates' refers to the historical figure Socrates: 'If the human individual Socrates and the soul of Socrates exist eternally...'. However, if the historical Socrates is indeed meant, then the entire antecedent becomes counterfactual — a mere thought experiment — because of course the historical Socrates, a mortal man, does not exist eternally. 158 Accordingly, the an-

¹⁵⁸ Compare Proclus *in Parm.* 824.12–825.9: 'Then shall we suppose there are not only Forms (*eide*) of species but also Forms of particulars (*ta kath'hekasta*) – such as a Form of Socrates or any other individual (*hekastos*), not as members of the species man, but as manifesting, each of them, its distinctive property (*idiôs poion*)? Yet would not this argument compel us to say that the mortal is deathless? For if everything that comes to be by virtue of an Idea (*idea*) comes to be from an unchangeable cause, and if everything that exists through an unchangeable cause is unchangeable in its being, Socrates and every other individual thing is the same at every moment of its being and established in eternity. But this is impossible' (translated by G. Morrow and J. Dillon, cited in R. Sorabji, 2004: 366–367). Proclus seems here to refer to Plotinus' V. 7 [18], as some common expressions suggest. Forms of individuals do not make sense in Proclus' view, since this would mean that the individual would not only be existent eternally, but would also be unchanging.

tecedent should in this case adopt the counterfactual mode: 'If Socrates and the soul of Socrates *were* eternal, there would be an *Autosôkratês...*'. It is possible that Plotinus was actually positing a condition for the existence of Forms of individuals at this point. That condition is the eternal existence of sensible individuals – just as eternal existence is a condition for Forms of universals.¹⁵⁹ Thus, if one translates *kai* as 'and', the conditional phrase becomes counterfactual and renders the existence of Forms of individuals impossible. Plotinus, however, presents a counter-argument in the following sentence. In view of this, the statement in question should preferably be translated in the indicative.

Scholars who argue that V. 7 [18] postulates Forms of intelligible individuals want to avoid a counterfactual proposition in this sentence; the obstacle they must remove is the impossible claim of the immortality of human beings. In this context, Gerson (1994: 65) wonders: 'Why should the immortality of Socrates be relevant to the question of whether or not there is a Form of Socrates? In Plato, no such reason is ever given for generating Forms. The direct answer to the question leaps off the page.'

Since Gerson advocates the theory of Forms of intelligible individuals, he would prefer to ignore the fact that Plotinus deals with sensible individuals. One way to eliminate this problem is to translate *kai* differently.

Both Gerson and Armstrong understand *kai* to have a specifying function rather than the copulative:

Armstrong: If Socrates, that is the soul of Socrates, always exists, there will be an absolute Socrates...

Gerson: If Socrates, that is, the soul of Socrates, is eternal, there will be a Socrates Itself...

¹⁵⁹ The eternal existence of sensible individuals is not entirely excluded in the physical cosmos. There are certain individuals who are everlasting. In II. 1 [40] 2, 4-17, Plotinus points to the fact that Plato proposed an eternal existence of celestial bodies, such as the sun, the planets, and other stars, not to mention the body of the universe itself. II. 1 [40] 2, 4-17: 'we must show how heaven, which has a body, can have proper individual identity, in the sense that each particular detail remains unchanged, when the nature of body is in continual flux. This is the view held by Plato himself, as well as by all other natural philosophers, not only about other bodies but about the heavenly bodies themselves. For "how," he says, "when they have bodies and are visible can they be unchangeable and always the same?" [Republic VII, 530B2-3] - agreeing, obviously, in this, too, with Heraclitus, who said that the sun kept on coming into being [DK, B6]. There would be no difficulty for Aristotle, if one accepted his assumption of the fifth body [De Caelo A. 3. 270b1 ff.]. But for those who do not postulate this fifth element but hold that the body of the heaven is composed of the same elements of which the living creatures down here are made, the question does arise how there can be individual identity. And still more, how can the sun and the other things in heaven be individually everlasting when they are parts?' (translated by A.H. Armstrong). Whether Plato accepts Forms of celestial bodies is another question, which will be interesting to answer.

In this way they transform the counterfactual condition into a generally valid (Platonic) fact, namely that the soul of Socrates exists eternally. As a consequence of this, the conclusion that 'there will be an absolute Socrates (Armstrong) / a Socrates Itself (Gerson)' is legitimatised, allowing Armstrong and Gerson to argue that the text is really about the souls of human individuals. Because of their capacity to ascend $(anag\hat{o}g\hat{e})$ to the Intellect – mentioned in the preceding sentence – there must be Forms of human individuals.

There are, however, two problems with this reading. The first problem – already formulated by Gerson (1994: 65-66) - is that Forms of individuals are restricted to human beings. Since animals and plants have no intellects, they cannot ascend to the Intellect and consequently there should be no Forms of individual animals and plants. Rist (1963: 228) and O'Meara (1999: 268-269) - both advocates of Forms of sensible individuals - acknowledge that Plotinus' enquiry in V. 7 [18] includes animals. For this reason, both argue that there must be also Forms of animals. O'Meara (1999: 268-269) even goes so far as to claim that there should be Forms of 'every formal determination, including what distinguishes one individual from another and which is not explainable by reference to matter'. The second problem – really a methodological problem of V. 7 [18] – involves the question of what exactly Plotinus wants to investigate in V. 7 [18]: if Plotinus really introduces Forms of intelligible individuals (be it soul-Forms or Form-Intellects) at the beginning of V. 7 [18], why are they not the focus of the entire treatise? As has been said on several occasions, the rest of the treatise is about sensible individuals. With this in mind, it seems likely that the sentence is not primarily about the soul of Socrates, but about Socrates the historical human being.

I have described the problems arising in the translations by Harder, Brisson, Armstrong, and Gerson. However, inspired by the way Harder and Cilento understand the sentence, I suggest exchanging the copulative kai in their translations with the epexegetical kai – as Armstrong and Gerson do – to avoid making this phrase counterfactual.

Harder: Allerdings, wenn Sokrates und die Seele des Sokrates immer **Sokrates** ist, dann muß es einen Sokrates an sich geben...', or in English, 'If Socrates and the soul of Socrates exist eternally as **Socrates**, then there must be Socrates-Itself' (my translation of Harder's German sentence).

Cilento: O, se piace, distinguamo: se l'anima di Socrate è sempre Socrate, allora ci sarà un Socrate in sé...

Harder's and Cilento's translations point to the same reading of this sentence, one that I find to be correct as well. At first glance, their translations may seem to deviate from the original Greek wording. Cilento completely ignores the *kai* and makes the soul of Socrates the exclusive subject: 'if the soul of Socrates is always Socrates,

then there will be Socrates-Itself' (my translation of the Italian). The most striking feature of Harder's translation is the 'third Socrates' (in bold), which does not appear in the Greek text, introducing redundancy and potential confusion. However, by inserting a 'third Socrates' he actually manages to capture the intended meaning of this phrase. Harder's reading implies that if the man Socrates and his soul are essentially 'Socratic' – i.e. the soul of Socrates always possesses the properties and traits of Socrates – then there will be 'Socrates-Itself' (*Autosôkratês*). In view of the following sentence, which implies that the soul of Socrates does not always exist as Socrates but transmigrates into other individuals, I think that Cilento's and Harder's translations well reflect Plotinus' intended meaning. Following Harder, I have decided to insert a third Socrates in square brackets and to translate *kai* with 'that is'. The phrase 'that is' helps readers understand the connection between Socrates and his soul, and makes the whole translation smoother and more elegant.

1, 4 Socrates-Itself

The term *Autosôkratês* is an allusion to the term *autoanthropos*, which is a (most likely polemical) neologism of Aristotle's, commonly translated as 'Man Itself' or 'Ideal Man'.¹60 Accordingly, most scholars translate *Autosôkratês* as 'Socrates Itself' (Gerson), 'Sokrates an sich' (Harder), 'Socrate en soi' (Brisson), or 'Socrate in sé' (Cilento), referring to the Form of Socrates. Armstrong translates *Autosôkratês* as 'absolute Socrates', presumably in the sense of the first Socrates or the 'Socratic' archetype. Sleeman and Stephen MacKenna suggest 'authentic Socrates'. In my translation, I have opted for Gerson's version slightly modified. Admittedly, 'Socrates-Itself' sounds a bit odd – one would think that 'Socrates Himself' is more correct. It would be wrong, however, to think that a Form has a sex (male/female) or a gender (masculine/feminine), as is the case with the male human Socrates. 'Socrates-Itself', on the other hand, is sex- and gender-neutral, and also depersonalised.

In his translation of V. 7 [18], Gerson remarks in a footnote that '[t]he word *Autosôkratês* refers to a Form of Socrates, but it is not yet clear what the inferential connection is between the eternal soul that is Socrates and this Form'. There are two different positions on how the soul of Socrates and the Form of Socrates relate to one another. First, Paul Kalligas (1997a) and Franco Ferrari (1997, 1998) understand *Autosôkratês* as the undescended part of Socrates' soul (the theory of soul-Forms):

What is more important, the identification between the form of Socrates and the highest part of his soul, far from being unacceptable for Plotinus, can be found as his considered opinion in several places in the *Enneads*. The most explicit occurrence

¹⁶⁰ Aristot. *Metaph.* VII 1040b: 'The reason for this is that they cannot explain what are the imperishable substances of this kind which exist besides particular sensible substances; so they make them the same in kind as perishable things (for these we know); i.e., they make "Ideal Man" and "Ideal Horse" (*autoanthrôpon kai autoippon*), adding the word "Ideal" ("*auto*") to the names of sensible things' (translated by H. Tredennick).

is in the second chapter of the late treatise *On What is the Living Being and What is Man* (I 1 [chron. No. 53]), which, oddly enough, has been so far overlooked in discussions concerning forms of individuals. We find there not only an explicit statement that 'soul is a kind of form' [I. 1 [53] 2, 6–7], but also traces of an argument that supports it, contained in the preceding hypothesis: If soul and essential soulness are one and the same ... (I 1.2.6, tr. Armstrong) (Kalligas, 1997a: 214–215).

The second position, advocated by Armstrong (1977), Gerson (1994), and Tornau (2009), conceives of the Form of Socrates as the particular intellect of Socrates (the theory of Form-Intellects):

[Autosôkratês] refers to the intellect of Socrates, which eternally resides in the community of intellects. The intellect of Socrates is a Form because Socrates uniquely instantiates a single disembodied intellect. What Socrates is eternally or ideally is an intellect cognitively identical with all Forms. The physical thiswordiy [sic] Socrates is presumably the unique instance of that intellect. If this is Plotinus' meaning, then the postulation of Forms of individuals is greatly qualified. It does not refer to individuals without intellect, like a particular rose (Gerson, 1994: 65).

According to Gerson, as well as Mamo and Tornau, there can only be Forms of human individuals because humans possess an intellect. Animals and plants do not possess an intellect (or at least, not one that resides as a Form among other Forms in the universal Intellect), and there can therefore be no Forms of individual animals and plants.¹⁶¹

As Tornau (2009) has pointed out, there are particular intellects in the universal Intellect, which Plotinus identifies with Forms. To what extent these particular intellects are personalised, say in the sense of a personal intellect of Socrates or a personal intellect of Pythagoras, is a difficult question to which Plotinus does not give a clear answer.

The first and second positions differ in that soul-Forms are not conceived as real but only as a kind of Forms. Although they are closely related to Forms, soul-Forms are still souls on the level of the hypostasis Soul. Form-Intellects, on the other hand, are understood as Forms in the universal Intellect.

1, 4-5 insofar as, qua soul, individuals exist there [in the intelligible world], as has been said.

This section is interesting from a text-critical perspective. Although I have previously stated that I prefer not to dwell on text-critical issues, the textual interven-

While Gerson (1994: 77) wants to exclude the existence of the dog Fido in the intelligible, O'Meara (1999: 268-269) claims that according to the argumentation in V. 7 [18] there should be Forms of all living beings and things. See the discussion of Gerson and O'Meara on pp. 58-61.

¹⁶² V. 9 [5] 8, 1-7.

tions made by $H-S^2$ at this point are significant. Instead of $\tilde{\eta}$, which often means 'qua' in a philosophical context, $H-S^1$ preserves $\dot{\eta}$, the definite article referring to the soul, namely $h\hat{e}$ psych \hat{e} , which is also the version of the manuscripts. $\tilde{\eta}$ is a form of the relative pronoun in the dative singular feminine form and can function adverbially to describe the manner or characteristic through which an action or a state is mediated or realised. This usage is common in philosophical texts, where it specifies that something is considered in its particular characteristic or role. It corresponds to the Latin 'qua', as seen in my translation – and Armstrong's – where individuals are present in the intelligible realm insofar as they are soul.

Harder and Brisson, however, stick to the original manuscript versions and read $\dot{\eta}$ as the article referring to the soul.

Harder: Allerdings, wenn Sokrates und die Seele des Sokrates immer Sokrates ist, dann muß es einen Sokrates an sich geben, und demgemäß muß dann die Einzelseele auch in der oberren Welt vorhanden sein...

Brisson: Si Socrate et l'âme de Socrate existent toujours, il y aura, comme on dit, un Socrate en soi, au sens où son âme individuelle sera aussi là-bas.

What becomes apparent is that both Harder and Brisson, while reading $h\hat{e}$ as the article for the soul, interpret kathekasta as an adjective that modifies 'soul' - not as 'the soul of individuals', but as 'the individual soul'. Another possibility is to read kathekasta as a predicate of hê psychê, as proposed by Simon Fries:163 'Whenever Socrates is the soul of Socrates, there must be Socrates-Itself, insofar as the soul is also all individuals/individual things there [i.e. in the intelligible world].' Fries advocates for reading $h\hat{e}$ as the article – an interpretation that differs from the *communis* opinio - arguing with a parallel in the penultimate sentence of the treatise: 'Or maybe in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles that in the Soul become available' (V. 7 [18] 3, 22-24). Fries explains that just as, in the realm of the senses, the individual is simultaneously the soul, so too, in the realm of the intelligible, the soul is simultaneously the individual. However, it is not just one individual; rather, it encompasses all individuals within itself (hypostasis Soul) - which is also said in the sentence at the end of chapter three. Thus, an individual being with a soul also has an existence in itself as a correlate in the intelligible world: just as Socrates is an individual in the sensible world, he is also an individual in the intelligible world (Socrates-Itself) because he possesses a soul. This interpretation could be seen as supporting the theory of soul-Forms, suggesting that if a Form of Socrates exists, then the individual soul is connected to it and does not truly descend during its incarnation as Socrates but

¹⁶³ I thank Simon Fries for his comments, which have enriched this work.

remains in the intelligible realm. However, as mentioned, this proposition is refuted in the next sentence, which states that the soul of Socrates is not always Socrates but changes due to the transmigration of the bodies it ensouls. Thus, the assertion about the permanence of the soul's identity is ultimately negated.

Another issue in this sentence arises from the phrase $h\hat{o}s$ legetai ekei ($\dot{\omega}\varsigma$ $\lambda \dot{e}\gamma e\tau a\iota$ $\dot{e}\kappa e\tilde{\iota}$), which I have translated as 'as has been said'. Almost every translator handles this phrase differently. Harder puts it in brackets in his Greek text and omits it entirely from his translation. It is noteworthy that this phrase is entirely absent in the Greek text of Hermannus Fridericus Müller. H–S² also bracket this phrase, but they create an interpolation out of it, inserting it between $\kappa a\iota$ and $\dot{e}\kappa e\tilde{\iota}$: $\kappa a\theta o$ $\tilde{\eta}$ $\psi \nu \chi \dot{\eta}$ $\kappa a\theta \dot{e}\kappa a\sigma \tau a$ $\kappa a\iota$ $\dot{\kappa}$ $\dot{\kappa}$ $\dot{\kappa}$ $\dot{\epsilon}$ $\dot{\kappa}$ $\dot{\epsilon}$ $\dot{\epsilon}$

Gerson: If Socrates, that is, the soul of Socrates, is eternal, there will be a Socrates Itself, insofar as each individual is its soul and, as was just said, the principle for each of us is in the intelligible world.

Gerson is keen to emphasise that Plotinus is referencing the preceding sentence, wherein $h\hat{e}$ arch \hat{e} (principle) is mentioned. To convey this, he simply reintroduces 'the principle' in the current sentence. While the parallel structure with ekei might suggest this interpretation, it remains speculative since it is not explicitly stated in the text.

Bréhier (1954) offers an interesting placement of this phrase: ἔσται Αὐτοσωκράτης ώς λέγεται ἐκεῖ, καθ ὄ ἡ ψυχὴ καθέκαστα καὶ ἐκεῖ = 'il y aurait là-bas, comme on dit, un Socrates en soi, ainsi que le principe de son âme individuelle.' According to this translation, alongside the Form of Socrates, there would also exist the principle of his individual soul in the intelligible. This raises the question: what could this principle of his soul be if not the Form of Socrates?

Finally, it is not inconsequential for the interpretation whether one changes $\dot{\eta}$ to $\dot{\tilde{\eta}}$ or where one positions the $\dot{\omega}\varsigma$ $\lambda \dot{\epsilon} \gamma \epsilon \tau a\iota$. Certain renditions of this sentence seem to advocate more strongly for the existence of $Autos \hat{o} krat \hat{e} s$ than others. However, I would like to stress once again that in the grand scheme of things this is of little importance, since the existence of Forms of individuals is refuted in the following sentence by the doctrine of transmigration.

1, 5–8 If, however, the soul of Socrates is not always [Socrates], but being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras or someone else, then this individual will no longer be there [in the intelligible world].

The argument for Forms of individuals in the previous sentence is now followed by a counter-argument. Both arguments show a parallel syntactic structure marked in bold:

Pro-argument: Perhaps, if Socrates, that is the soul of Socrates, is always [Socrates], there will be Socrates-Itself, insofar as, qua soul, individuals exist there [in the intelligible world], as has been said.

Counter-argument: If, however, the soul of Socrates is not always [Socrates], but being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras or someone else, then this individual will no longer be there [in the intelligible world].

The parallel syntactic structure indicates that Plotinus considers these two sentences as two equivalent arguments. It would therefore be wrong to characterise the sentence we are now dealing with merely as a 'difficult additional remark', as Rist (1963: 224) does.¹64 The present statement is thus a major obstacle to the theory of Forms of individuals. In fact, this counter-argument negates the existence of *Autosôkratês*, stating that if the soul of Socrates exists only temporally as Socrates, reincarnating at different times as different individuals, then there can be no Form of Socrates. Because of reincarnation, there is no eternal identification between individual souls and earthly individuals. In other words, individual souls are not tied to the individuality of individuals living temporally in the physical cosmos. Thus, the Platonic doctrine of transmigration of souls (*metempsychosis*) is opposed to the theory of Forms of individuals.¹65

Paul Kalligas (1997a), an advocate of soul-Forms, admits that the doctrine of transmigration is incompatible with the theory of Forms of individuals:

Each individual form of this kind can be expressed in the sensible world in a plurality of ways, since it contains a variety of *logoi*, or seminal formative principles, that may be actualized at different times. This seems to leave open, in the mind of Plotinus,

See the discussion of Rist's structure of V. 7 [18] 1, 1–8 on pp. 99–101.

Plato presents his ideas of transmigration and rebirth in many myths, which, among other themes, occupy a permanent place in the dialogues: the Chariot Myth (*Phaedr.* 246A–254e), the Myth of Er (*Rep.* 614b–621c), the Gorgias Myth (*Gorg.* 523e–527), and the Phaedo Myth (*Phaed.* 106e–115a). Reincarnation is also mentioned in the *Meno* (81c–e), the *Cratylus* (400c), the *Phaedo* (70a–72d, 81e–82d), the *Timaeus* (41d ff., 90d–91c), and the *Laws* (870d–e, 872e, 881a). The first time the idea of rebirth appears in the dialogues is in the *Phaedo*. There, Socrates refers to an 'ancient theory' (*palaios men oun esti tis logos, Phaedo* 70c) according to which 'souls arriving there come from here, and then again that they arrive here and are born here from the dead' (translated by G.M.A. Grube).

the possibility of transmigration even into animals, but, of course, raises serious problems as to the identifying characteristics that allow us to say, e.g., that Socrates and Pythagoras have the same soul and, therefore stand for the same individual form. If we must posit a different form in order to account for the difference in the shape of the nose between two men (as we saw in V 9.12.5–7), it is difficult to understand how two people as different as the famously beautiful Pythagoras and the notoriously ugly Socrates can represent one and the same individual (Kalligas, 1997a: 212).

According to Kalligas, the question is how it is possible that two people who are so different in appearance as Pythagoras and Socrates can have the same individual form or soul. Plotinus' concept of *logoi* or seminal formative principles is meant to explain this, but for Kalligas it remains difficult to understand how two individuals having such different external appearances can share the same inner essence or soul. I believe Kalligas may not have fully recognised that the essence of the individual soul does not change by actualising different *logoi* at different times, such as the *logoi*-combination of Socrates or Pythagoras.

Other advocates of the theory of Forms of individuals, while acknowledging that the doctrine of transmigration poses a real problem, try to save their theory by downplaying the importance of transmigration in Plotinus' philosophy. Mamo (1969: 87), a proponent of Forms of individuals, takes a radical approach by claiming that '[t]here is no clear evidence that Plotinus, in fact, accepted transmigration'. Mamo is not alone in this assertion. William Ralph Inge (1929), Philippus Villiers Pistorius (1952), and Andrew Smith (1984) all argue that Plotinus did not attach much importance to the doctrine of transmigration, and did not regard it as scientifically sound. ¹⁶⁶ Rist (1963), Blumenthal (1966), and Armstrong (1977), on the other hand, cite the article by Audrey N.M. Rich (1957), which convincingly argues, using references to the *Enneads*, that Plotinus considered the doctrine of transmigration an essential part of his own philosophy. ¹⁶⁷

Mamo (1969: 85–86) is concerned that the doctrine of reincarnation impedes 'the continuity and eternal identity of Socrates and his soul', which he believes is essential to 'the mystical experience of the ascent' of 'each ego back to the Nous'. In my view, reincarnation is not primarily directed against the 'continuity and the eternal identity' of individual souls, but against the identification of individual souls with sensible individuality (such as bodily properties, sex, national affiliation, temperament, character, etc.). Nor does it pose a problem for 'the mystical experience of the ascent' (anagôgê): when Socrates' soul ascends into the higher spheres of the intelligible, it is no longer important that it be male, Greek, or snub-nosed, as it no longer has any need to identify with its former individual properties. Ploti-

¹⁶⁶ Stametellos (2013: 49) lists these authors in his article. However, Inge (1929), Pistorius (1952), and Smith (1984) did not write on Forms of individuals.

 $^{^{167}}$ On transmigration in Plotinus see Rich (1957), Cole (1992), Stamatellos (2013), and Karamanolis (2020).

nus frequently explains that self-identity does not depend on experiences or traits acquired by individual souls during their incarnation on earth (I. 1 [53] 12; I. 6 [1] 7, 1–11). Rather, the individuality acquired by the soul during its life on earth is a limitation, a burden that must be discarded: Plotinus refers to Plato's example of the sunken statue of the sea-god Glaucus, overgrown by algae and shells and therefore no longer recognisable. 168 Similarly, the soul's experiences on earth are like encrustations that must be chipped off the soul, as from the sunken statue of the sea god: 'The ascent and the separation is not only from this body but from all that has been added' (I. 1 [53], 12, translated by A.H. Armstrong). The liberation of the true self from the incrustations of this world is achieved by practising the virtues¹⁶⁹ or by practising spiritual exercises (I. 1 [53], 12). The notion of spiritual exercises is notably encapsulated in Hadot's (1987: 14) seminal work, wherein he states: 'ces exercices [...] correspondent à une transformation de la vision du monde et à une metamorphose de la personalité. Le mot "spirituel" permet bien de faire entendre que ces exercices sont l'oeuvre, non seulement de la pensée, mais de tout le psychisme de l'individu et surtout il révèle les vraies dimensions de ces exercices: grace à eux, l'individu s'élève à la vie de l'Espirit objectif, c'est à dire se replace dans la perspective du Tout.'170 Elsewhere, Plotinus' statement that the 'whole earth [is a play] where men have in many places set up their stages' implies that this-worldly individuality is something that must be cast off.¹⁷¹ Moreover, 'though if Socrates, too, may play sometimes, it is by the outer Socrates that he plays', implying that the external physical Socrates is only a role and does not essentially constitute the soul of Socrates.¹⁷² When discussing this passage in his commentary, Kalligas (2023: 332) also refers to the 'cosmic drama' in which every soul has a unique set of roles to fulfil. Kalligas also asserts that in each reincarnation, the soul would interact with

Plato, *Rep.* X 611d7–612a5. Compare Hutchinson (2018: 10): 'In this respect, Plotinus continues a deeply embedded ancient philosophical view of the self as something that evolves through time and undergoes constant improvement toward an ideal end. It is not something given, but something we sculpt and fashion along the way to becoming beautiful and experiencing the beauty of the intelligible realm. This is reflected in the famous passage in which Plotinus exhorts us never to stop working on our own statue (I. 6. 9. 13–14). Just as a craftsman sculpts a statue by carving a figure with a hammer and chisel and smoothing it out with a rasp until it becomes beautiful, so too do we sculpt the self by carving the soul and smoothing it out until we become beautiful as intellects. Sculpting the true self is the ultimate goal of one's embodied actions, since it is only as intellect that we can establish right reason in charge of our lives and derive the premises for our activities from Intellect, thereby achieving freedom (*to ephhêmin*) and self-determination (*autexousios*).'

Compare Hutchinson (2018: 12): 'The process of detachment involves three degrees of virtue, which are arranged hierarchically [the civic, purificatory, and intellectual virtues]. [...] The practice of virtue thus scrapes away the nonrational desires and opinions originating in the compound and culminates in the ultimate insight that the authentic self is our intellect, in which true virtue is present (I.6.9. 8–25 IV.7.10. 7–17). As Plotinus says, "So the soul when it is purified (*kathartheisa*) becomes form and formative power, altogether bodiless and intellectual and belonging wholly to the divine" (I.6.6. 13–15).'

Extracted from Hutchinson (2018: 13–14).

¹⁷¹ III. 2 [47] 15, 50-51.

¹⁷² III. 2 [47] 15, 58-59.

different formative principles depending on the circumstances and contingencies, all while maintaining its fundamental character identity intact.

When the soul ascends (anagein) into the intelligible, it not only preserves its true identity, but even expands and gains access to the higher spheres of itself, of which it was not aware while incarnated in the physical cosmos. Giannias Stamatellos (2013: 49–50) explains the expansion of the soul using the doctrine of the undescended part of human souls (which he calls the 'dual-aspect theory of the soul'). Stamatellos (2013: 53–55) maintains that transmigration is accomplished only by the lower part of the soul, while the higher part does not descend into the material sphere at all, but 'remains above', i.e. in the vicinity of the universal Intellect, which constantly contemplates the Forms. This assertion is very much in line with Hutchinson's claim which posits that the individual intellects (which Hutchinson depicts as noetic selves) residing within the universal Intellect do not possess memories associated with the lives of the specific individuals to which they are connected:

As a pure intellect, he [i.e. a *true self*] is simultaneously aware of his identity with Intellect and of his integration with Being and the Forms. By this Plotinus means that his awareness does not take place in time and involve transitioning temporally from one Form to the next, but rather it takes place in the eternal present and involves the compresence of the contents of Intellect in his act of awareness. An implication of this is that once we have sculpted the true self, our cognition does not include memories of past experiences, or any memories at all, but only the timeless awareness of our intellectual activity. Which is to say, memory of past experiences does not play a role in constituting the true self. Memories do play a constitutive role in determining the dianoetic self (IV.3.26. 43–47). However, since the intelligible world is timeless and intelligible realities are not subject to change, psychic operations that involve time and change, such as discursive reasoning and memory, are not included in the constitution of the noetic self (Hutchinson, 2018: 15–16).¹⁷³

When we apply Hutchinson's statement to Socrates, we discern a distinction between two aspects of his being: the dianoetic Socrates, representing Socrates at the level of the Soul, and the noetic Socrates, corresponding to Socrates' intellect. In this context, only the dianoetic Socrates would possess the capacity to retain memories of his life. This perspective aligns with the notion that memories are encoded in the form of *logoi* within the *logoi*-combination of Socrates. Conversely, the noetic Socrates, pertaining to Socrates' intellect, would remain disconnected from Socrates' memories or even the awareness of the individual identity of Socrates or his existence altogether. This disconnect arises because the specific dianoetic information lacks relevance within the noetic realm of universal Forms. This implies that

While Hutchinson recognises memory as vital for personal identity, enriching life through past experiences, he points to the fact that Plotinus acknowledges this but argues that memories tie us to the physical world, preventing us from realising our true self and distracting us from the intelligible realm.

the problem of continuity does not even arise at the level of Intellect, as the Intellect – both the universal Intellect and the individual intellects within it – are inherently eternal and immutable. In this context, the various reincarnations occurring at the level of the Soul hold no significance for the Intellects. When, however, the lower soul leaves the material realm behind, it becomes one with its higher part and thus expands itself by contemplating the universal Intellect. Since Plotinus considers the higher part of the soul to be 'the true man', the soul of Socrates will not lose its essence when it eventually incarnates into another body (I. 1 [53] 7, 17–23).

1, 5-6 If, however, the soul of Socrates is not always Socrates,

This phrase is translated differently by Armstrong, Harder, Gerson, and Brisson:

Armstrong: But if Socrates does not always exist...

Harder: ist sie dagegen nicht immer 'Sokrates'...

Gerson: If the principle does not always exist...

Brisson: Mais si tel n'est pas le cas...

Armstrong, Harder, and Gerson each give a different grammatical subject in their respective translations of this sentence ('Socrates' in Armstrong; 'sie', i.e. the soul, in Harder; 'principle' in Gerson). Brisson distances himself completely from the Greek formulation and translates freely: 'But if this is not the case...' (my translation of Brisson). The reason for this variety in approaches is that the Greek subject is not explicit – it is just said 'ei d' ouk aei', i.e. 'if not always'. There are, however, several strategies that can help to determine the subject of this sentence. The first possibility is to look at the subject of the previous sentence. Because of the parallel structure, the subject of both sentences will most likely be the same. Another way to determine the subject is to look at the context of the whole sentence. I would suggest considering both strategies.

There are at least three possibilities for the subject of the preceding if-sentence: it can be 'Socrates, that is the soul of Socrates' (Armstrong, Gerson, Schall); it can be 'Socrates and the soul of Socrates' (Harder, Brisson); or it can be 'the soul of Socrates' (Cilento). Now it becomes clear why it is so difficult to determine the subject of the present if-sentence: the subject of the preceding if-sentence is not so clear either. How one interprets the *kai* in the previous sentence also affects the determination of the subject in the present sentence. Looking at the translations just mentioned (except Cilento's), one will notice that none of them adheres to the parallel sentence structure; rather, the subjects of the two if-sentences are different in each case:

Armstrong: 1. If Socrates, that is **the soul of Socrates**, always exists... 2. But if **Socrates** does not always exist...

Harder: 1. Allerdings, wenn **Sokrates und die Seele des Sokrates** immer Sokrates ist... 2. ist **sie** (the soul) dagegen nicht immer Sokrates...

Gerson: 1. If Socrates, that is, **the soul of Socrates**, is eternal... 2. If **the principle** does not always exist...

Brisson: 1. Si **Socrate et l'âme de Socrate** existent toujours... 2. Mais si tel n'est pas le cas...

According to Armstrong's translation, in the previous sentence Plotinus considers the immortality of Socrates' soul, whereas in the present sentence he considers the mortality of the person Socrates. It seems that there is no direct connection between the two thoughts. In Harder's translation, the two subjects do not agree either; however, the deviation in his case is not as large as in Armstrong.

Gerson has chosen a very different solution. He makes 'the principle' (*hê archê*), which he identifies with the Form of the individual, the subject of the sentence.¹⁷⁴ Gerson also changes the last part of the sentence by inserting the notion of the soul, which does not occur in the original Greek:

Gerson: If the principle does not always exist, but the soul that was at one time Socrates comes to be different individuals at different times, say, Pythagoras or someone else, the individual [soul] will no longer be in the intelligible world.

It is not clear to me why Socrates' soul being reborn as other individuals should imply that it does not exist in the intelligible world. Is this really what Plotinus intended to say? Or has Gerson perhaps strayed too far from the original text in favour of his theory of Form-Intellects?

Brisson's free translation is the only one that sticks to the parallel structure of the two statements and thus comes closest to the actual meaning. His translation, however, is not very helpful because it disregards the original text.

In my translation, I intend to keep the parallel structure of the argument so that the subject of the two if-sentences is the same – namely, the soul of Socrates:

My translation: 1. if Socrates, that is **the soul of Socrates**, is always [**Socrates**], ... 2. If, however, **the soul of Socrates** is not always **Socrates**, ...

Gerson (1994: 64–65): 'At the beginning of the passage, Plotinus of course means to affirm the antecedent of the conditional "if I and each one of us have a way of ascent and return to the intelligible, the principle [$h\hat{e}$ $arch\hat{e}$] of each of us is there." This proposition does not assert that there is a different principle for each one of us. By itself, it could simply be taken to mean that there is one principle, say the Form of Man, for all. The next line, however, introduces the notion of "absolute Socrates," [$Autos\hat{o}krat\hat{e}s$] and leaves little doubt that he means to affirm a different principle for each individual.' The square brackets are my insertions.

The same is true for Cilento's translation:

Cilento: 1. se l'anima di Socrate è sempre Socrate, ... 2. se, al contrario, l'anima di Socrate non è sempre Socrate, ...

In this way, the translation does justice to the parallel textual structure intended by Plotinus, thereby clarifying the entire argument. It consists of two opposing conditions. The first condition is the eternal existence of the soul of Socrates as the unique individual, Socrates; i.e. the soul of Socrates exclusively ensouls Socrates and no one else. The second condition posits that the soul of Socrates does not always remain the soul of Socrates but also ensouls other individuals from time to time. The first condition supports the existence of Forms of individuals, while the second condition argues against it. However, does the reincarnation of Socrates' soul as other individuals necessarily preclude the existence of Socrates in the intelligible realm? This would imply that the principles of the sensible person Socrates are to be sought not in the intelligible realm, but in matter. Plotinus, however, contradicts this conclusion in the very next sentence when he declares that the *logoi* in the soul are the principles of sensible individuals.

1, 6–8 but being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras or someone else, then this individual will no longer be there [in the intelligible world]

Here, Plotinus presents an example that contains a chronological inconsistency: 'being formerly Socrates, the soul becomes different individuals at different times, say Pythagoras'. Normally we would not say that Socrates' soul reincarnates as Pythagoras, for the simple reason that Pythagoras (570–490 BC) lived a hundred years before Socrates (469–399 BC). This chronological mistake is also reflected in Armstrong's, Brisson's, and Harder's translations:

Armstrong: But if Socrates does not always exist, but the soul which was formerly Socrates becomes different people at different times, like Pythagoras or someone else, then there will not be this particular person Socrates also in the intelligible world.

Harder: ist sie dagegen nicht immer 'Sokrates' sondern wird immer eine andere, z. B. die früher Sokrates war, Pythagoras oder sonst ein anderer, dann ist der bestimmte Einzelmensch nicht in der oberen Welt.

Brisson: Mais sit el n'est pas le cas, et que l'âme qui était auparavant Socrate devienne des individus différents à différents moments, par exemple Pythagore ou quelqu'un d'autre, alors cet individu de sera pas aussi là-bas.

To avoid this inconsistency, Gerson refrains from using chronological terms at all. Instead, he chooses general terms such as 'at one time' and 'at different times':

Gerson: If the principle does not always exist, but the soul that was **at one time** Socrates comes to be different individuals **at different times**, say, Pythagoras or someone else, the individual [soul] will no longer be in the intelligible world.

Thus, the order of incarnation no longer matters, while the intended meaning of the sentence is preserved.

Most translators understand the subject of the last part of the present sentence to be the person Socrates – 'this particular person Socrates' (Armstrong), 'der bestimmte Einzelmensch' (Harder), 'cet individu' (Brisson). Gerson, again, translates more freely: 'the individual [soul] will no longer be in the intelligible world', thus making the subject of this phrase not Socrates but 'the individual soul'. Gerson's translation, however, is controversial. Why should a soul born at one time as Socrates and at another time as Pythagoras no longer exist in the intelligible world? Rather, Plotinus' original sentence proposes that the individual Socrates (and any other sensible individual) does not exist in the intelligible world because his soul is not essentially 'Socratic', for it may also be the soul of Pythagoras, for example. The transmigration argument says that a soul becomes the soul of Socrates when it descends into the sensible world, implying that individuality is something a soul acquires when it incarnates. But before it enters the sensible world, the soul of Socrates is neither Socrates nor Pythagoras nor any other human being, animal, or plant.

I cannot explain why Plotinus chose an anachronistic example. Regardless, the point is that the soul of Socrates is not always bound to the person of Socrates, but is reborn as many persons in the course of its existence. The soul of Socrates is therefore not essentially Socrates: it transcends sensible individuality and is ultimately separable from the person Socrates. As long as the person Socrates lives, his soul is bound to his sensible individuality and personality, but as soon as he dies, his soul separates from his person and unites with another, for example Pythagoras. The doctrine of the transmigration of souls thus states that the individual Socrates will persist in neither the material nor the intelligible world. After his death, his soul will discard his individuality and transmigrate into another body, so that nothing of the 'Socratic' features will remain in the intelligible world. This conclusion, however, seems to contradict the 'Neoplatonic premise' (V. 7 [18] 1, 1–3), which demands that 'the principle of everyone is also there (in the intelligible world)'. Plotinus presents the solution to this problem in the next sentence.

1, 8-9 But if the soul of each individual possesses the forming principles of all those individuals through which it passes in succession, then again all will be there [in the intelligible world]

We now arrive at a definite answer to the question of whether there are Forms of individuals. Plotinus has presented two mutually exclusive possibilities: either the Forms are principles of sensible individuals, but then one would have to give up the doctrine of transmigration (V. 7 [18] 1, 3–5); or the doctrine of transmigration is upheld, but then one would have to give up the existence of intelligible principles of individuals (V. 7 [18] 1, 5–8). Since the demand for intelligible principles of individuals in V. 7 [18] 1, 1–3 – which we have called the 'Neoplatonic Premise' – is at odds with the Platonic doctrine of transmigration of souls, Plotinus, as Remes (2007: 78) correctly notes, 'endorses neither of these options as such'. ¹⁷⁵ Instead, he proposes a compromise, which makes the 'Neoplatonic Premise' compatible with the doctrine of transmigration. The compromise is to dispense with Forms of individuals altogether and instead consider other principles – *logoi*.

According to the model presented by Plotinus in this statement, the principles of individuals do not lie in the universal Intellect, but in individual souls. The soul of Socrates – to stay with Plotinus' example – possesses the forming principles (*logoi*) of all individuals into which it will transmigrate in the course of its existence. The soul therefore contains the *logoi* of Socrates, Pythagoras, and all the other individuals into whom it will transmigrate. When the soul is born as Pythagoras, it actualises the *logoi* of Pythagoras. When Pythagoras dies and the soul detaches from his material body, it stops actualising the *logoi* of Pythagoras. When the soul

Remes (2007:78): 'In the beginning of the V.7.1 Plotinus asks whether there is an "idea" (*idea*) of each particular. In what follows he first offers two possibilities. First, if there is a soul of the particular person Socrates, and if this soul is eternal, there must be a form that could be called 'Socrates-itself' (*Autosôkratês*). Or, second, if reincarnation as some other personality is possible, no individuality at all can be due to the intelligible principles. Plotinus endorses neither of these options as such. As he goes on to say quite explicitly, each eternal soul contains all forming principles there are in the intelligible, not only of human being but of all individual animals as well. [...] Note also that no claims are made about the Intellect, nor about the forms or individual persons. It is attested only that the soul must have some principles both for human being and for all individual animals.'

The Neoplatonic Premise in V. 7 [18] 1, 1–3: 'Perhaps, if I and every individual trace back to the intelligible, the principle of every individual, too, is there [in the intelligible world].'

¹⁷⁷ It is important to point out that Pythagoras, because he is made up of many different body parts and properties, must be produced by many different *logoi*, i.e., a *logoi*-combination. At this point in the treatise, one would tend to assume that *one complete individual* is produced by *one logos*, similar to the model of 'one Form produces one individual' proposed at the beginning of V. 7 [18]. As the treatise progresses, however, it becomes clear that each peculiar property requires its own forming principle, so that an individual consisting of many different properties must be a product of a combination of many different *logoi*. This point is discussed in detail on pp. 17–26 and also in the next passage on '1, 8 the forming principles' on pp. 131–134.

then transmigrates into another body, for example of Socrates, it begins to actualise the 'Socratic' logoi.178

With this compromise, Plotinus gives a final answer to the initial question of whether there are Forms of individuals, since he does not return to this question in the rest of the treatise. The answer, then, is that Forms cannot be the principles of individuals, otherwise one would have to abandon the doctrine of the transmigration of souls. If one accepts *logoi* as principles of individuals, there is no conflict with the doctrine of transmigration, and the Neoplatonic premise (that principles of individuals must exist in the intelligible) is also fulfilled.

1, 8 the forming principles

A detailed account of *logos/logoi* was given on pp. 12–23. As a brief reminder, in V. 7 [18] *logos/logoi* is used in the sense of intelligible forming principles on the level of the Soul. By interacting directly with matter and giving it a particular form, *logoi* produce sensible individuals. Since an individual consists of many different body parts and properties, it must be the product of many different *logoi*. I call the set of *logoi* that produces a complete individual a *logoi*-combination. When a soul transmigrates into a living being, for example Socrates, it begins to actualise the *logoi*-combination that makes up the person Socrates. When Socrates dies, his soul ceases to actualise the 'Socratic' *logoi*-combination; it can then transmigrate into another body by actualising a new *logoi*-combination. *Logoi* are images of Forms ('unfolded Forms', according to I. 1 [53] 8, 7–8), eternal and unchanging.

Plotinus' alternating use of **forming principle** (i.e. *logos* in the singular) and **forming principles** (i.e. *logoi* in the plural) in V. 7 [18] is striking – and also quite confusing. As stated earlier, the term *logos* can be understood in two ways: (1) *logos* can stand for a particular forming principle, such as the *logos* producing the 'whiteness' of the skin (II. 6 [17] 3, 1); or (2) *logos* can stand for a combination of many different *logoi*, such as the *logos* of Socrates.¹⁷⁹ This distinction, however, does not emerge clearly from V. 7 [18], but is made clear in other treatises (II. 4 [12] 3, 6–11, IV. 4 [28] 16, 5–9). Reading V. 7 [18], one rather has the impression that one individual, for example Socrates, actualises one *logos*. This impression is mainly due to Plotinus' claim that the number of individuals in a cosmic cycle is equal to the number of *logoi*: 'But maybe, there are as many [*logoi*comb] as the individuals are dif-

Kalligas (2023: 332) also refers to an implicit epistemological function of logoi in this passage: 'It (i.e. this theory of logoi as principles of individuation) would also explain the deeper unity that holds all souls together, without, however, annulling their individuality; cf. IV 3.5.1–18 with my comments, as well as my comment on IV 9.5.12–23. In fact, in VI 5.12.16–25 it is stated that during his return to the intelligible world, an individual becomes "all" (pas), in the sense of coming to recognize his kinship with the totality of beings. But here these principles are said to operate formatively, evidently becoming activated in a selective manner, depending on the "identity" of each individual; see Nikulin 2005, 300–301; Remes 2007, 77–85; but also the reservations expressed by Sorabji 2006, 123.'

¹⁷⁹ See pp. 17-26.

ferent' (V. 7 [18] 3, 5–6). But if one individual is caused by many different logoi, how can the number of individuals be equal to the number of logoi? The only plausible explanation is that whenever Plotinus claims that there are as many forming principles as individuals, he actually means that there are as many logoi-combinations as there are individuals, i.e. for each individual there is a $[logoi^{\rm comb}]$. Below, I have listed every single occurrence of logos/logoi in V. 7 [18] and in each case clarified the meaning intended by Plotinus.

Singular: instances in which Plotinus uses the singular, i.e. *logos*, to mean a *logoi*-combination:

- 'Or perhaps, there is not the same forming principle for different individuals, nor does 'human being' serve as a model for particular human beings who differ from each other not only in matter, but in a vast number of peculiar differences' (V. 7 [18] 1, 18–20).
- 'there will not be some particular forming principle [*logoi*^{comb}] for each individual that is born' (V. 7 [18] 2, 2–3).
- 'and each of the parents, for instance the male, will produce not according to different forming principles, but according to one [logoi^{comb}], his own or his father's' (V. 7 [18] 2, 3-5).
- 'Perhaps in the case of those who are indiscernible, the forming principle [$logoi^{comb}$] is one' (V. 7 [18] 3, 3–4).

Plural: Plotinus usually uses the plural, i.e. *logoi*, when he speaks of forming principles in a general sense:

- 'But if the soul of each individual possesses the forming principles of all those individuals through which it passes in succession, then again all will be there [in the intelligible world]' (V. 7 [18] 1, 8–9).
- 'for we do also say that as many forming principles as the cosmos possesses, each soul also possesses' (V. 7 [18]1, 9–10).
- 'Consequently, if the cosmos possesses [the forming principles] not only of the human being, but also of individual living beings, so, too, does the soul; the whole of the forming principles, then, will be unlimited unless it keeps turning in periodic cycles' (V. 7 [18] 1, 10–13).
- 'why should there be forming principles, that is, models for all things that come into being in [just] one cycle?' (V. 7 [18] 1, 15–16).
- 'it is unlike the way images of Socrates relate to their archetype. No, the difference in production needs to stem from different forming principles' (V. 7 [18] 1, 20–22).
- 'Perhaps, the whole cosmic cycle contains all the forming principles, and again the same things are produced according to the same forming principles' (V. 7 [18] 1, 22–23).

- 'If, however, the mixtures of forming principles of the male and female produce different offspring' (V. 7 [18] 2, 1–2).
- 'and each of the parents, for instance the male, will produce not according to different forming principles' (V. 7 [18] 2, 3–4).
- 'Maybe, nothing prevents them [the parents] from producing also according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand' (V. 7 [18] 2, 5-7).
- 'But the thing is that it is not the case even if it appears so that sometimes most of the forming principles come from the male, at other times from the female, or that each of them contributes an equal part of forming principles. No, both of them contribute the whole, and it is then embedded [in the embryo], but either the part of the one or the other dominates over the matter' (V. 7 [18] 2, 9–13).
- 'That which is on the side of matter must be linked to the ugliness alone, and even there the perfect forming principles are concealed, but given as wholes' (V. 7 [18] 2, 16–18).
- 'In fact, this has been granted insofar as [the forming principles] are given as wholes, but it is now asked whether [it is possible] if the same forming principles dominate [in several individuals in one cosmic cycle]' (V. 7 [18] 2, 21–24).
- 'How, then, can we say in the case of many twins that the forming principles are different?' (V. 7 [18] 3, 1–2).
- 'Or maybe, what prevents there being different forming principles also in indiscernibles?' (V. 7 [18] 3, 7–8).
- 'In nature, where the other [product] is not created by discursive reasoning, but solely by forming principles, the difference must be linked to the form'
 (V. 7 [18] 3, 10-11).
- 'For how vast the cosmos has to be, and how many individuals it [the cosmos] will pass through in the course of its life, is grounded from the very beginning in that which contains the forming principles' (V. 7 [18] 3, 16–19).

In some cases, Plotinus uses the plural form when he wants to show that the number of forming principles is equal to the number of individuals in a cosmic cycle. Here, of course, he does not mean individual *logoi*, but *logoi*-combinations that numerically correspond to the individuals. Thus, when Plotinus states that the number of *logoi* matches the number of individuals, he is referring to these *logoi*-combinations, which ensure that each individual is a unique and coherent whole:

- 'But let the forming principles be different: why is it necessary that there be as many [logoi^{comb}] as there are individuals born in one cosmic cycle, when it is possible that outwardly individuals look different even though the same forming principles are present?' (V. 7 [18] 2, 18–21).

- 'but it is now asked whether [it is possible] if the same forming principles dominate [in several individuals in one cosmic cycle]' (V. 7 [18] 2, 22–24).
- 'But if this is so, then there are not as many forming principles [*logoi*^{comb}] as there are individuals' (V. 7 [18] 3, 4).
- 'But maybe, there are as many [logoi^{comb}] as the individuals are different'
 (V. 7 [18] 3, 5-6).
- 'but if there is a measure of how many individuals there are to be, the quantity [of individuals] will be determined by the unrolling and unfolding of the sum-total of forming principles' (V. 7 [18] 3, 13–15).
- 'And is it also the case with other animals that produce a huge number of offspring from one birth, that there are as many forming principles [logoicomb] [as individuals]?' (V. 7 [18] 3, 19–21).

1, 9–12 for we do also say that as many forming principles as the cosmos possesses, each soul also possesses. Consequently, if the cosmos possesses [the forming principles] not only of the human being, but also of individual living beings, so, too, does the soul

Having stated that the principles of individuals are the *logoi* residing in the soul, Plotinus now explains that each individual soul possesses the *logoi* of every living being (*alla kai tôn kathekasta zôon*) born in the cosmos. From this we can conclude that all individual souls share basically the same intelligible content. In spite of this, every soul is not identical: each individual soul differs from the others in that it actualises a different *logoi*-combination every time it transmigrates into a new body, and each soul thus has its own individual life story and unique experiences:

But, before this, we must discuss whether it is correct to say that all the souls are one soul, like the soul of each individual. For it would be absurd if my soul and anyone else's were one soul: for if I perceived anything another would have to perceive it too, and if I was good he would have to be good, and if I desired anything he would have to desire it, and in general we should have to have the same experiences as each other and as the All, so that if I had an experience the All would share in the perception of it. And how, if there is [only] one soul, is one soul rational and another irrational, and one in animals but a different one in plants? But on the other hand, if we are not going to make that assumption, the All will not be one, and we shall not discover one principle of souls (IV. 9 [8] 1, 14–23, translated by A.H. Armstrong).

That each soul contains all the *logoi* existent in the cosmos is neither questioned nor justified in the further course of V. 7 [18]. The reason for this may be that Plotinus has already spoken extensively on this subject in his earlier texts, such as IV. 9 [8], 'If all souls are one', IV. 1 [4], 'On the essence of the Soul', and IV. 8 [6], 'On the descent of the soul into bodies'. In these short treatises, Plotinus gives an early insight into his complex theory of psychology, which he then discusses in greater detail in his

longer texts, IV. 3–5 [27–29], 'On the Soul I–III'. One of Plotinus' most important psychological theses is that 'all souls are one' (IV. 9 [8] 1, 11–13). This assertion does not merely mean that every single soul is an indivisible unity which is present as a whole in every part of the body it ensouls. Rather, 'all souls are one' means that the World Soul forms a unity with all the individual souls of humans, animals, plants, and heavenly bodies. Plotinus traces the unity of all souls back to the highest or supreme Soul, which was the first to emanate from the universal Intellect.

In any bodies, therefore, which it enters, even if it enters the largest of all and that which is universally extended, by giving itself to the whole it does not abandon its unity. It is not one in the sense in which body is one; for body is one by continuity, but its parts are different from each other and in different places. And it is not one in the way in which quality is, either. But the nature at once divisible and indivisible which we affirm to be soul is not one in the way in which the continuous is, having different parts; but it is divisible in that it is in all the parts of that in which it is, but indivisible in that it is present in all the parts of it as a whole and in any one part as a whole (IV. 1 [4] 1, 58–67, translated by A.H. Armstrong).

How, then, is there one substance in many souls? Either the one is present as a whole in them all, or the many come from the whole and one while it abides [unchanged]. That soul, then, is one, but the many [go back] to it as one which gives itself to multiplicity and does not give itself; for it is adequate to supply itself to all and to remain one; for it has power extending to all things, and is not at all cut off from each individual thing; it is the same, therefore, in all. Certainly, no one should disbelieve this; for knowledge is a whole, and its parts are such that the whole remains and the parts derive from it (IV. 9 [8] 5, 1–9, translated by A.H. Armstrong).

The highest Soul does not descend into the bodies in the material realm, but always remains in the intelligible, constantly exercising rational activity through contemplation of universal Forms. From the highest Soul originate the World Soul and the individual souls, which are therefore of the same lineage: this is why Plotinus often refers to them as 'soul sisters' (IV. 3 [27] 6, 13–15; II. 9 [33] 18, 14–17). Since both the World Soul and the individual souls originate 'simultaneously' from the highest Soul, they are essentially not distinct and separate, but one and the same in essence and in substance. Plotinus vividly describes how the soul of each of us, which is essentially one with the World Soul, created the cosmos. Moreover, he calls 'each one of us an intelligible universe'.

Let every soul, then, first consider this, that it made all living things itself, breathing life into them, those that the earth feeds and those that are nourished by the sea, and the divine stars in the sky; it made the sun itself, and this great heaven, and adorned it itself, and drives it round itself, in orderly movement; it is a nature other than the things which it adorns and moves and makes live; and it must necessarily be more honourable than they, for they come into being or pass away when the soul leaves

them or grants life to them, but soul itself exists for ever because 'it does not depart from itself' (V. 1 [10] 2, 1–6, translated by A.H. Armstrong).

For the soul is many things, and all things, both the things above and the things below down to the limits of all life, and we are each one of us an intelligible universe, making contact with this lower world by the powers of soul below, but with the intelligible world by its powers above and the powers of the universe; and we remain with all the rest of our intelligible part above, but by its ultimate fringe we are tied to the world below, giving a kind of outflow from it to what is below, or rather an activity, by which that intelligible part is not itself lessened (III. 4 [15] 3, 21–27, translated by A.H. Armstrong).

Since the World Soul and the individual souls are essentially one, it follows that the individual souls contain the same *logoi* as the World Soul, i.e. all the *logoi* that exist in the universe. Thus, each individual soul contains the *logoi* of every human being and every animal. Implicitly, Plotinus' proposition confirms the Platonic doctrine that individual souls can be reborn as both human beings and animals. Although Plato's doctrine of transmigration is 'often regarded as an integral part' of his philosophy, Erland Ehnmark (1957: 1) points out that Platonic accounts of transmigration 'are preceded by a cautious warning that what will follow is a myth, or a tradition, which may be true, but, obviously, cannot be presented as capable proof'.

Against this background, Plotinus' theory of reincarnation as presented in V. 7 [18] takes on a new dimension of significance. He offers a model for how the Platonic myths recounting the transmigration of souls from human to animal bodies might work. Moreover, Plotinus' model of transmigration based on intelligible forming principles (*logoi*) fits perfectly into his own metaphysics. According to his model, the ensoulment of a living being occurs when a soul actualises a certain *logoi*-combination, which is what brings that individual into being. Since every soul possesses all the *logoi* that exist in the universe, every soul can be born as every kind of living being.

The Myth of Er (Rep. X 614b-621c) vividly describes how souls who were previously respected men might choose the life of animals - either because they are tired of human life or because it suits their character. In the same way, animal souls can choose to live a human life. The description gives the impression that there are no substantial differences between human and animal souls in the afterlife - especially in the episode in which the souls are to choose their next life: 'Er saw the soul of Thamyris choosing the life of a nightingale, a swan choosing to change over to a human life, and other musical animals doing the same thing. The twentieth soul chose the life of a lion. This was the soul of Ajax, son of Telamon. He avoided human life because he remembered the judgment about the armor. The next soul was that of Agamemnon, whose sufferings also had made him hate the human race, so he changed to the life of an eagle. Atalanta had been assigned a place near the middle, and when she saw great honors being given to a male athlete, she chose his life, unable to pass them by. After her, he saw the soul of Epeius, the son of Panopeus, taking on the nature of a craftswoman. And very close to last, he saw the soul of the ridiculous Thersites clothing itself as a monkey. [...] Still other souls changed from animals into human beings, or from one kind of animal into another, with unjust people changing into wild animals, and just people into tame ones, and all sorts of mixtures occurred' (Rep. X 620a-d, translated by G.M.A. Grube, rev. C.D.C. Reeve).

Consider the example of Socrates. When a particular soul is incarnated as Socrates, this soul actualises the 'Socratic' *logoi*. But the soul of Socrates also possesses the *logoi* of every other human (and also of every animal and plant), which are, however, in a non-actualised state. Even though Socrates is incarnated with brown eyes and white skin, his soul still possesses the *logoi* for blue eyes and green eyes, as well as the *logoi* for brown skin and black skin, and even the *logoi* of animal properties such as fur, feathers, horns, and claws:

But when the soul which [...] was a man follows the soul which has chosen the nature of a beast, it gives the forming principle in it which belongs to that living thing in the intelligible world. For it possesses it, and this is its worse form of activity (VI. 7 [38] 6, 33–37, translated by A.H. Armstrong).

This passage gives us a brief summary of what we have just elaborated. A soul that has lived the life of a human being can afterwards be reborn as an animal if it has 'chosen the nature of a beast'. Since the soul already has the *logoi* of animal properties within it, it can begin to actualise the *logoi*-combination of a particular animal. Plotinus calls the *logoi* of animals a 'worse form of activity' compared to the *logoi* of rational beings.

Both Plotinus and Plato view the soul's journey through multiple lives as essential for growth and development. However, their perspectives on the moral implications and mechanisms of transmigration reveal significant differences, especially in terms of moral retribution and the role of choice in the soul's progression. In *The Republic*, Plato describes the Myth of Er (X 614b-621c), where souls are given the opportunity to choose their next lives. This choice is influenced by their past actions and inherent desires, but there is an element of autonomy and free will in determining their future incarnations. Plotinus introduces a stricter concept of moral retribution, encapsulated in the idea of *Adrasteia*, or inescapable justice. This principle ensures that the consequences of one's actions are inevitably experienced:

Then we must not discard that argument, either, which says that the rational principle does not look only at the present on each occasion but at the cycles of time before, and also at the future, so as to determine men's worth from these, and to change their positions, making slaves out of those who were masters before, if they were bad masters (and also because it is good for them this way); and, if men have used wealth badly, making them poor (and for the good, too, it is not without advantage to be poor); and causing those who have killed unjustly to be killed in their turn, unjustly as far as the doer of the deed is concerned, but justly as far as concerns the victim; and it brings that which is to suffer together to the same point with that which is fit and ready to execute what that unjust killer is fated to endure. There is certainly no accident in a man's becoming a slave, nor is he taken prisoner in war by chance, nor is outrage done on his body without due cause, but he was once the doer of that which he now suffers; and a man who made away with his mother will be made away

with by a son when he has become a woman, and one who has raped a woman will be a woman in order to be raped. Hence comes, by divine declaration, the name *Adrasteia*: for this world-order is truly *Adrasteia* [the Inescapable] and truly Justice and wonderful wisdom (III. 2 [47] 13, 1–18, translated by A.H. Armstrong).¹⁸¹

Unlike Plato, Plotinus emphasises the inevitability and strictness of cosmic justice. Every action has a corresponding consequence, and the soul's journey is seen as a process of purification through experiencing the direct results of its moral failings. Particularly noteworthy are the examples where a man wrongs a woman through acts such as murder or rape. In the subsequent life, he is reborn as a woman who will endure the same suffering. Plato also discusses scenarios where men are reborn as women, but the context is significantly different. In *Timaeus*, Plato describes the creation of the cosmos and the first humans who populated the world. According to the account Timaeus, the first generation of humans was entirely male:

Now these were merely auxiliary causes in its formation – the preeminent cause of its production was the purpose that took account of future generations: our creators understood that one day women and the whole realm of wild beasts would one day come to be from men (*Tim.* 76d6–e2, translated by D.J. Zeyl).

According to our likely account, all male-born humans who lived lives of cowardice or injustice were reborn in the second generation as women (*Tim.* 90e8–9, translated by D.J. Zeyl).

According to these passages, those men who lived unjust or cowardly lives were reincarnated as women in the next generation. This transformation serves as a form of moral retribution but also indicates a hierarchical view of gender roles. Plotinus, on the other hand, treats male and female incarnations as morally equivalent, applying the same standards of justice to all souls. This suggests a more egalitarian view of gender, where the soul's worth and experiences are not influenced by gender hierarchies.

1, 12–14 the whole of the forming principles, then, will be unlimited unless it keeps turning in periodic cycles, and thus the unlimitedness will be limited, whenever the same result is produced

In the preceding passage, Plotinus explained that each individual soul possesses all the *logoi* that exist in the cosmos, i.e. not only those of human individuals, but also those of all other living beings. Next, he considers the total number of *logoi*. The initial suggestion is that there must be an infinite number of living beings in the cosmos and accordingly an infinite number of *logoi* in the soul. However, a numerical infinity in the intelligible raises a problem. Numerical infinity implies

¹⁸¹ See also the discussion of this passage on p. 209.

unlimitedness and indefiniteness, and since the intelligible world is by definition a limited and defined unity, a numerical infinity would rupture the unity of the intelligible sphere. Hence, Plotinus calls numerical infinity 'a total falling away' from the One, 'evil' and 'foolish', a 'journey to the exterior' which leads the self 'far away from itself' (VI. 6 [34]1, 1–14).

Numerical infinity and unlimitedness are likewise inadmissible when it comes to the material realm. Since the intelligible cosmos is limited and defined, its image, the physical cosmos, must also be limited and defined as far as possible:

Yet, all the same, the universe is large and beautiful. This is because it has not been left to escape into infinity (*phugein eis tên apeirian*), but has been circumscribed by one; and it is beautiful not by largeness but by beauty; and it needed beauty because it became large (VI. 6 [34] 1, 23–26, translated by A.H. Armstrong).

The vastness of the cosmos represents the danger of chaos, where infinite expansion could lead to disorder. Therefore, beauty, symbolising order, must govern the cosmos. It is this principle of beauty and order, circumscribed by the One, that preserves the universe from descending into chaos. Corresponding to the limited size of the physical cosmos, there must be an analogous limit to its duration. Since the cosmos is eternal, this limitation cannot be defined by a beginning and an end of the cosmos. But if eternity is divided into cosmic cycles — as Plotinus suggests in the present proposition — then natural limits are provided by the beginning and end of each cycle. Accordingly, in a limited cosmic cycle of a cosmos limited in size, there can only be a limited number of living beings. Consequently, the limited number of living beings also requires only a limited number of *logoi*.

Richard Sorabji (2004a: 193–194) points out that the question of the infinity of the world and the total number of souls is related to the question of reincarnation. The assumption that the world is infinite in terms of duration leads to the assumption of an infinite number of souls, which in turn would cancel out the unity of the

In the *Timaeus* (28b–29b), Plato describes the creation of the cosmos. Ever since, scholars of Plato have debated whether he considers the cosmos to have been created in time. James Wilberding, who rejects the temporal creation of the cosmos in Plato, points out that almost all ancient thinkers, including Plotinus, understood Plato's account of the creation of the cosmos in a non-temporal way — with the exception of Atticus, Plutarch, Aristotle, and some Christian thinkers. What is indisputable, however, is that the cosmos is characterised as eternal in the *Timaeus*. The Demiurge himself guarantees the imperishability of the cosmos he has created (41a–b).

Sorabji (2004a: 193–194, vol. 2): 'If souls are immortal and there has already been an infinite number of births, we are threatened by a more than finite number of souls, unless souls are recycled through reincarnation.' Moreover, Sorabji cites Olympiodorus' comment on the *Phaedo* (10 § 1, 1–5), which explains why Plato considered reincarnation important: 'Now there is this ancient doctrine which I remember [*Phaedo* 70C5-72E2]. The doctrine of metempsychosis, or reincarnation, is inevitable if we start from these two premises, the eternity of the world and the immortality of the soul: if both are to be maintained, there must necessarily be metempsychosis, or else the infinite will exist actually' (translated by L.G. Westerink).

intelligible world. Thanks to reincarnation, there is no need for an infinite number of souls, because souls keep returning from the intelligible world to the physical cosmos by reincarnating again and again. Plotinus expresses this thought later in the same chapter by saying that 'one "human being" [as a model] suffices for all human beings, just as a limited number of souls, too, produces an unlimited number of human beings' (V. 7 [18] 1, 16–18).

1, 12–13 the whole of the forming principles, then, will be unlimited

The usual meaning of *apeiros* is 'indefinite' or 'infinite'; the word is often found in the *Enneads*.¹⁸⁴ I have chosen to translate *apeiros* as 'unlimited' because it is composed of the negation *a* and the word *peras*, which means 'limit' or 'end'. Therefore, the translation 'unlimited' is a literal rendition of the Greek expression which captures the connotations of something going beyond the limits, breaking through defined boundaries, and seeming to leave order behind. Later in the treatise, Plotinus uses the noun form of *apeiros* several times, i.e. the Greek term *apeiria*, which I translate as 'unlimitedness' (V. 7 [18] 1, 13; V. 7 [18] 1, 24; V. 7 [18] 3, 21–23).

The theme of unlimitedness (*apeiria*) is a puzzling one. At first, unlimitedness seems problematic for both the intelligible and the physical cosmos, so Plotinus introduces periodic cosmic cycles in order to dispense with it. At the end of the first chapter, however, Plotinus again addresses the issue of unlimitedness, but this time proclaiming that '[o]ne must not fear unlimitedness in the intelligible world' (V. 7 [18] 1, 25–26). Plotinus mentions unlimitedness a third time in the very final sentences of the treatise, and here again he asserts that 'there is no need to fear unlimitedness in seeds and forming principles' (V. 7 [18] 3, 21–22). He adds that 'in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles' (V. 7 [18] 3, 22–23).

It seems that in V. 7 [18], we are dealing with different attitudes to unlimitedness. In the sentence in question, unlimitedness seems to be a problem; in the other two passages just cited, unlimitedness in the intelligible is not to be feared. I therefore propose that Plotinus is addressing two different kinds of unlimitedness in V. 7 [18]. The first kind is the numerical unlimitedness, which is indeed a problem and is dealt with in the present sentence. But in the other two passages (i.e. V. 7 [18] 1, 25-26 and V. 7 [18] 3, 21-23), unlimitedness is spoken of in terms of the creative power of the Soul and Intellect.

Sleeman lists thirteen contexts to which *apeiros* might refer: matter (*hylê*), body (*soma*), the evil (*kakia*), being and essence (*on, onta, ousia*), Intellect and the intelligible (*Nous, noêta*), Soul (*psychê*), life (*zoe*), *logos*, God and Good (*theos, to agathon*), time and eternity (*chronos, aion*), number and limit (*arithmos, peras*), to be numerically infinite, to be infinite in size, length and grandeur, and to be indefinite in the sense of vague. As can be seen, Plotinus ascribes *apeiros* not only to matter and numbers, but also to the intelligible realm.

That which is there, which has a greater degree of existence, is unlimited [only] as an image, that which is here has a less degree of existence, and in proportion as it has escaped from being and truth, and sunk down into the nature of an image, it is more truly unlimited. Are, then, the unlimited and essential unlimitedness the same? Where there is a formative principle and matter the two are different, but where there is only matter they must be said to be the same, or, which is better, that there is no essential unlimitedness here; for it will be a rational formative principle, the absence of which from the unlimited is the condition of its being unlimited. So matter must be called unlimited of itself, by opposition to the forming principle; and just as the forming principle is forming principle without being anything else, so the matter which is set over against the forming principle by reason of its unlimitedness must be called unlimited without being anything else (II. 4 [12] 15, 26–37, translated by A.H. Armstrong).

Its [the Soul's] infinity lies in its power; it is infinite because its power is infinite, and not as if it was going to be divided to infinity. For God too is not limited (IV. 3 [27] 8, 36–38, translated by A.H. Armstrong).

Plotinus frequently attributes this kind of unlimitedness to the intelligible, especially to the First principle:

For he is the First. But he is not limited: for by what? But he is not unlimited like a magnitude either: for where should he proceed to, or what should he intend to gain when he lacks nothing? But he has infinity in the sense of power: for he will never be otherwise, or fail, since the things which do not fail exist through him (V. 5 [32] 10, 19–24, translated by A.H. Armstrong).

And it [the One] must be understood as infinite not because its size and number cannot be measured or counted but because its power cannot be comprehended (VI. 9 [9] 6, 11–13, translated by A.H. Armstrong).

1, 13–14 unless it keeps turning in periodic cycles, and thus the unlimitedness will be limited, whenever the same result is produced

Franco Ferrari (1998: 649–650) and Dmitri Nikulin (2005: 291) both argue that Plotinus is referring to the Stoic doctrine of cosmic cycles in this statement. Even before this, Blumenthal (1966: 79) had also characterised the doctrine of cosmic cycles in V. 7 [18] as Stoic. There are, however, good reasons for assuming that Plotinus adheres not to the Stoic but to the Platonic understanding of cosmic cycles as described in the *Timaeus*.

The Stoics assumed an exclusively material reality. Unlike Plato, who divided reality into an intelligible world (the world of real being) and a material world (the world of becoming), the Stoics rejected the existence of the intelligible and saw the

whole of creation as material.¹⁸⁵ Although they envisioned a rational and ensouled cosmos, their supreme and divine principles governing the cosmos are physical.¹⁸⁶ Michael J. White (2003: 129–130) describes the First Principle of the Stoics as a 'God as demiourgos or craftsman [who] is immanent in the cosmos as its active, rational, *and corporeal* principle, and is particularly identified with the creative fire (*pur technikon*) from which the world cycle arises and into which it periodically returns'. The Stoic doctrine of cosmic cycles thus implies a periodic extinction of the cosmos by a conflagration (*ekpurôsis*), followed by a new generation. In the words of White (2003: 129), 'god, being the "demiurge" of the cosmic cycle, in certain periods of time consumes the whole substance [sc., of the cosmos] into himself and then again brings it forth from himself.'¹⁸⁷

It is rather unlikely that Plotinus believed in the complete extinction of the cosmos by fire and its subsequent rebirth from that fire. According to Sleeman, the term *ekpurôsis* does not occur once in the *Enneads*. The term *periodos*, meaning cycle, occurs a few times. If one looks at the passages in which *periodos* is mentioned, one finds that the context is generally a discussion of the laws according to which individual souls descend into the material world and ascend again into the intelligible (IV. 3 [27] 12, 26–31; VI. 4 [22] 16, 1–3). In other words, cosmic cycles appear very often in connection with the Platonic doctrine of the transmigration of souls. Since the Stoics did not believe in rebirth – at least not as far as the same cosmic cycle is concerned – Plotinus most probably did not use the term *periodos* in the Stoic sense. In fact, Plotinus first uses the term in connection with Plato's *Phaedo* and *Timaeus* (IV. 8 [6] 1, 37–38).¹⁸⁸

In the *Timaeus*, we find the term *periodos* used in a variety of expressions on different topics, such as 'circular path' (34a6), 'period of a [single] circle (i.e., heavenly orbit)' (39c2), 'the orbits of the immortal soul' (43a5), 'observe the orbits of intelligence in the universe' (47b7), 'redirect the revolutions in our heads that were thrown off course' (9od2), and similarly, 'they no longer made use of the revolutions in their heads' (91e5) (translated by D.J. Zeyl).

In most cases, the term *periodos* is applied either to planetary cycles or to intellectual revolutions (i.e. deliberation or reasoning) in the soul. The two are related, since planetary cycles are the image of the cycles in the soul. By giving the soul

¹⁸⁵ Plato, Tim. 27c-29d.

On Stoic theology, see Algra (2003: 153-178).

 $^{^{187}}$ White's account of the Stoics' divine principle is based on the words of Diogenes Laertius (VII $_{137}$).

See also Armstrong's footnote on this section: 'As always, Plotinus thinks that Plato will be our best guide to the truth if we take the trouble to interpret him rightly and to reconcile his apparent contradictions. The passages in Plato's dialogues quoted or alluded to here are *Phaedo* 67d1; *Cratylus* 400c2; *Phaedo* 62b2–5; *Republic* 514a5; 515c4; 617b4–5; *Phaedrus* 246c2; 247d4–5; 249a6; *Republic* 619d7; *Timaeus* 34b8. The *Phaedo*, the image of the cave in the *Republic*, and the *Phaedrus* myth are for Plotinus the principal Platonic authorities for the negative view of the soul's descent into the world, the *Timaeus* the principal authority for the positive view.'

a kind of spherical shape and placing it in a correspondingly spherical cosmos, Plato makes both the soul and the cosmos finite and defined entities. Moreover, the spherical stars and planets that revolve in the universe are instruments and markers of time. Plato describes a kind of 'Celestial Clock': 'Each (sidereal) day-and-night, (lunar) month, and (solar) year is distinguished from others by the fact that each completes a single cycle in the course of which the heavenly body that is the "marker" for that time period returns to its original position (39c1–5)'.¹89 A complete cosmic cycle, i.e. when all the planets and stars return to their original positions, is what Plato calls the 'perfect year' (39d2–e1):

It is none the less possible, however, to discern that the perfect number of time brings to completion the perfect year at that moment when the relative speeds of all eight periods have been completed together and, measured by the circle of the Same that moves uniformly, have achieved their consummation. This, then, is how as well as why those stars were begotten which, on their way through the universe, would have turnings. The purpose was to make this living thing as like as possible to that perfect and intelligible Living Thing, by way of imitating its sempiternity (*Timaeus* 39d2–e1, translated by D.J. Zeyl).

Alain Petit (2000: 84) notes that the idea of endlessly repeating of cosmic cycles imitating the eternity of the intelligible illustrates for Plotinus 'une continuation de l'activité de l'intellect à l'âme, mais d'une activité moins puissante, en ce sens précis [...] qu'elle coïncide moins avec elle-même [...] L'éternel retour représente a cet égard une forme d'unité imitative, qui exprime dans le sensible l'unité paradigmatique, paradigmatique du moins en ce qu'elle pencède de l'activité noétique qui est par soi paradigmatique'. ¹⁹⁰ This connection between the intelligible and the physical cosmos justifies the theory of cosmic cycles in Neoplatonic terms.

The Stoics have a similar model of planetary cycles – what Plato calls the 'perfect year', they call the 'great year'. At the end of the 'great year', the universe is destroyed by fire, only to be reborn from that same fire. In Plato's philosophy, on the other hand, no conflagration (*ekpurôsis*) takes place after the completion of the 'perfect

¹⁸⁹ Zeyl (2000: xlii).

The physical cosmos approaches the intelligible by imitating the eternity of the intelligible world in its eternal rotation: 'Le fait que l'éternel retour ait un aspect imitatif ne s'inscrit pas en faux, l'imitation étant toujours gagée sur une production et une activité qui prolonge celle qu'elle imite. L'infini du retour est donc, à la pythagoricienne, un infini dominé, de pure procession, qui ne peut, rétroactivement pour ainsi dire, refluer sur l'acte dont il est issu. Le retour est la forme qu'affecte la domination exercée sur cet infini, à partir de l'auto-constitution du monde intelligible. Le Traité 18 est à cet égard l'un des textes les plus explicites sur ce que l'on pourrait nommer l'approximation de l'éternel par le retour éternel, à condition de rappeler l'existence d'une médiation qui est le fait de l'âme et des *logoi* qu'elle produit' (Petit, 2000: 85). 'La répétition contenue dans l'éternel retour a ceci de propre qu'elle traduit dans le temps une identité éternelle, qui n'est autre que le résultat d'une activité éternelle' (Petit, 2000: 78).

¹⁹¹ See White (2003: 141-142) and Jones (2003: 337).

year'; rather, a new cycle begins immediately. As already pointed out, there is no mention of conflagration and destruction of the cosmos in the *Enneads*, so I think it is more appropriate to speak of the Platonic rather than the Stoic doctrine of cosmic cycles in Plotinus.

There is, however, one Stoic element in Plotinus' theory of cosmic cycles that is not found in Plato. The Stoics assumed that after the destruction of the cosmos by the great fire, a new cosmos would arise out of flames. They taught that the new cosmic cycle would be exactly the same as the previous one: the planetary development, the history of human kind, the individuals born in the universe, and their lives would be identical in every respect to those of the cycle that had come before. Plotinus seems to have adopted this idea. As he goes on to explain, 'the whole cosmic cycle contains all the forming principles, and again the same things are produced according to the same forming principles' (V. 7 [18] 1, 22–23). Again, at the end of the second chapter, he writes that 'the absolute identity is possible across different cosmic cycles' (V. 7 [18] 2, 24–25).

Since Plotinus insists that cosmic cycles are 'absolute identity' (to tauton pantê, V. 7 [18] 2, 23) to one another, we can also rule out the possibility that he was thinking of cosmic cycles in terms of Hesiod's Myth of Ages. 192 According to Hesiod, there have been five Ages of Mankind since the very beginning of the cosmos (the Golden Age, the Silver Age, the Bronze Age, the Heroic Age, and the Iron Age, in which we live today). The Ages come in succession, with the beginning of a new age presupposing the end of the previous age and the extinction of its particular iteration of mankind. This extinction is necessary because the new age is subject to quite different physical and biological laws. For example, in the Golden Age, ruled by Kronos, people 'lived like gods without sorrow of heart, remote and free from toil and grief', because they did not age and the earth bore fruits all year round (Works and Days, 107–108, translated by Hugh G. Evelyn-White). This changed in the Silver Age, when mankind 'resembled the golden race neither in body nor in spirit' (Works and Days, 127, translated by Hugh G. Evelyn-White). In fact, they were childish and did not serve the Gods. In his rage against the mankind of the Silver Age, Zeus wiped them out and ushered in the Bronze Age, which again differed from the Golden and Silver Ages: the mankind of the Bronze Age 'sprung from the ash-trees', the people were 'terrible and strong', and they lived in houses made of bronze (Works and Days, 140–155, translated by Hugh G. Evelyn-White). Hesiod's model differs from the Stoic in that the cosmos is not completely destroyed at the end of each cycle, but transformed, so that the same cosmos continues to exist throughout the different ages.

Like Hesiod's cosmic cycles – and unlike those in Plotinus – Plato's cycles can differ greatly from one another. Consider the cosmological myth in the *Statesman*

¹⁹² Hesiod, Works and Days, 106-201.

(268–274e), in which Plato describes two very contrasting periods of the cosmos. During the first cosmic cycle, which was ruled by Kronos, the entire cosmos turned in the opposite direction. This had the consequences that people came into the world as old men and grew younger over time, which Plato describes as a blissful (*makarios*, 269d8) existence. According to this myth, we currently live in the age of Zeus, in which people grow old and live a burdensome life.

Even though Plotinus did not assume extinction and regeneration of the cosmos, in V. 7 [18] he does think that the cosmos periodically passes through identical ages. This Stoic element seems to be important for Plotinus because it supports the unity, limitedness, and definiteness of the intelligible world, which he states at the end of the first and the third chapters. If the cosmic cycles were not identical, this would imply a non-consistent structure of the intelligible world, which would thus also be indeterminate.

However, if Plotinus truly supported the idea that the universe undergoes repeated cycles where it returns to the same state, implying that the World Soul recreates the same individuals and life paths, it raises significant questions. What purpose would there be for souls to undergo the same experiences eternally? Plotinus' discussion on divine Providence offers a different perspective on recurring cosmic cycles. In this text, Plotinus appears to move away from the theory of identical cosmic cycles:

Then we must not discard that argument, either, which says that the rational principle does not look only at the present on each occasion but at the cycles of time before, and also at the future, so as to determine men's worth from these, and to change their positions, making slaves out of those who were masters before, if they were bad masters (and also because it is good for them this way) (III. 2 [47] 13, 1–5, translated by A.H. Armstrong).

Plotinus emphasises a rational cosmic order, or *logos*, which ensures cosmic justice. This principle accounts for individuals' actions across multiple lifetimes. For example, those who misuse power in one life might find themselves in a powerless situation in the next. This cosmic justice applies to past, present, and future cycles, maintaining a consistent order in the universe. According to this text, it appears that, towards the end of his life, Plotinus did not conceive of cosmic cycles as being absolutely identical. Instead, he emphasised meaningful changes made according to the regulations of Providence, rather than a repetition of identical experiences.

1, 14–18 If, then, in general the things that come into being are greater in number than their model, why should there be forming principles, that is, models for all things that come into being in [just] one cycle? For one 'human being' [as a model] suffices for all human beings, just as a limited number of souls, too, produces an unlimited number of human beings.

The conclusion in V. 7 [18] 1, 10–12, namely that each soul possesses all the *logoi* of all the living beings existent in the universe, leads Plotinus to ponder the total number of *logoi*. Since the universe is eternal, Plotinus first assumes that the number of *logoi* is unlimited. Unlimitedness in the intelligible, as we have seen, does not in itself pose a problem.¹⁹³ In the *Enneads*, Plotinus often describes the creative power of intelligible principles as 'unlimited' (*apeiros*).¹⁹⁴ Numerical unlimitedness in the intelligible, on the other hand, does pose a problem, because an infinite number of intelligible principles would call into question the well-defined unity of the intelligible world. To avoid an infinite number of individuals and their principles, Plotinus resorts to the doctrine of cosmic cycles. A cosmos limited by a cycle implies a limited number of individuals. A limited number of individuals in turn implies only a limited number of forming principles. In this way, Plotinus avoids a numerical infinity in the intelligible sphere.

Having rejected the suggestion of an unlimited number of forming principles, Plotinus considers another possibility in this passage. He suggests that a small number of principles would suffice to create a large number of individuals within a cosmic cycle. Plotinus even proposes a single intelligible model (*paradeigmatos*) of 'one human being' (*hena anthrôpon*) as the blueprint for all men. This model (*paradeigma*) of one human individual would be used many times to produce numerous individuals, 'just as a limited number of souls, too, produces an unlimited number of human beings'. Later, the assumption that there are fewer models than individuals is discarded, as we shall see in the next section.

A controversial element in this and especially the next passage (V. 7 [18] 1, 18–20) is the term *paradeigma*, which I translate as 'model'. Proponents of Forms of individuals identify *paradeigma* as a Platonic Form, or in this particular case, the Form of Human Being.¹⁹⁵ The term *paradeigma*, however, need not refer to the Form of

See the discussion on unlimitedness on pp. 138–140 and 146–147.

 $^{^{194}}$ IV. 3 [27] 8, 36–38; V. 5 [32] 10, 19–24. Also in V. 7 [18] Plotinus confirms in two passages (V. 7 [18] 1, 25–26 and V. 7 [18] 3, 20–23) that unlimitedness in the intelligible is not to be feared.

using the term 'archetype'. Like Blumenthal, they also identify *paradeigma* with the Form of Human Being. Brisson similarly writes in the footnote of his translation: 'Ces *paradeigmata* ("modèles"), ce sont les Formes'. See p. 102. In fn. 135, I discuss the possibility of *paradeigma* referring to the Platonic Forms, concluding that even if *paradeigma* is understood as a Platonic Form, the argument in the passage (V. 7 [18] 1, 14–21) is not that individual human beings must be created by their own individual Form. Rather, the argument suggests that, because individual differences among humans are the result of form, not matter, there must be intermediary rational forming principles – *logoi* – that account for these individual differences.

Human Being. Any intelligible principle can be called a model for the things it creates in the sensible world. A *logos* is therefore also a *paradeigma* for the things or living beings it produces. For this reason, I argue that the term *paradeigma* should not be interpreted in the sense of a universal Form, but in the sense of a *logoi*-combination. The model for a 'human being' is thus a complex construction consisting of many different forming principles. The term *paradeigma* will be discussed in detail in the commentary of the next sentence (V. 7 [18] 1, 15–20).

1, 14–15 If, then, in all cycles together the things that come into being are greater in number than their model

There are several possible ways of translating this passage, depending on one's understanding of the Greek term *holôs*:

Gerson: If, then, in general [$hol\hat{o}s$], the things that come to be are more in number than their paradigms...

Harder: Wenn nun die entstehenden Dinge überhaupt [holôs] zahlreicher sind als ihr Urbild...

Armstrong: Well, then, if the things which come into being in all the periods together [$hol\hat{o}s$] are more numerous than the models...

Brisson: Mais alors, si pour l'ensemble [holôs] des périodes, le nombre des choses qui viennent à l'être est plus grand que celui des modèles...

Cilento: Se, dunque, nel complesso dei cicli, ciò che nasce supera numericamente il proprio modello...

Gerson and Harder read *holôs* adverbially as 'in general'. If we read this passage by itself, their translation does make sense. However, when one considers the question that follows (i.e. why should there have to be forming principles and models for all of the things that come into being in one cycle?), one gets the impression that something is missing here. It seems as if we are lacking crucial information about cosmic cycles, which can be supplied with the help of *holôs*.

I agree with Armstrong's, Brisson's, and Cilento's interpretations of *holôs* as referring to all cosmic cycles in their totality. This reading clarifies the argument in favour of a small number of forming principles and models: if a particular individual, say Socrates, is produced once in each cycle, then over the course of all the cycles, there will be many instances of Socrates. As was already shown, Plotinus assumes that each cycle is identical, so that every Socrates born in every cycle is (absolutely) identical, being the product of the exact same forming principles.¹⁹⁶ In

¹⁹⁶ See pp. 143-148.

other words, there is only one intelligible model for all of these instances of Socrates. If we now apply this logic to one cosmic cycle, we might assume that one model can also produce many individuals within one cycle. This thought is, however, rejected in the next sentence (V. 7 [18] 1, 18–20).

1, 18–20 Or perhaps, there is not the same forming principle for different individuals, nor does 'human being' serve as a model for particular human beings who differ from each other not only in matter, but in a vast number of peculiar differences

Here, an important element of Plotinus' theory of individuals is clarified. Explicitly, Plotinus states that different individuals cannot be produced by the same forming principle; implicitly, the statement also indicates that differences within one and the same individual cannot be produced by one forming principle. As was already mentioned, it is not the case that one *logos* produces a complete individual. ¹⁹⁷ Rather, we must assume that an individual consisting of a multitude of forms and properties is accordingly caused by a multitude of different forming principles, which I call a *logoi*-combination.

Moreover, Plotinus rejects the previous suggestion that a small number of *logoi* and models would suffice to produce all the different individuals within one cosmic cycle. A forming principle, Plotinus explains, cannot produce different things. A particular *logos*, for example the *logos* of the colour red, will always produce the colour red and cannot produce something else, such as the colour green or a triangle. The same is true for a *logoi*-combination. For example, the *logoi*-combination of Socrates can only produce the individual Socrates, a male human being with a snub nose and all the other properties peculiar to Socrates. The *logoi*-combination of Socrates is therefore not a universal principle, like the Form of Human Being: while the latter is the cause of all human beings, the *logoi*-combination of Socrates is the principle of Socrates alone.

Plotinus argues further that a single model (*paradeigma*) of a 'human being' cannot produce all the different human beings, because individuals are characterised by 'a vast number of peculiar differences' (*idikais diaphorais muriais*) that cannot be attributed to matter. Individuals are not essentially distinguished by their own distinctive portion of matter, such as flesh and bones; rather, they are distinguished by their peculiar properties, such as eye colour, skin tone, eye and nose shape, hair texture, etc. Each individual must therefore be caused by its own unique model (*paradeigma*). As already stated, I argue that a 'human being' model (*paradeigma*) is to be understood in terms of a *logoi*-combination, i.e. a principle on the level of the Soul, and not in terms of a Form of an individual human being.

¹⁹⁷ See pp. 130-131.

Moreover, Plotinus here implicitly answers the question of the total number of forming principles. Since each individual must be produced by its own unique *logoi*-combination, there must be as many *logoi*-combinations as there are individuals in the world.

1, 18–19 Or perhaps, there is not the same forming principle for different individuals

This is the first time in V. 7 [18] that the term *diaphorôn* is used, which plays a central role in the rest of the treatise. Although *diaphorôn* generally means 'differences', almost all translators agree that *diaphorôn* in V. 7 [18] refers to 'different individuals' (Armstrong, Gerson) or 'verschiedene Wesen' (Harder). Even if *diaphorôn* were translated as 'differences', the sentence would express basically the same meaning, namely that one and the same *logos* cannot produce different properties. Since Plotinus speaks of human individuals in this context, it is likely that he does have human individuals in mind in this phrase. In other passages of V. 7 [18], *diaphorôn* is also rendered without the reference word 'individuals', but even there the embryological context shows that it must still refer to individuals.¹⁹⁸

Brisson, however, opts for a completely different translation. He renders *diaphorôn* as 'ces deux cas différents', explaining in a footnote that '[l]es traducteurs comprennent de façon radicalement différente ce membre de phrase, suivant qu'ils donnent à *tòn autòn lógon* un sens technique ou non'. Thus, Armstrong, Gerson, and Harder read *ton auton logon* in the technical sense (as do I), to mean 'the same forming principle' (Armstrong), 'the identical expressed principle' (Gerson), 'dieselbe rationale Urform' (Harder), or 'the same forming principle' (my translation). Brisson obviously does not read *logos* in the technical sense, but in the general sense of 'argument' or 'explanation':

Brisson: Non, le raisonnement [*logon*] ne peut être le même pour ces deux cas différents [*diaphorôn*]. Un homme considéré comme modèle ne peut suffire à rendre compte d'individus humains qui se différencient les uns des autres non seulement par la matière, mais aussi par d'innombrables différences formelles.

Brisson refers to the previous statement that a small number of forming principles will suffice to produce all individuals, 'just as a limited number of souls produces an unlimited number of human beings' (V. 7 [18] 1, 16–18). His translation indicates that the production of individuals by models (*paradeigmata*) cannot be compared to the ensoulment of sensible individuals by souls: they are 'deux cas différents'. While

 $^{^{198}}$ V.7 [18] 2,1-2; V.7 [18] 2,7; V.7 [18] 2,12-14. Here, too, *diaphorôn* appears without a reference word. The embryological context, however, makes it clear that what the parents produce (*poiousin*) is *diaphorôn*, i.e. different children or different individuals.

each soul can transmigrate into different bodies, an intelligible model (*paradeigma*) cannot produce different individuals.

Brisson's reading is complicated by the fact that the term logoi has already been used in a technical sense earlier in the text. It would therefore be somewhat confusing for Plotinus to have use the same word again to mean something different. In favour of Brisson's translation, on the other hand, is the fact that Plotinus uses logos in the third chapter with the general meaning of 'explanation' (V. 7 [18] 3, 12-13). Brisson's translation, however, leaves out an important point, namely that an intelligible forming principle cannot produce different things. This statement plays an important role in the further course of the treatise when Plotinus is concerned to show that every individual is produced by a unique logoi-combination (V. 7 [18] 3, 4-6; V. 7 [18] 3, 10-12).

1, 19–20 nor does 'human being' serve as a model for particular human beings who differ from each other not only in matter, but in a vast number of peculiar differences

As stated above, some proponents of the theory of Forms of individuals believe that the term *paradeigma* here refers to the Form of Human Being.¹⁹⁹ If *paradeigma* is understood in this way, the sentence under study would indeed provide evidence for the theory of Forms of individuals, for Plotinus would be claiming that a single Form of Human Being cannot account for all the peculiar properties of different individuals and that each individual needs its own corresponding Form.

A question provoked by this reading is what exact properties would a Form of an individual cause? Would this Form be the principle of all properties or only of the essential ones? It would be somewhat problematic to assume that a Form also causes non-essential properties, such as fingerprints or birthmarks. Given the discussion in Plato's *Parmenides*, it is doubtful that a Form can be the principle of body hair and other 'undignified and worthless' features.²⁰⁰ Plotinus, however, aims to derive all properties from the intelligible. Accordingly, the model (*paradeigma*) should also be the cause of non-essential properties, such as body hair, fingerprints, and birthmarks. As Plotinus often mentions in the *Enneads*, all these properties are caused by *logoi*.²⁰¹

¹⁹⁹ Blumenthal (1966: 65). Rist (1963: 225) and Kalligas (1997a: 219; 2023: 332) refer to *paradeigma* using the term 'archetype'. Like Blumenthal, they identify *paradeigma* with the Form of Human Being. Brisson (2004: 414) likewise writes in a footnote: 'Ces *paradeigmata* ("modèles"), ce sont les Formes.'

Plato, *Parmenides* 130c5–d5: "And what about these, Socrates? Things that might seem absurd, like hair and mud and dirt, or anything else totally undignified and worthless? Are you doubtful whether or not you should say that a form is separate for each of these, too, which in turn is other than anything we touch with our hands?" "Not at all," Socrates answered. "On the contrary, these things are in fact just what we see. Surely it's too outlandish to think there is a form for them" (translated by M.L. Gill and P. Ryan).

 $^{^{201}\}quad \text{V. 7 [18] 2, 1-7; V. 9 [5] 6, 13-14; V. 9 [5] 12, 9-10; II. 6 [17] 1, 30-43.}$

The term *paradeigma* does not in itself mean 'Form'. Sleeman suggests 'pattern, model, example' as possible translations for *paradeigma* in the *Enneads*. By translating *paradeigma* as 'model', I mean an intelligible blueprint — in this case, the intelligible blueprint of a 'human being'. The statement under examination basically suggests that a single intelligible blueprint of a 'human being' cannot produce all human individuals. Since all human individuals are distinguished from each other by peculiar properties, each individual needs its own intelligible blueprint.

So what exactly is the intelligible blueprint of a 'human being'? Is it a Form, a logos, or a combination of many different logoi? As an intelligible blueprint, the term *paradeigma* could of course refer to Forms, just as Plato calls the noetic cosmos a model (paradeigma) for the physical cosmos (Tim. 31a4, 37c8, 28a6-28b2).202 In Plotinus, we also find similar descriptions (III. 2 [47] 1, 20-27). According to him, every intelligible principle of the noetic cosmos, such as the *logoi*, is a model (paradeigma) for the sensible copies. But there is contextual evidence suggesting that *paradeigma* should not be associated with Forms but rather with *logoi*. First, Plotinus has already rejected Forms of individuals because the concept clashes with the doctrine of transmigration (V. 7 [18] 1, 5–8); second, the present passage still belongs to the discussion on the number of logoi in relation to the number of individuals. Having ruled out an unlimited number of logoi on account of cosmic cycles (V. 7 [18] 1, 13–14), Plotinus wonders whether a small number of *logoi* would suffice to produce all the individuals within one cosmic cycle (V. 7 [18] 1, 14–18). In the present passage we now get the answer: one intelligible model (paradeigma) of a human individual cannot produce different individuals. Because of their peculiar properties, each individual must have its own intelligible model. Hence, there has to be a numerical correspondence between intelligible models and individuals.

Is *paradeigma*, then, nothing more than a *logos*? If this were so, why does Plotinus have to introduce the term *paradeigma* to paraphrase *logos*? When Plotinus says 'why should there have to be forming principles (*logous*) and models (*paradeigmata*) for all of the things that come into being in one cycle?' (V. 7 [18] 1, 15–16), he makes it implicitly clear that there is a difference between *logos* and *paradeigma*.

The term *paradeigma* in Plato's works is mostly found in dialectical discourses concerning the method of dialectic. Cristina Ionescu (2020: 292), who studies the concept in great detail, gets to the heart of its purpose: 'Paradigms [*paradeigmata*] are images that can serve to help us move from a simple to a more complex understanding of an entity for which they serve as paradigms; ideally, though of course not always, they help us progress from opinion to knowledge.' Ionescu cites Plato's own definition of paradigms: '[W]e come to have a paradigm when one thing which is the same in something different and distinct, is rightly identified, and upon being brought together with the original thing, brings about a single true judgment about each separately and both together? (*Statesman* 278c3–6, translated C.J. Rowe)'. Ionescu (2020: 292) lists a few paradigms that can be found in the dialogues: 'e.g. the definitions of shape and color as paradigms for a definition of virtue in the *Meno*; the city as paradigm for the soul in the *Republic*; the mythical imagery of the afterlife as paradigmatic for how our souls fare during this life in the *Phaedo*, the *Phaedrus*, the *Gorgias*, and in the *Statesman*, the weaver is a paradigm for the statesman.' Thus, even sensible things can be models for other things.

Unfortunately, he does not explain how exactly the two concepts differ. To better understand the difference between *logos* and *paradeigma*, it is helpful to look at the use of logos/logoi in V. 7 [18]. As already indicated above, it becomes clear in this passage (V. 7 [18] 1, 18–19) that Plotinus considers an individual to be the product not of one *logos* but of many different *logoi*, with each *logos* being responsible for a peculiar property of the individual. Moreover, in chapter two, Plotinus explicitly describes an individual as being produced 'according to different ones [forming principles], since they (parents) have all the forming principles, but each time [they (parents) have] other principles at hand' (V. 7 [18] 2, 6-7). However, there are also passages that pose difficulties for this interpretation, as for example V. 7 [18] 3, 3-4: 'Perhaps in the case of those who are indiscernible, the forming principle [logoicomb] is one'. Here, Plotinus seems to be adopting the model of one *logos* producing one individual. But several passages from the *Enneads* explicitly ascribe individual properties and body parts to different *logoi*: 'There is one principle (*logos*) of the eye and another of the hand' (V. 9 [5] 6, 13-14), one for the 'differences of colour' (V. 9 [5] 12, 9–10), and one for any other quality or feature of any living being or thing, such as 'whiteness in the white lead' and 'heat of the fire' (II. 6 [18] 1, 30-43).

We are thus faced with a problem in V. 7 [18]. On the one hand, Plotinus considers an individual to be caused by many different *logoi*; on the other hand, he also says that an individual is produced by one *logos*. As we have seen, this problem can be solved by drawing a distinction between various uses of *logos* in the singular.²⁰³ In its basic sense, *logos* denotes a forming principle of a single property, for example 'one principle (*logos*) of the eye' (V. 9 [5] 6, 13–14). Alternatively, *logos* in the singular can also denote a multitude of *logoi* that have combined to produce a complete individual, such as a human being. The second use of *logos* in the singular resembles the use of the term *paradeigma* in the passage under examination: 'Or perhaps, there is not the same forming principle (*logos*) for different individuals, nor does "human being" serve as a model (*paradeigma*) for particular human beings who differ from each other not only in matter, but in a vast number of peculiar differences' (V. 7 [18] 1, 18–21). The model (*paradeigma*) of a human being seems to be the principle of a complete human individual with all the peculiar properties included. Therefore, the term *paradeigma* does not represent just one *logos*, but a *logoi*-combination.²⁰⁴

There is one problem with the thesis that the term *paradeigma* is not to be identified with Forms but with *logoi*-combinations: some scholars consider *logoi* and

²⁰³ See pp. 17–18, 25–26 and 131–134.

As Sorabji (2006c: 144–145) points out, the idea that individuals are distinguished by unique combinations of peculiar properties is explicitly stated by Porphyry, Plotinus' disciple. Porphyry, *Commentary on Categories* 129,8–10: '[Nor] are they [state and condition (*hexis, diathesis*)] differentiated from one another in number, as Socrates differs from Plato: for Socrates does not differ from Plato in virtue of specific differentiae, but in virtue of a distinctive *combination* of qualities (*idiotêti sundromês poiotêtôn*), in virtue of which Plato differs from Socrates' (translated by S. Strange).

Forms to be the same principles. This problem has already been noted by Panayiota Vassilopoulou (2006):

In order for the conclusion of this argument to be that in addition to the 'Form of human being' there are Forms of individual human beings, to explain the individual differences between human beings, the proponents of this view rely upon a further major assumption which I should treat as the third assumption, (3) the term *logoi* mentioned throughout this paragraph is treated as synonymous with the term *tou kathekaston idea* [i.e. Form of each individual] (which Plotinus used in the opening question of the treatise), and so identified with the Forms of individual human beings. Hence, each *logos* (= *kathekaston idea*) [i.e. Form of each individual] is responsible for the *idikais diaphorais muriais* [i.e. a vast number of peculiar differences], i.e. for what differentiates one human being from another (Vassilopoulou, 2006: 374–375).

As elaborated in the introduction, there are a few ontological differences between Forms and *logoi* in Plotinus.²⁰⁵ First, Forms are universal principles of the Intellect, whereas *logoi* are principles of the Soul. Second, *logoi* are more specific compared to Forms, which is why Plotinus describes *logoi* as unfolded Forms. To clarify the difference, there is one Form of Human Being, but there are many *logoi* of human properties and body parts, such as 'one principle (*logos*) of the eye and another of the hand' (V. 9 [5] 6, 13–14). It is *logoi* that interact directly with matter and impart it with certain properties. Forms, on the other hand, do not interact with matter.

Because some advocates of the theory of Forms of individuals identify logoi with Forms, they relate the problem of numerical unlimitedness to Forms, although this problem clearly concerns only the logoi in individual souls (V. 7 [18] 1, 12–14). Blumenthal (1966), who himself seems to identify Forms with logoi, summarises the opinions of various scholars:

Here there is no doubt that Plotinus accepts Ideas of individuals. Did he go so far as to accept an infinite number of such Ideas? In the part of his discussion that we have dealt with it seems that the number of such principles is finite, and writers on Plotinus tend to say that this was his doctrine with little sign of hesitation. So Zeller takes the postulation of cycles as a means of avoiding the infinity of the Ideas. Inge writes, 'Thus the history of the Universe contains an infinite number of vast but finite schemes, which have, each of them, a beginning, middle and end.' Similarly Armstrong says that Plotinus mentions but dismisses the idea of an infinite number of Forms in favour of a finite number reproduced in an infinite succession of world periods. On the other hand the interpretation of the final sentence of V. 7.1 given by Bréhier, Harder, and Cilento, would support the view that in this treatise Plotinus envisages an infinite number of Forms of individuals (Blumenthal, 1966: 65–66).

²⁰⁵ See pp. 18–20.

There is at least one reason to believe that the problem of numerical unlimitedness in V. 7 [18] relates only to *logoi* and not to Forms: in Platonism, the problem of numerical infinity was never seen in relation to the Intellect and Forms, because Plato defines the noetic cosmos as determined in every respect. For this reason, Forms themselves are determined, as is their number.

In Plotinus, however, in addition to the Forms in the Intellect, there are also principles in the Soul, the *logoi*. Whether the number of *logoi* is as determined as the number of Forms is not at all clear. This has something to do with the nature of the Soul, which, unlike the Intellect, thinks discursively:

For around Soul things come one after another: now Socrates, now a horse, always some one particular reality; but Intellect is all things. It has therefore everything at rest in the same place, and it only is, and its 'is' is for ever, and there is no place for the future for then too it is – or for the past – for nothing there has passed away – but all things remain stationary for ever, since they are the same, as if they were satisfied with themselves for being so (V. 1 [10] 4, 20–26, translated by A.H. Armstrong).

The Soul thus thinks of sensible individuals discursively, in the sense of 'now Socrates, now a horse'. Against this background, the question arises as to whether the sequence of sensible individuals is infinite or limited. If the number of sensible things were unlimited, then the soul would also be unlimited, and therefore not a unity. However, by means of cosmic cycles, Plotinus limits the sensible cosmos and thus also ensures that the Soul and its principles, the *logoi*, are also limited. Since discursivity is not inherent in the Intellect, but the 'Intellect is all things', the problem of numerical unlimitedness cannot concern the Forms at all, because the unlimitedness of the Intellect (and also of the First Principle, the One) is a different kind of unlimitedness.

1, 20 vast number of peculiar differences

Some scholars have connected the statement that human individuals are distinguished by a 'vast number of peculiar differences' to the Stoic theory of *idiôs poion* (i.e. 'individually qualified', see Reesor, 1972: 279).²⁰⁶ The *idiôs poion* is the second of the Stoics' 'four general "kinds" of things', and corresponds to qualities, which are in turn 'divided into common qualities (signified by, for instance, "man") and peculiar qualities (signified by, for instance, "Socrates")'.²⁰⁷ The first kind is matter, which the Stoics identified with substance. In the Stoic conception, an individual is composed of matter and peculiar properties that are also corporeal. Either component can be called a subject, which is why the Stoics say that 'each of us is two subjects. One is

²⁰⁶ Armstrong (1977: 56), Ousager (2004: 32), D'Ancona Costa (2002: 560, fn. 85).

See T.H. Irwin, (1996: 460): 'These four [general 'kinds' of things, which are sometimes taken to be counterparts to the Aristotelian categories] are: subjects, qualified things, things in some condition, and things in some condition relative to something (Simplicius *in Catg.* 66.32-67.2 = LS 27 F)'.

substance, the other is [a peculiarly qualified person?]. The first is always in flux and being carried off, neither increased nor decreased nor remaining such as it is at all; the second remains and increases and decreases, and is affected in every way opposite to the first subject, though it is coalesced and conjoined and commingled, and never allows perception to grasp the difference' (Plutarch, *Comm. Not.* 1083c-d = LS 28 A, translated by A.A. Long and D.N. Sedley, quoted in Irwin, 1996: 459). While matter is constantly changing through growth, ageing, etc., the peculiar properties always remain the same. It is by virtue of these peculiar properties that Socrates, for example, always remains Socrates and is also recognised as Socrates, even when he grows older. Peculiar properties are thus the 'source of persistence through time' of sensible individuals.²⁰⁸ It is therefore the second subject, i.e. 'the peculiarly qualified person', that actually constitutes and defines the person Socrates, and not the first subject, which is merely the matter or substance of which he is formed.²⁰⁹

I would suggest that one should be rather careful about identifying Plotinus' statement on the 'vast number of peculiar differences' with the Stoic doctrine of idiôs poion. As Sorabji (2004b: 165, 2006c: 139) points out, the idea that an individual is distinguished primarily by his or her unique properties (*idiôs*, 154a), such as Socrates' snub-nosedness, is already found in Plato's Theaetetus (209c), so it is not solely a Stoic doctrine. It is also noticeable that Plotinus uses the term *idikos* instead of the Stoically connoted term idiôs. However, both terms are related: idikos has a more technical meaning as 'specific' (according to Sleeman) or 'special' (according to LSJ),²¹⁰ while *idiôs* means 'one's own, proper, peculiar to oneself' (Sleeman). This passage is the only occurrence of the term idikos in the entire Enneads. Whether Plotinus is actually referring to the Stoic doctrine of *idiôs poion* is not clear. I think it more likely that he is simply making the common-sense argument that all individuals are unique. Uniqueness becomes relevant again in chapters two and three. In chapter two, Plotinus reaffirms that unique differences in form derive not from matter but from logoi (V. 7 [18] 2, 13-17). In chapter three, he draws the conclusion that there is nothing identical within one cosmic cycle (V. 7 [18] 3, 1–6). Even identical twins are unique individuals with different properties, even if the differences are not visible to the naked eye (V. 7 [18] 3, 9-11). It is therefore rather unlikely that Plotinus is concerned here with the simple truth that individuals are distinguished by 'a vast number of peculiar differences'. Rather, he is interested in the question of where these properties come from and what ultimately causes individuality.

It is undeniable that Plotinus incorporated Platonic as well as Aristotelian and Stoic elements into his philosophy. To better understand Plotinus' theory of individuals, it is worth taking a look at his predecessors. A concise yet extremely helpful overview of the philosophical-historical development of ancient views on individ-

²⁰⁸ Irwin (1996: 464).

²⁰⁹ Irwin (1996: 460).

²¹⁰ LSJ: 'ἰδικός [ῖδ], ή, όν, (εἶδος) late form of εἰδικός (q.v.), special'.

uals is provided by Richard Sorabji (2004b: 164–204). Essentially, there are two theories of individuals that, at first glance, stand in stark contrast to one another: (i) Plato's bundle theory and (ii) Aristotle's theory of individual form. Elements of both these theories can be found in V. 7 [18]: it seems to me that Plotinus develops a theory of individuals by combining the Platonic and Aristotelian approaches.

- (i) Plato's bundle theory, developed in the *Theaetetus* and the *Timaeus*, states that sensible objects are not independently existing substances, but bundles (*athroisma* and also *sundromê* in the *Theaetetus* 157b–c) of various properties that the objects acquire through their participation in the intelligible Forms.²¹¹ Forms are the real substances, of which the sensible objects are but images or copies. In comparison with the intelligible principles, which are the real beings, the sensible objects are not being, but always becoming. In light of this, Plato criticises the fact that we tend to speak of sensible objects as 'this' and 'that' (*tode kai touto*), when it would be more correct to speak of them as 'such and such' (*toiouton*) (*Tim.* 49d–50a3).²¹²
- (ii) Aristotle's theory of individual form sees physical objects as actually existing substances that combine matter with an individual form, the form being the primary substance of the respective objects. 213

This rough overview shows that Plato's and Aristotle's views of sensible individuals seem to be opposed in every respect. However, Sorabji (2004b: 172) points out that the Platonic and Aristotelian approaches were seen by some commentators as not so different when it came to the question of what distinguishes individuals from one another. For Plato, individuals differ according to their unique combinations of properties, such as eye colour and nose shape, which all arise from the different ways of participating in the intelligible Forms. In the *Metaphysics*, Aristotle also asks what distinguishes two individuals from each other:

²¹¹ Compare Sorabji (2004b: 165).

A somewhat similar approach is taken by the trope theory of contemporary metaphysicians: "Trope theory is the view that reality is (wholly or partly) made up from tropes. Tropes are things like the particular shape, weight, and texture of an individual object. Because tropes are particular, for two objects to "share" a property (for them both to exemplify, say, a particular shade of green) is for each to contain (instantiate, exemplify) a greenness-trope, where those greenness-tropes, although numerically distinct, nevertheless exactly resemble each other' (Maurin, 2018 in *Stanford Encyclopedia of Philosophy*). Unlike Plato, the founder of trope theory, D.C. Williams, does not hold that tropes are mediated by intelligible principles. An attempt to synthesise the Platonic bundle theory and the trope theory is made by Christopher Buckels (2020) in his article 'A Platonic Trope Bundle Theory'. For more on tropes and bundles, see Casullo (1988), McPherran (1988), Ehring (2001), McDaniel (2001), Schaffer (2001), Silverman (2002), Ehring (2011), and Buckels (2018).

I have borrowed the expression 'theory of individual form' from Michael Frede's article (1987b: 65). Consider also the discussion on 'forms of individuals in Aristotle' in Sorabji (2004b: 164). On individual or particular forms (eidê) in Aristotle's embryology see Albritton (1957), Balme (1962, 1980), Charlton (1972), Heineman (1982), Cohen (1984), Whiting (1986), Frede (1987b, 1990), Witt (1989), Lloyd (1990), Sorabji (2004), Gelber (2010), Salmieri (2018), Ainsworth (2020).

Thus obviously there is no need to set up a form as a pattern (for we should have looked for Forms in these cases especially, since living things are in a special sense substances); the thing which generates is sufficient to produce, and to be the cause of the form in the matter. The completed whole, such-and-such a form induced in this flesh and these bones, is Callias or Socrates. And it is different from that which generated it, because the matter is different but identical in form, because the form is indivisible (*Metaph.* VII 1034a1–9, translated by H. Tredennick).

Aristotle also considers form (i.e. all the various properties) to be the principle of individuation. For him, however, it is important that this form is rooted in matter. It is 'this flesh and these bones', with their own unique qualities, that distinguish Callias from Socrates. As Sorabji says, if Aristotle regards matter as the seat of individual qualities and differences of form, '[i]n that case, differentiation by matter is the same as differentiation by distinctive qualities' (2004b: 172).²¹⁴

Before Plotinus, the Stoics had recognised that aspects of the two theories can be usefully combined. Sorabji (2004b: 165) notes that they 'borrowed from Plato the idea of uniquely distinctive characteristics (*idiotetes*, Latin *proprietates*) for each individual. [...] [L]ike Aristotle, they kept the idea of matter, which they called substance (*ousia*), as the subject of qualities, and did not follow Plato in making the individual consist of a bundle of qualities only.' It was the Stoics who first declared the necessity of individual uniqueness. In doing so, they argued that it is impossible for two identical individuals to exist, because it is impossible for 'the sage' to distinguish the two individuals from each other. Plotinus also argues for the uniqueness of individuals in the third chapter of V. 7 [18].

Following on from the Stoics, Plotinus likewise integrates both Platonic and Aristotelian elements into his theory of the individual. Like Plato, Plotinus understands individuals as bundles of properties, or rather as bundles of the intelligible principles of properties – *logoi*. And like Aristotle, the *logoi*-combinations are 'mixed' with matter to form the substance of individuals.²¹⁵ A similar conception of the individual as the totality of his peculiar properties is also held by Porphyry. In the second chapter of the *Isagôgê*, Plotinus' disciple writes:

Sorabji (2004: 172) refers here to later commentators who also did not see a strong difference between Plato's and Aristotle's conceptions of the individuation principle. Alexander *in Metaph.* 216, 2–3: 'For the differences between particular men are material' (translated by A. Madigan). Ammonius *in Isag.* 60,16–21: 'Of those [spoken sounds, *phönai*] predicated substantially some are said of things differing in species, viz. genera and differentiae, and some of things that differ numerically, viz. the [ultimate] species of individuals which differ from each other not in species but in matter – for instance I say "horse" of Xanthus ["Chestnut"] and Balias ["Dapple"]' (translated by A. Busse).

Plotinus understands the interaction between logoi and matter as a 'mixture'. III. 2 [47] 2, 39–42: 'Its (the universe's) terminal points are matter and rational principle [i.e. logos]; its starting point is Soul presiding over the mixture, Soul which we must not think suffers any harm as it directs this All with the utmost ease by a sort of presence' (translated by A.H. Armstrong).

On appelle 'individu' Socrate, et ce blanc-ci, et le fils de Sophronisque qui s'en vient (à condition que Sophronisque n'ait que Socrate pour fils). Ces [êtres] sont donc appelés 'individus', parce que chacun d'entre eux est constitué de caractères propres, dont le rassemblement ne saurait jamais se produire identiquement dans un autre : en effet, les caractères propres de Socrate ne sauraient jamais se retrouver chez un autre être particulier, tandis que ceux de l'homme, je veux dire de l'homme commun, peuvent se retrouver chez plusieurs hommes, ou plutôt même chez tous les hommes particuliers, en tant qu'hommes (Porphyry, *Isagôgê* 7, 16–24, translated by A. de Libera and A.P. Segonds).²¹⁶

Socrates is called an 'individual', and this white man, and the son of Sophroniscus who is coming (provided Sophroniscus has only Socrates for a son). These [beings] are therefore called 'individuals', because each of them is made up of peculiar properties, the gathering of which can never occur identically in any other: for the peculiar properties of Socrates can never be found in any other particular being, whereas those of human being, I mean of the common human being, can be found in several human beings, or rather in all particular human beings, insofar as they are human beings (my translation of the French).

1, 20–22 it is unlike the way images of Socrates relate to their archetype. No, the difference in production needs to stem from different forming principles.

Here, Plotinus wants to substantiate the previous assertion that a single model (i.e. a *logoi*-combination) of a 'human being' cannot produce various individuals who differ according to a multitude of peculiar properties. So, he argues that the relationship between individuals and their intelligible models (i.e. *logoi*-combinations) is different from that between the images (*eikones*) of Socrates and their archetype (*archetupon*), i.e. the person Socrates.²¹⁷ Plotinus insists that 'it is necessary that different individuals are caused by different forming principles'; his aim is to establish a numerical one-to-one correspondence between *logoi*-combinations and individuals, in the sense that one individual is produced by one *logoi*-combination. I call this the Correspondence Premise.

Plotinus then contrasts the relationship between sensible individuals and their *logoi* with the relationship between Socrates and his images: Socrates can be the archetype of many different images, paintings, or statues, whereas a particular *logoi*-combination can only be the principle of one particular individual. Accordingly, every living being must be produced by its own unique *logoi*-combination. The example does not confirm the existence of Forms of individuals, as Remes (2007: 77) concedes:

²¹⁶ Graeser (1996: 193).

On Plotinus' attitude to images, and in particular to his own portrait as depicted in the *Vita Plotini* (1, 4-19), see Stern-Gillet (2000: 13-45).

Since people have different structures, Plotinus reasons, it seems unlikely that all human beings could be formed according to one, single form. The forming principles must be different. What is denied is that human beings with different characteristics could be like bronze statues made according to one and the same model, differing merely in respect to the bit of bronze they are cast in. That would be the point about the portraits of Socrates. But as I see it, the text is not necessarily saying anything about forms of individuals (Remes, 2007: 77).

There are at least two other passages in the *Enneads* where Plotinus uses the example of Socrates and his images:

For it is absurd to put being under one genus with non-being, as if one were to put Socrates and his portrait under one genus (VI. 2 [43] 1, 23–25, translated by A.H. Armstrong).

It was said about the qualitative that, mixed together with others, matter and the quantitative, it effects the completion of sensible substance, and that this so-called substance is this compound of many, and is not a 'something' but a 'something like'; and the rational form, of fire for instance, indicates rather the 'something', but the shape it produces is rather a quale. And the rational form (*logos*) of man is the being a 'something', but its product in the nature of body, being an image (*eidôlon*) of the form, is rather a sort of 'something like'. It is as if, the visible Socrates being a man, his painted picture (*eikôn*), being colours and painter's stuff, was called Socrates; in the same way, therefore, since there is a rational form (*logos*) according to which Socrates is, the perceptible Socrates should not rightly be said to be Socrates, but colours and shapes which are representations of those in the form; and this rational form (*logos*) in relation to the truest form of man is affected in the same way (VI. 3 [44] 15, 24–39, translated by A.H. Armstrong).

The first passage elucidates another aspect of the comparison. Just as being and non-being belong to two different genera, so also Socrates and his images belong to two different genera. The former is a human being; the latter is an artefact made of paint, paper, wood, and other materials. There is indeed a similarity between Socrates and his images in the sense that one can recognise the person Socrates in his images. However, the two differ in their essence.

The second passage reveals that the sensible Socrates and the intelligible Socrates also belong to two different genera: what we call Socrates (i.e. the historical person Socrates) is just an image of the 'real Socrates' and 'should not rightly be said to be Socrates'. The 'real Socrates' is the *logoi*-combination (*logos*) of Socrates (which Armstrong translates as 'the rational form'). Just as the human Socrates and the painter's materials are entirely different genera, so too the intelligible *logoi*-combination and the sensible Socrates are qualitatively different. Whereas the *logoi*-combination is a 'something', i.e. it is a substance and essence, the sensible Socrates is

a 'sort of "something like", i.e. not a substance and not an essence. ²¹⁸ Plotinus even goes so far as to say that it would actually be wrong to call the sensible Socrates 'Socrates', since it is only a representation of Socrates. The real Socrates, after all, is the *logos* (rational form, as Armstrong would say, or *logoi*-combination, as I would put it).

Also insightful are Kalligas' comments on the same passage (i.e. VI. 3 [44] 15, 24–39). Kalligas (2011: 772) points to the two aspects of the *logos*: definitional and perceptual. In its definitional aspect, the *logos* represents the essential nature or pattern of a physical object. For example, in the case of fire, it encapsulates the combination of its fundamental qualities like heat and dryness. However, when we perceive an actual object like fire, our senses do not directly grasp the *logos*. Instead, we experience individual qualities (qualia), such as the sensation of heat. Kalligas explains that these qualities are like separate images or affections perceived by our senses. To understand the true essence represented by the *logos*, our soul's reasoning faculty plays a crucial role. According to Kalligas, the soul combines and associates these separate sensory perceptions, reconstructing the *logos* in our minds. The *logos* itself is not directly perceptible; it is accessible only through the rational capacities of the soul.²¹⁹

1, 22–23 Perhaps, the whole cosmic cycle contains all the forming principles, and again the same things are produced according to the same forming principles.

We have already discussed cosmic cycles and the fact that Plotinus did not adopt this theory from the Stoics, since the theory of cosmic cycles in the *Enneads* lacks the essential Stoic component of the periodic destruction of the cosmos by conflagration (*ekpurôsis*).²²⁰ Instead, we have pointed to the possibility that Plotinus could be referring to the Platonic doctrine of the 'perfect year' (i.e. a complete cosmic cycle) from the *Timaeus* (39d2–e1). The present sentence, however, contains an idea

 $^{^{218}}$ A similar statement about how people mistakenly refer to things in the world as 'this' and should actually speak of things in terms of 'what is such' is found in Plato's *Timaeus* 49d–50a3.

Kalligas (2011: 772): 'It is said here that in its definitional aspect the logos designates the essence of some bodily object, i.e., a pattern for the constitutive qualities which make up what it is. In the case of fire, for example, it refers to the combination of the hot and the dry, which are the constitutive elemental properties of fire. But in the actual fire, these qualities are perceived separately by the various sense organs as qualia or affections $[\pi \acute{a}\theta \eta]$ incurred of them, as images of something that lies beyond their reach (cf. V. 5. 1, 12–19). It is only when these disparate sensations are brought together and associated with one another by the soul's reasoning faculty that the soul is able to reconstruct, in its own mind, the underlying reality of the formative logos. For the logos itself is not directly perceptible, being accessible only to the rational capacities of the soul. In this way, the sensible qualities constituting the body are viewed as secondary activities or evéryera issuing from the logos and as being arranged according to the formula exhibited by the corresponding definition. When all the parts of the definition are analysed to their ultimate components, the result is a full list of all the constitutive qualities which make up the corresponding body'.

²²⁰ See pp. 142-144.

that one would more readily attribute to the Stoics than to Plato. This idea is that with the completion of a cosmic cycle, a new cycle begins that is identical to the previous cycle. Plotinus says that 'again the same things happen all over according to the same forming principles'; in other words, the same things, animals, and people come into being, produced by the same *logoi*-combinations as in the previous cycle. In the new cycle, Socrates and Plato are reborn, identical to Socrates and Plato from the previous cycle because their souls actualise the same *logoi*-combinations.

The completion of the entire cosmic cycle is determined by the actualisation of all the *logoi* that are present in the Soul. Once all possible *logoi*-combinations have been actualised and instantiated in the sensible world, a new cosmic cycle begins and the process of actualising the *logoi* begins anew. Since the structure of the intelligible world is consistent and determinate, there is no possibility of the new cosmic cycle being different to the previous one. The World Soul and the individual souls will actualise the same *logoi*-combinations in the same order, resulting in an identical cosmic cycle.

While it is certain that the Socrates and Plato born in the new cycle must be identical to the Socrates and Plato of the previous cycle, it is not stated that the same things must happen again, with history repeating itself according to the exact same chain of events. After all, if individual souls reincarnate to learn and improve through the moral lessons of their lives, why should they live and act exactly as they did in the previous cycle upon reincarnation in the next? I also find Kalligas' (2023: 333) interpretation of the identical cosmic cycles very compelling: 'Each cosmic period will contain all formative principles, but this does not mean that the forms will be realized each time in the same manner. I understand the final observation as Blumenthal 1971a, 117–18: infinity exists in the intelligible realm only potentially and is manifested in the world of sensible entities in a ceaseless variety, depending on the progression of circumstances.' However, it is not clear whether Plotinus is actually convinced that things run strictly according to the same scenario in all cosmic cycles, or whether deviations are possible within the actualisation process of the logoi: there is simply too little said here. What can be said with certainty, however, is that the size and fullness of a cosmic cycle depends on the number of logoi and logoi-combinations, which is reaffirmed in chapter three (V. 7 [18] 3, 14–19): '[T]he quantity [of individuals] will be determined by the unrolling and unfolding of the sum-total of forming principles; so that when all things come to an end, there will be another beginning. For how vast the cosmos has to be, and how many individuals it [the cosmos] will pass through in the course of its life, is grounded from the very beginning in that which contains the forming principles.'

1, 23–25 One must not fear unlimitedness in the intelligible world; for the whole unlimitedness is contained in the indivisible, as it were, and comes forth, whenever it actualises.

Through the theory of cosmic cycles, Plotinus has limited both the size of the cosmos and the number of living beings born in it. He has also established that cosmic cycles repeat eternally. Plotinus now asserts that the eternal continuance of the cosmos does not imply unlimitedness (apeiria) in the intelligible world (en tô noêtô). For the cosmic cycles to repeat eternally, there is no need for an infinite number of logoi. The intelligible world is supra-temporal (überzeitlich), meaning that it exists beyond time and encloses it, as it were. The intelligible world is therefore not divided by temporal units: there is no past, present, or future, only one unity. The eternal continuance of the cosmic cycles rests as a unity in the indivisible (en amerei) intelligible sphere, which is the World Soul and the logoi. When the World Soul actualises (energein) the logoi, the sensible cosmos comes forth (prohienai) and repeats in cycles forever.

The adverb 'whenever' (*hotan*) presents a difficulty for the translator as it introduces temporality into the intelligible world. The sentence gives the impression that the intelligible world comes into actuality at certain points in time, or that *logoi*-combinations are actualised one after the other. The intelligible world, however, is always in a state of actuality/activity (*energeia*). In order to bring forth sensible things, their principles, the *logoi*, must always be actualised by the World Soul and the individual souls. The actualisation process of the *logoi* is the activity (*energeia*) of the Soul. And although all *logoi* are actualised as a whole, the sensible cosmos emanates only gradually from the intelligible world. The cosmic cycles instantiate themselves as a temporal process, in which the things come into being and living beings are born one after the other.

2. V. 7 [18] 2: EMBRYOLOGY – HOW ARE *LOGOI* PASSED ON FROM PARENTS TO OFFSPRING?

ARGUMENT OF V. 7 [18] 2

To gain a clearer understanding of the second chapter, it will be helpful to briefly recall the main premises of chapter one:

- 1. Neoplatonic Premise: the principles of human individuals are in the intelligible (V. 7 [18] 1, 1-3).
- 2. Because of transmigration of souls, the principles of human individuals cannot be the Forms in the universal Intellect (V. 7 [18] 1, 5-8).
- 3. Compromise based on forming principles (*logoi*): if the soul of each human individual possesses the *logoi* of every single person in the cosmos, individual souls will be able to transmigrate into other human (or animal) bodies. The principles of human individuals are therefore the *logoi* in the Soul (V. 7 [18] 8–10).
- 4. If the cosmos contains the logoi of each individual living being, then so does every individual soul (V. 7 [18] 1, 11–12).
- 5. Because the cosmos is limited by periodic cycles, the number of living beings born is limited. Consequently, the number of logoi must also be limited (V. 7 [18] 1, 13–14).
- 6. Correspondence Premise: every individual property must result from a corresponding forming principle (*logos*). To have a particular property is to actualise a *logos*, which is the cause of this particular property. Accordingly, individuals characterised by various peculiar properties must result from a *logoi*-combination. Furthermore, each individual actualises a unique *logoi*-combination (V. 7 [18] 1, 18–22).

Based on the results of the first chapter, Plotinus develops an innovative theory of embryology in chapter two. Plotinus' embryology is based on the thesis that parents pass on *logoi* to their children. What makes this innovative is that, first, the function of the *logoi* is comparable to the function of the genetic code in modern scientific embryology, and second, both parents are equally involved in the formation of their offspring. In view of typical ancient theories of embryology, in which the role of the female was considered inferior to that of the male, the second aspect requires special attention. A total of four embryological questions are addressed in chapter two:

- (I) Which logoi do parents pass on to their children? (V. 7 [18] 2, 1–7).
- (II) How is it that children from the same parents are different or resemble their parents to different degrees? (V. 7 [18] 2, 7–13).

(III) Does matter have an influence on the development of different phenotypes? (V. 7 [18] 2, 13-18).

(IV) Is it possible for absolutely identical individuals to be born in the same cosmic cycle? (V. 7 [18] 2, 18-25).

To begin, Plotinus examines which *logoi* are biologically passed on from parents to children. 221 First, he notes that mixtures of paternal and maternal logoi produce different children, since all siblings from the same parents have different peculiar properties (V. 7 [18] 2, 1–2).²²² Despite their resemblance to their parents in certain respects, children are not simply pieced together like a patchwork of parental properties. Each child also has its own peculiar properties, such as birthmarks, different facial and bodily proportions, or talents that are not found in the physical appearance or character traits of the parents. Hence, whenever the logoi of the father and the mother are combined to produce a child, a different mixture occurs each time. On the basis of this observation, Plotinus concludes that in procreating, parents can draw on *logoi* other than those which they actualise themselves (V. 7 [18] 2, 2-5). To substantiate his claim, Plotinus refers to his statement in the first chapter that the soul of each individual contains all the *logoi* that exist in the cosmos (V. 7 [18] 1, 8–10). The children, therefore, have different peculiar properties because their parents have all the *logoi* existing in the universe at their disposal for the formation of their offspring (V. 7 [18] 2, 5-7).

Next, Plotinus asks how it is that children of the same parents look different from one another (V. 7 [18] 2, 7–8). Implicitly, this question addresses the problem of generational resemblance, i.e. why some children resemble one parent more than the other, both in terms of physical and personality traits. Plotinus' answer is that this phenomenon arises from an unequal dominance between the maternal and paternal *logoi* (V. 7 [18] 2, 8). He then discusses how this occurs, denying that it is due to one parent passing on a greater number of *logoi* than the other (V. 7 [18] 2, 8–13). Third, Plotinus asks why people with different phenotypes are born in different regions of the earth and whether matter has an influence on the development of different phenotypes (V. 7 [18] 2, 13–14). In answer, he excludes the influence of matter on the formation of different phenotypes, tracing every development of healthy and beautiful bodily properties back to the intelligible *logoi* (V. 7 [18] 2, 15–18). Finally, Plotinus asks why there must be as many different *logoi*-combina-

^{&#}x27;Heredity, the sum of all biological processes by which particular characteristics are transmitted from parents to their offspring. The concept of heredity encompasses two seemingly paradoxical observations about organisms: the constancy of a species from generation to generation and the variation among individuals within a species. Constancy and variation are actually two sides of the same coin, as becomes clear in the study of genetics.' At: https://www.britannica.com/science/heredity-genetics.

²²² In the second chapter, Plotinus examines in general the case of siblings. Identical twins is dealt with later in the third chapter.

tions as there are individuals born in one cosmic cycle, and whether it is not possible for one *logoi*-combination to produce several identical individuals within the same cosmic cycle (V. 7 [18] 2, 18-25). These questions introduce the third chapter and are conclusively answered there. The second chapter can therefore be divided into four sections: (I) V. 7 [18] 2, 1-7; (II) V. 7 [18] 2, 7-13; (III) V. 7 [18] 2, 13-18; and (IV) V. 7 [18] 2, 18-25.

- (I) Sentences (i) and (ii): which *logoi* do parents pass on to their children? (V. 7 [18] 2, 1–7).
 - (i) Rejection of the idea that parents only pass on those *logoi* which they themselves actualise: Plotinus begins by stating that the mixtures (*mixeis*) of maternal and paternal *logoi* always produce different offspring (*diaphorous*). It follows that the mixtures of parental *logoi* must consist of different *logoi* each time a child is produced. It cannot be the case the parents always produce children according to the same *logoi*-combination, namely the *logoi*-combination which they themselves actualise. Plotinus thus rejects the model according to which parents pass on to their children their own *logoi*-combination, which they have inherited in turn from their own parents. In this way, all siblings do not have the same *logoi*-combination, but each is produced according to a unique *logoi*-combination (V. 7 [18] 2, 1–5).
 - (ii) Introduction of the Plotinian model of heredity: Plotinus claims that each time parents reproduce, their child is formed according to a different *logoi*-combination. Plotinus asserts that parents have at their disposal all the *logoi* that exist in the cosmos from which to form their offspring. With this assertion, Plotinus implicitly refers back to the first chapter, where he had stated that 'if the cosmos possesses [the forming principles] not only of the human being, but also of individual living beings, so, too, does the soul' (V. 7 [18] 1, 9–10). Accordingly, parents can produce children using *logoi* which they themselves do no actualise (V. 7 [18] 2, 5–7).
- (II) Sentences (iii), (iv), and (v): how is it that children from the same parents are different or resemble their parents to different degrees? (V. 7 [18] 2, 7–13).
 - (iii) Question on the different degrees of resemblance between children and their parents: how is it that siblings are different from one another? (Implicit question: why do some children resemble one parent more than the other?) (V. 7 [18] 2, 7–8).
 - (iv) Answer: siblings resemble their parents to different degrees because at each conception there is 'dominance that is unequal' (*ouk isên epikratêsin*) between the maternal and paternal *logoi* (V. 7 [18] 2, 8).
 - (v) Explanation of the unequal dominance between the maternal and paternal *logoi*: Plotinus rejects the embryological model that assumes an unequal dominance between the maternal and paternal *logoi* in a quantitative sense: it is not the case that sometimes one parent passes on a greater number of *logoi* to the children than the other, while other times both parents contribute an equal number of *logoi*. Rather,

both parents always contribute the same number of logoi, namely the total number stored in their souls. Since each soul possesses all the logoi that exist in the cosmos (V. 7 [18] 1, 9–10), the mother and father both pass on the whole $(hol\hat{o}n)$ set to the offspring. But it is either the maternal or the paternal logoi that dominate (kratei) the matter $(hyl\hat{e}s)$ of the future child, the criterion of dominance being neither the sex of the parent nor the number of logoi contributed. ²²³ Why in each case either the paternal or the maternal logoi dominate is not explicitly mentioned here (V. 7 [18] 2, 8–13).

At the core of Plotinus' embryology is the equality of both parents — male and female — in terms of causation and formation of the embryos. Plotinus was the first ancient thinker to value the mother's role in procreation equally with the father's.

- (III) Sentences (vi) and (vii): does matter have an influence on the development of different phenotypes? (V. 7 [18] 2, 13–18).
 - (vi) Question on the development of different phenotypes: why do individuals have different phenotypes in different geographical regions (*allê chôra*)? Is it because matter ($hyl\hat{e}$) is dominated by logoi to different degrees in different places? (V. 7 [18] 2, 13–14).
 - (vii) Answer: if different phenotypes were due to the fact that *logoi* dominate matter to different degrees in different regions, then development of the different phenotypic properties would be due to the influence of matter. If this were so, then the different phenotypes in different geographic regions would be unnatural (*para phusin*). Plotinus says that matter can only be the cause of ugliness (*aischos*), such as deformity or malfunction of the body. Since different phenotypes exhibit beautiful properties (*diaphoron pollachou kalon*) everywhere on earth, the cause of their development must be different *logoi*. In addition, Plotinus confirms the omnipresence of the whole *logoi*-set (*dothentôn de holôn*), even in malformed body parts (V. 7 [18] 2, 15–18).
- (IV) Sentences (viii) and (ix): is it possible for absolutely identical individuals to be born in the same cosmic cycle? (V. 7 [18] 2, 18-25).
 - (viii) Question on the number of *logoi*-combinations in relation to the number of individuals: given that individuals appear different even though the whole *logoi*-set is present in each individual, why must there be as many different *logoi*-combinations as there are individuals in one cosmic cycle? (V. 7 [18] 2, 18–21).

In Aristotelian embryology, the male sex is both the cause of procreation and the formal cause of embryos. Aristotle considers the female only as the material cause of children. In other ancient theories of embryology, such as those of Hippocrates and Galen, the reproductive power of the female is also significantly inferior to that of the male.

(ix) Follow-up question on the possibility of the existence of identical individuals. Plotinus explains that individuals are all different, although the whole *logoi*-set is present in everyone, because each individual actualises only particular *logoi* (a particular *logoi*-combination) from whole *logoi*-set (V. 7 [18] 2, 5–7; V. 7 [18] 2, 12–13). He therefore rephrases his question and asks whether it is possible for the same *logoi*-combination to dominate in several individuals, or for several individuals to actualise the same *logoi*-combination, meaning that identical individuals could be born within the same cosmic cycle (V. 7 [18] 2, 21–25).

2, 1–5 If, however, the mixtures of forming principles of the male and female produce different offspring, there will not be some particular forming principle [logoi $^{\mathrm{comb}}$] for each individual that is born, and each of the parents, for instance the male, will produce not according to different forming principles, but according to one [logoi $^{\mathrm{comb}}$], his own or his father's.

The second chapter abruptly introduces the subject of embryology: the first chapter contains no indication that the main topic of the second and part of the third chapter will be biological heredity. Nevertheless, the results of the first chapter are fundamental to the theory of embryology that Plotinus puts forward here. One important conclusion from chapter one is that the soul of each individual contains all the forming principles (*logoi*) of every individual living being born in the cosmos (V. 7 [18] 1, 9–12). Another important conclusion is that the cause of an individual is not simply one forming principle (*logos*), but a complex *logoi*-combination. In fact, each individual must be produced by a unique *logoi*-combination in order to account for all their peculiar differences (idikais diaphorais muriais) (V. 7 [18] 1, 18-22). 224 One and the same *logoi*-combination cannot produce different individuals, because each forming principle (logos) from the logoi-combination is responsible for a peculiar property (e.g. a logos determining eye colour, another determining the shape of the nose, etc.). To exhibit a property is therefore to actualise a particular logos, which is the cause of that property. It should be noted that Plotinus can refer to the logoi-combination of one individual using logos in the singular.

Before presenting his own theory of biological inheritance, Plotinus first dismisses some ideas of his predecessors.²²⁵ To begin with, he states that the mixtures (*mixeis*) of maternal and paternal *logoi* produce different children: each time a couple reproduces, their offspring have different physical properties and character traits. Each of the siblings is an individual consisting of various peculiar properties.

In my commentary on the passage V. 7 [18] 1, 18–22 (pp. 148–160), it was shown that what Plotinus calls a model (*paradeigma*) must be a *logoi*-combination. The expression 'model of a "human being" thus implies a complex construct that cannot consist of only one forming principle, but must consist of a multitude of different forming principles – a *logoi*-combination, in other words.

Plotinus does not mention any names when he refers to embryological theories which he criticises and rejects. According to Porphyry, however, Plotinus was well acquainted with some of the physicians who attended his lectures, and it can therefore be assumed that he was well versed in Hippocratic as well as Aristotelian and Galenic embryology.

As we have learned from the first chapter, any peculiar property must be caused by a corresponding logos (V. 7 [18] 1, 18–22). It cannot therefore be the case that the mixtures of maternal and paternal logoi always produce the same logoi-combination ($logos\ tis$) for their offspring (ginomenou). If the parents were to pass on to the children only those logoi that they themselves actualise, then the pool of possibilities for forming children would be very small. The children could not have any unique peculiar properties, such as individual birthmarks or fingerprints, because each of these properties would have to be already present in either the father or the mother. For children to be fully unique individuals, heredity must involve logoi other than those actualised by the parents. For this reason, Plotinus rejects the idea that each of the parents produces offspring according to their own logoi-combination (kath' hena ton autou), or that of their own father or mother (\hat{e} patros autou).

Furthermore, Plotinus implicitly rejects the idea that parents produce children according to only one forming principle. It becomes clear that procreation involves many different forming principles which are transmitted to the embryo. Later, we will learn that parents pass on the whole *logoi*-set – all the *logoi* that are stored in their souls – to their children (V. 7 [18] 2, 11–12). We learned in the first chapter that the soul of each individual contains *logoi* from every living being born in the cosmos (V. 7 [18] 1, 11–12). From this whole logoi-set, however, only certain logoi are actualised: the soul of Socrates, for example, actualises only the 'Socratic' logoi (or the 'Socratic' logoi-combination) as long as it is incarnated as Socrates. This gives rise to several questions on heredity – some of which Plotinus answers in the second chapter, others he leaves unanswered. If both parents pass on the whole logoi-set to the child, does this not lead to a doubling of the *logoi*-sets in the child's soul? Furthermore, if the child's *logoi*-combination can be a mix of *logoi* actualised by the parents and other logoi, then according to what principle is the child's logoi-combination put together? In other words, what principle determines which logoi the conceived child will actualise and how many of them will be logoi actualised by the respective parents?

2, 1–2 If, however, the mixtures of forming principles of the male and female produce different offspring

Plotinus begins the chapter by proposing that male and female *logoi* must be mixed together to produce a child. This proposition implies that both parents are involved in passing on genetic information to their offspring. In ancient embryology, however, it was not a self-evident assumption that mothers have an equal position compared to fathers in the generation and formation of children. The most widespread ancient models of reproduction were those of Hippocrates, Galen, and Aristotle. In all three models, female reproductive ability was considered significantly inferior to that of the male. It was either said that females had weak semen (Hippocrates), or that their reproductive organs were incomplete (Galen), or that, due to their 'cold

nature', females were not capable of producing semen (Aristotle).²²⁶ Aristotelian embryology was particularly prominent, according to which the male represented the formal cause and the female the material cause — a theory known in scholarship as 'reproductive hylomorphism'.²²⁷ Simply put, Aristotle attributed to the male the function of providing form, life, and soul to the embryo, whereas to the female he assigned the function of providing matter, food, and space. This might sound eccentric, but at the time it was simply not possible to confirm whether females produce semen or an equivalent means of contributing to reproduction.²²⁸

As far as the number of seeds (*sperma*) is concerned, ancient embryologists can be assigned to either (i) the one-seed or (ii) the two-seed theory:²²⁹

- (i) The one-seed theory, supported more by philosophers like Anaxagoras, Aristotle, and Neoplatonists than by physicians, was crucial in Aristotle's work. He linked it to hylomorphism and the four causes – material, formal, efficient, and final – asserting that the male provides the formal and efficient causes, while the female contributes the material cause in procreation. However, assigning different reproductive roles to each sex raises inconsistencies with observed hereditary traits, particularly in explaining maternal resemblances and the organic nature of the sperm. Accordingly, in procreation and heredity, the male seed (sperma) transmits the form to the embryo, while the female menses (katamênia) is itself the matter from which the embryo is formed under the influence of the forming movements of the seed. The fact that different causes are attributed to the male and the female, and that therefore the male and the female perform different functions in reproduction and heredity, poses serious problems because the physical reality does not correspond well to the underlying metaphysical model. While this model can convincingly explain the similarity between a father and his offspring, it cannot explain the similarity between a mother and her children. Equally problematic seems to be the fact that the sperm, which is considered the only formal cause of the embryo, is itself made of organic material.
- (ii) The two-seed theory seems to have been more widespread than the competing one-seed theory. The theory not only found support among philosophers such as the Pythagoreans, Parmenides, Empedocles, Democritus, Epicurus, and Plato, but was also advocated by the most influential physicians such as Hippocrates and his followers, and Galen. It addresses the hereditary influence of mothers, a problem for one-seed theorists. However, it faced its own dilemma: if females produce seed, why is a male's necessary? Two-seed theorists posited that the female seed is either inactive or, per Galen, infertile. This, however, seems to loop back to the one-seed issue of explaining maternal traits. In listing the proponents of this theory, Wilberding includes Plato. Although Plato himself does not comment clearly on the issue, his embryological account in the *Timaeus* can certainly be interpreted in terms of the two-seed theory.

²²⁶ Wilberding (2015a: 321–322).

²²⁷ Henry (2006a: 257–288).

 $^{^{228}}$ The ovum was first discovered in the nineteenth century by the anatomist Karl Ernst von Baer and discussed in his study *De ovi mammalium et hominis genesi* (1827).

The information presented here is a summary of Wilberding (2015b: 152, 2017: 58–60).

In ancient times, the semen (or seed) was seen as both the generative cause and the seat of formative powers – effectively the genetic information – for future offspring. While it was possible to detect the semen in males, this was not possible in females. What was observed in females was menses, which Aristotle identified as the material that females contribute to reproduction, albeit with a lesser status than male semen. Aristotle believed the menses to be the matter from which the embryo was formed. It was therefore assumed that the essential task of the female was to deliver the embryonic matter and to carry the embryo in the womb, a task which was primarily associated with nutritional and protective functions. Since no semen was to be found in the female, ancient thinkers explained animal reproduction using an agricultural analogy: male semen is planted in the female body just as a seed is planted in soil. The uterus, like the soil, receives the semen and nourishes it. In the process, the embryo develops according to the form created in the semen by the father. The mother in turn influences the development of the embryo insofar as she provides the matter, out of which the embryo is formed.

Aristotelian embryology, much of which is found in the *Generation of Animals* (*GA*), is of course much more complex than reproductive hylomorphism might initially imply. According to Aristotle, the matter that the mother contributes to reproduction is in some sense pre-formed. Otherwise, the theory could not explain how similarities arise between children and their mothers. Nonetheless, reproductive hylomorphism probably did lead to the association of the female with matter alone and the male exclusively with form. This further devalued women, who already had a low social position, biologically and in their function as mothers. As Roberto Lo Presti (2014: 933) rightly notes, 'it is clear that the duality male/female is to be understood within the frame of the other most essential polarities that are to be found in the Aristotelian theoretical system: form/matter, actuality/potentiality, activity/passivity. [...] [T]he "male principle" is to be paired with all the "positive" poles of these pairs of opposites – therefore, with "form", "actuality", "activity" – while the "female principle" is to be paired with the "negative" ones: "matter", "potentiality", "passivity".

In Aristotle's defence, it can be said that in his time very little was yet known about the anatomy of the female reproductive organs: the ovaries had not yet been discovered, let alone the ovum. More than half a millennium later, Galen (129–200 AD) was one step ahead of Aristotle, since the ovaries had by this point been discovered. Although the discovery of the ovum was not made until 1827 by Karl Ernst von

²³⁰ Aristotle, *GA* 727a27–30: 'Now it is impossible that any creature, should produce two seminal secretions at once, and as the secretion in females which answers to semen in males is the menstrual fluid, it obviously follows that the female does not contribute any semen to generation; for if there were semen, there would be no menstrual fluid; but as menstrual fluid is in fact formed, therefore there is no semen' (translated by A.L. Peck).

²³¹ Compare to Plato's *Laws* 838e4–839a3; *Tim.* 91c–d7; Aristotle, *GA* 739b34–35.

Baer, Galen sees in the ovaries an equivalent to the testicles: an organ that serves to produce and store semen. For this reason, Galen rejects the Aristotelian idea of only one active principle and speaks instead of a male and a female principle of reproduction and heredity. Lo Presti (2014: 932) specifies that Galen rejects the conception of 'passive power' and instead 'assumes that every power, which manifests itself in whatever bodily process, is "active" by definition'. Even though Galen attributed active generative power to the female, he faced a problem which he could in turn solve by downgrading the 'active power' of the female. As Wilberding (2015b: 152) writes, '[o]ne difficulty of the two-seed theory that its proponents must address is why the male is required for reproduction, seeing as the female already has a seed at hand'. Galen's solution to this problem was again to claim that the female seed is inferior to that of the male.²³²

This strict division of reproductive functions between male and female was probably also influenced by Plato's account of the Receptacle (*chôra*) in the *Timaeus*. ²³³ The Receptacle is seen as a 'third kind' essentially distinct from the Demiurge and the Forms. It is the all-encompassing space in which particular things manifest themselves. Some commentators therefore associated the Receptacle with matter. ²³⁴ While Timaeus calls the Demiurge 'father', Receptacle is referred to as 'nurse' and 'mother'. Thus, Plato's *Timaeus* also links the role of the mother with the provision of space and matter, and the role of the father with the provision of intelligible form. Plotinus, however, sharply criticises all those who see the role of the mother in the procreation of children merely as a material cause:

So that 'receptacle' and 'nurse' are more proper terms for it [i.e. the matter]; but 'mother' is only used in a manner of speaking, for matter itself brings forth nothing. But those people seem to call it 'mother' who claim that the mother holds the position of matter in respect to her children, in that she only receives [the seed] and contributes nothing to the children, since all the body of the child which is born,

 $^{^{232}}$ On the reproduction theory of Galen see Preus (1977), Boylan (1984, 1986), Nickel (1989), and Bien (1999).

In this passage from *Timaeus* (49a3–5od5), Plato discusses the concept of a receptacle, which he describes as a kind of cosmic container or space in which all physical forms come into existence. He characterises this receptacle as eternally unchanging, always able to receive all things without itself adopting any characteristics of the things that enter it. Plato uses the metaphor of the receptacle as a wet nurse and later compares it to a mother, the Demiurge using the universal Forms to shape reality as a father, and the resulting phenomena, i.e. the cosmos with all its beings as their offspring.

²³⁴ Sorabji (2004a: 259–261) provides a selection of ancient opinions on whether Plato believed that space is matter. Philoponus *in Phys.* 4.2. 209b11–13: 'For this reason Plato too, in the *Timaeus*, says that matter and space (*khora*) are the same, for that which has the role of participant, and space, are one and the same' (translated by A. Lacey). Simplicius *in Phys.* 539.8–542.12: 'Having said that insofar as it is an attribute of place to be an extension (*diastema*) we shall be led back to matter in our enquiry into the nature of place, he commented on Plato having called matter the space and place of embodied forms in the *Timaeus*. For in the *Timaeus* he says that matter is the receptacle of all becoming like a nurse. [...] Alexander agrees also that matter is called space in the *Timaeus* with a different meaning, but he says that Aristotle finds fault with Plato with good reason' (translated by J. Urmson).

too, comes from the food. But if the mother does contribute something to the child, it is not in so far as she is matter, but because she is also form, for only form can produce offspring, but the other nature is sterile [....] For when they make matter the mother of all things, they apply this title to it taking it in the sense of the principle which has the function of substrate; they give it this name in order to declare what they wish, not wishing to make matter in every way exactly like the mother; to those who want to know more accurately in what way [it is a mother] and do not make a merely superficial investigation, they show, by a far-fetched analogy, but all the same as best they could, that matter is sterile and not in every way female but only female as far as receiving goes, but no longer when it comes to generation; they show this by making that which approaches it neither female nor able to generate, but cut off from all power of generation, which only that which remains male has (III. 6 [26] 19, 17–41, translated by A.H. Armstrong).

Plotinus points out that it is misleading to conceive of the role of the mother as matter and, conversely, to conceive of matter as the 'mother of all things'. The former is false, for the female can only procreate insofar as 'she is also form, for only form can produce offspring'. If the female were only a material cause, then any procreation involving the female principle would be impossible because the nature of matter is sterile. The second approach, namely to call matter a female principle and the 'mother of all things', is equally wrong. Plotinus emphasises that matter is sterile and deprived of any generative power. The only parallel that could be drawn between matter and the female, according to Plotinus, is the fact that both have the capacity to receive something: the female receives the semen of the male, while matter receives intelligible forms. But even this similarity is, according to Plotinus, 'a far-fetched analogy'.

In light of the theories mentioned above, in which the reproductive role of the female was strongly undermined, Plotinus' model seems innovative and even 'revolutionary', to quote the title of James Wilberding's article. ²³⁵ But should we conclude from this that Plotinus assumed that the female also produces a type of semen? Unfortunately, we do not find a concrete answer to this question in V. 7 [18] or anywhere else in the *Enneads*. Not once does Plotinus address the physical processes underlying reproduction and heredity. Traditionally, questions of reproduction and biological heredity focused on physical processes. Wilberding (2015b: 151) presents a catalogue of embryological questions posed by ancient physicians and philosophers: 'how twins are formed, how the offspring's sex is determined, and how to account for deformities and (lack of) resemblance'. In addition, there are also 'three

²³⁵ In his article 'The Revolutionary Embryology of the Neoplatonists', Wilberding (2015a: 323) argues that the Neoplatonists, including Plotinus, not only restored the balance between the male and the female in terms of biological reproduction and heredity, but even went so far as to 'identify the female rather than male as the immediate active cause of reproduction', crediting the female 'with leading the seminal principles from a state of potentiality to a state of actuality'. In this regard, Plotinus was the pioneer of Neoplatonic embryology, and the treatise V. 7 [18] was the foundational text.

major issues in spermatogenesis' (Wilberding, 2015b: 151): (1) How many seeds are involved in reproduction, i.e. does the female also produce semen? (2) How is semen produced in the body? (3) How is the embryo present in the semen and how does the embryo develop? Another important question concerns the moment of ensoulment of the embryo.

Similarly, Anthony Preus (1977: 65) points to a comparable set of questions concerning embryological development: 'What is the nature of seed? [...] Why do children usually resemble their parents, and sometimes fail to resemble one or both parents? What determines the sex of offspring, what determines sex-linked characteristics, what determines non-sex-linked characteristics?' Plotinus deals with these questions only partially, if at all. He does not investigate embryology using empirical observations and data, but grounds his theory primarily on metaphysical considerations.

It is thus striking that Plotinus describes procreation as a mixture of intelligible forming principles: in other words, procreation and heredity take place in the intelligible sphere. Plotinus even goes so far as to call the procreation of living beings 'contemplation':

For when living things, too, produce, it is the rational principles within which move them, and this is an activity of contemplation, the birthpain of creating many forms and many things to contemplate and filling all things with rational principles, and a kind of endless contemplation, for creating is bringing a form into being, and this is filling all things with contemplation. And failures, too, both in what comes into being and what is done, are failures of contemplators who are distracted from their object of contemplation; and the bad workman is the sort of person who makes ugly forms. And lovers, too, are among those who see and press on eagerly towards a form (III. 8 [30] 7, 18–27, translated by A.H. Armstrong).

For Plotinus, it is not the bodies but the souls of the parents that are primarily involved in reproduction and heredity. Accordingly, the proposition that females must also pass on *logoi* to their children is supported by the assertion in the first chapter that the soul of each individual – male or female – possesses all the *logoi* that exist in the cosmos (V. 7 [18] 1, 8–12). This is why Plotinus is not particularly interested in whether the mother produces a type of semen like the father: even if she does not, she still has a biological device or mechanism in her body that enables her soul to pass on her *logoi* to the embryo. In this context, Wilberding (2017: 59) points out that Plotinus' account of the number of seeds is ambiguous:

There are two individuals, however, whose commitment is more ambiguous, though I believe that they, too, are best understood as endorsing the one-seed theory. The first is Plotinus. Plotinus never explicitly mentions a seed contributed by the female, nor does he appear to view the menses as seminal. At times it certainly looks like he is envisioning the father as the sole provider of the offspring's form. At *Ennead*

3.1.1.32–35, for example, he bluntly declares the father to be the cause of the child, while the mother is a mere auxiliary cause (συνεργόν), and in Ennead 2.3.14.31–32 the mother is mentioned not as a contributor at all but as a possible obstacle to the offspring's natural development. All of this would seem to suggest that Plotinus subscribes to the one-seed theory. Yet in Ennead 5.7, which is without doubt his most embryologically minded treatise, he describes the offspring as coming about from 'mixtures' (μίξεις) of male and female form-principles, with the resemblance to one or the other parent being determined by which contribution 'prevails over' (κρατεί) the matter. This language is typical of two-seed theories, according to which the male and female seeds are mixed in such a way that each may dominate in certain respects thereby accounting for the resemblances to both parents. It may well be, then, that Plotinus in this treatise is thinking of reproduction in terms of a two-seed theory, but, as we shall see on pp. 65–7, Porphyry is able to integrate this language of 'mixture' and 'prevalence' into his one-seed account, and it is possible that Plotinus was already thinking along these lines (Wilberding, 2017: 59).

Although Plotinus strongly criticises the Aristotelian view that the female is primarily a material cause, there is some evidence in the *Enneads* that he agrees with the Aristotelian model of procreation, at least in part. For example, Plotinus suggests that menses (*katamênia*) serves as matter for the embryo and that 'there is an outline and sketch plan of the whole living thing impressing the form on the menstrual fluid (*katamênisis*)' (II. 9 [33] 12, 20–23, translated by A.H. Armstrong). He does not say here, however, that the form imposed on the menses comes exclusively from the male. If children are created from mixtures of *logoi* from both the male and the female, then the form imposed on the menses would have to come from both the father and the mother.

Plotinus also seems to agree with Aristotle on the proposition that the father is the main or sole cause of the offspring:

And the cause of the child is the father, and perhaps some external influences coming from various sources which cooperate towards the production of a child; for instance, a particular kind of diet, or, slightly remoter, seed, which flows easily for begetting, or a wife well adapted to bearing children: and in general, one traces the cause of the child back to Nature (III. 1 [3] 1, 32–36, translated by A.H. Armstrong).

Wilberding (2017: 59) hints that he sees this passage as contradicting the embryology developed by Plotinus in V. 7 [18] 2. While Plotinus clearly names the mother as the cause of her offspring in V. 7 [18] 2, in this passage 'the mother is a mere auxiliary cause' (Wilberding, 2017: 59) — nothing more than a vessel that must be 'well adapted to bearing children'. The two passages, however, are not necessarily mutually exclusive. In III. 1 [3] 1, 32–36, Plotinus is simply observing that the father is the trigger for impregnation — the female cannot procreate offspring solely by herself without entering a sexual union with the male. In addition, Plotinus lists 'some

external influences' that have a beneficial effect on procreation, such as 'a particular kind of diet, or, slightly remoter, seed, which flows easily for begetting, or a wife well adapted to bearing children'. Only the semen of the male is mentioned in this list: since Plotinus describes it as capable of flowing for the purpose of begetting, it must be the male semen. The only female contribution mentioned is the need to be well adapted to bearing children – presumably in terms of physical qualities, such as hip width, good health, etc. This passage thus seems to suggest that Plotinus, like Aristotle, supports the one-seed theory, or the assumption that the female, unlike the male, does not produce semen. But as already mentioned, the assumption that the female does not produce semen does not necessarily render her ineligible as a contributor to the process of reproduction. She may have other mechanisms in her body that are equal in function to the male semen. The crucial point in this passage is that Plotinus refers to nature as the actual cause of the child. It is therefore the World Soul working through nature that is responsible for procreating and forming the offspring by means of parental *logoi*.

Most translators (Armstrong, Gerson, Brisson) agree that *diaphorous*, 'different', should be read as referring to different children or individuals.²³⁶ Harder, on the other hand, understands *diaphorous* as 'difference', and explains that Plotinus intends to assert here that mixtures of parental *logoi* produce differences between a child and its parents:

Harder: Wenn indessen die Mischung der Formkräfte des Männlichen und Weiblichen die Verschiedenheit (eines Kindes von den Eltern) hervorbringt...

However, the Ancient Greek word for difference should be *diaphora*, not *diaphorous*. One could therefore accuse Harder of inaccuracy in the translation. Different things are not the same as differences. Does Harder's translation significantly alter the meaning of this phrase? In this case, such a reading seems to be acceptable. Having said that, I think that Harder's specific reading is also insinuated by the more general readings of the other translators: if the mixtures of parental *logoi* produce different children, it also implies that these children are not only different from each other, but from their parents as well.

Another way to translate this phrase would be: 'If, however, the mixtures of forming principles produce the differences of male and female', i.e. *diaphorous* is read in terms of male and female sex. The rest of the sentence, if read thus, would imply that sex is not inherited from male to male and from female to female, but is due to certain mixtures of *logoi*. Again, however, this reading, like Harder's suggestion, is implied in the more general translation: if the mixture of male and female

 $^{^{236}}$ See the discussion on $\it diaphor \hat{o}n$ in my commentary of the first chapter (V. 7 [18] 1, 20) on pp. 149–150 and 154–160.

logoi produces different children with differences in sex, then this difference is not due to the parents, but to the mixtures of *logoi*.

2, 2–5 there will not be some particular forming principle [logoi^{comb}] for each individual that is born, and each of the parents, for instance the male, will produce not according to different forming principles, but according to one [logoi^{comb}], his own or his father's

Having explained that mixtures of maternal and paternal *logoi* produce different children, in this section Plotinus outlines an embryological model which he opposes. What, then, is this embryological model that Plotinus considers to incorrect, and can it be attributed to any of his predecessors? First of all, according to Plotinus, the mixture of parental *logoi* cannot result in only one forming principle (*logos*), which is passed on to the child, because – as has been explained in chapter one – a single *logos* is able to produce only a single property (see the discussion on V. 7 [18] 1, 18–22 on pp. 149–160). Since a human individual comprises 'a vast number of peculiar differences' (V. 7 [18] 1, 20), the mixture of parental *logoi* must result in a *logoi*-combination, in which each individual *logos* accounts for each peculiar property of the offspring. For this reason, we shall understand the use of *logos* (in the singular) in this passage as meaning *logoi*-combination [*logoi*^{comb}].

Second, Plotinus points out that each sibling cannot be generated and formed according to the same mixture of parental logoi. In other words, it cannot be the case that each of the siblings inherits the same *logoi*-combination from its parents. Since each sibling has different peculiar properties, whenever the parents produce a child, the mixture of their logoi must result in different logoi-combinations. Accordingly, Plotinus rejects the model according to which, for example, the father only passes on the *logoi*-combination [*logos*^{comb}] which he actualises himself. The same applies to the mother. It cannot be that father and mother only pass on to their children the properties that are manifested in their own phenotypes. If both parents were to pass on only those *logoi* that they themselves actualise, then the children would have exactly the same properties as their parents and their grandparents. If children were thus composed of properties that their parents and grandparents display in their phenotype, then it would no longer be possible for the children to develop their own unique properties. The children would resemble a kind of collage of parental properties – but that is not what is generally understood by unique individuality. Being an individual implies that despite a strong resemblance to one or both parents, one has completely unique physical features and bodily proportions. Moreover, the theory outlined would have difficulty explaining cases where children bear little resemblance to both parents and grandparents.

Is it possible to assign this embryological model, rejected by Plotinus, to a particular thinker? The most prominent embryological theories in Plotinus' day were those of Galen and Aristotle. Although we know much about these thinkers'

theories of reproduction and heredity, it is difficult to ascribe the theory disputed by Plotinus to either of them. This is partly because Plotinus' explanations are somewhat terse, and partly because physicians and philosophers usually set out embryological theories based on empirical data. Their theories contained descriptions of physical processes and phenomena, such as the nature of the seed/semen.²³⁷ Traditionally, they addressed questions such as whether the female also produces semen and where in the body semen originates. Plotinus' focus, however, is not on the physical but on the intelligible. He presents a theory of heredity without addressing the traditional issues about semen in any detail. As Wilberding (2017: 59) points out, in the *Enneads* we find contradictory indications as to whether Plotinus adhered to the one-seed theory (Aristotle's view) or (in V. 7 [18] 2) the two-seed theory (Galen's view). Wilberding (2017: 59–60), however, observes that most Neoplatonic embryologists, including Plotinus' student Porphyry, advocated the one-seed theory. Against this background, it is difficult to guess who exactly Plotinus addresses in this passage. It is obvious, however, that his interest centres on the intelligible forming principles (logoi) and how these are passed on from parents to children. The *logoi* are therefore the reference point we should use to find out who Plotinus is dealing with in this section.

Aristotle links his theory of reproduction and biological heredity to his conception of the four causes: the formal, material, efficient, and final cause. Aristotle identifies the male with the formal and efficient causes, and the female with the material cause. He believes that the male, due to his 'hot nature', is able to produce a blood concoction, which in reproduction serves as semen. The female, because of her 'cold nature', is not able to concoct blood to the same extent as the male and therefore produces infertile menses. Aristotle assumes that the form present in the male semen, which is transferred to the female menses during procreation — forming the matter of the embryo — is purely intelligible. He calls this form *pneu-*

²³⁷ Compare for instance Galen's treatise *On Seed* and the Hippocratic text *On Seed*. Aristotle discusses the nature of seed in the *Generation of Animals*. Some deliberations on the nature of seed can also be found in Plato's *Timaeus*. On this, see Preus (1977: 65–70).

 $^{^{238}}$ Aristotle, *GA* 729a9–12: 'The male provides the "form" and the "principle of the movement", the female provides the body, in other words, the material' (translated by A.L. Peck). *GA* 716a4–6: 'As we mentioned, we may safely set down as the chief principles of generation the male (factor) and the female (factor); the male as possessing the principle of movement and of generation, the female as possessing that of matter' (translated by A.L. Peck).

 $^{^{239}}$ Aristotle, *GA* 748b31–33: 'The male may occasionally generate because the male is by nature hotter than the female, and because the male does not contribute any corporeal ingredient to the mixture' (translated by A.L. Peck).

Aristotle, *GA* 728a17–25: 'Further, a boy actually resembles a woman in physique, and a woman is as it were an infertile male; the female, in fact, is female on account of inability of a sort, viz., it lacks the power to concoct semen out of the final state of the nourishment (this is either blood, or its counterpart in bloodless animals) because of the coldness of its nature. Thus, just as lack of concoction produces in the bowels diarrhoea, so in the blood-vessels it produces discharges of blood of various sorts, and especially the menstrual discharge (which has to be classed as a discharge of blood, though it is a natural discharge, and the rest are morbid ones)' (translated by A.L. Peck).

ma. In his translation of GA, Peck (1943) explains that pneuma contains formative movements that act on matter and shape it into an embryo:

This *pneuma*, which is thus present in the semen, is charged with the 'movements' [kinêsis] proper to Soul, including (in the case of the male) the 'movements' proper to sentient Soul; and these 'movements', when given the right material to work upon (viz., material which is potentially an animal of the right kind) and the right conditions, are able to produce an animal of the same kind as that which they would have produced or maintained in the male parent even if the blood in which they were originally present had not undergone the further stage of being concocted into semen (Peck, 1943: xiv).

Thus, according to Aristotle, the male semen is the carrier of the form or forming movement, which acts on the female menses and transforms them into an embryo. The female menses are therefore the underlying matter of the embryo, which Aristotle even associates with prime matter, whereas the male semen is the principle of soul whose sole task is to form and animate the embryo. The material component of the male's seminal fluid is not needed for the construction of the embryo – the mother alone is the material cause. The seminal fluid simply evaporates after it has finished its task of transferring form (GA 737a8–13). In Aristotle, then, genetic heredity is based on form, which is absolutely detached from matter – similar to the model that Plotinus presents here.

However, given that Aristotle ascribes the cause of form and generation exclusively to the male, is Plotinus' theory not in fact Aristotelian after all? For Plotinus says that 'each of the parents, for example (*hoion*) the male, will produce not according to different forming principles, but according to one (*logoi*^{comb}), his own or his father's'. The phrase *hoion ho arrên*, 'for example the male', implies that this statement applies equally to the female. The theory presented here thus seems to differ from Aristotelian reproductive hylomorphism, since Plotinus implies that the female is also capable of passing on her forming principles to the children. But as has been said already, Aristotelian embryology is much more complex than equating the male agent solely with form and the female agent solely with matter: Aristotle regarded reproductive hylomorphism as an ideal case that is not always consistent with reality. Because a strict reproductive hylomorphism cannot explain

Aristotle, *GA* 729b13–19: 'Now of course the female, qua female, is passive, and the male, qua male, is active – it is that whence the principle of movement comes. Taking, then, the widest formulation of each of these two opposites, viz., regarding the male qua active and causing movement, and the female qua passive and being set in movement, we see that the one thing which is formed from them only in the sense in which a bedstead is formed from the carpenter and the wood, or a ball from the wax and the form' (translated by A.L. Peck).

Aristotle, *GA* 729a29-33: 'Thus, if the male is the active partner, the one which originates the movement, and the female qua female is the passive one, surely what the female contributes to the semen of the male will be not semen but material. And this is in fact what we find happening; for the natural substance of the menstrual fluid is to be classed as "prime matter" (translated by A.L. Peck).

why children resemble their mothers or why female offspring are produced at all, Aristotle did not completely deny the role of the female in heredity, allowing his theory some leeway.

Aristotle's denial of the mother's power of generation, and of her ability to pass on her form to the embryo, is largely due to his assumption that the female is incapable of producing semen. This concept severely limits the mother's potential involvement in heredity. In fact, for Aristotle, ideal procreation and heredity would operate according to a strict reproductive hylomorphism, with the mother exclusively contributing matter, and the father exclusively passing on his form by imprinting it on the embryonic matter. This ideal version of heredity would always result in a male child who is an exact copy of his father in terms of appearance. A female child resembling the mother is, according to Aristotle, a case of 'failed' heredity resulting in 'deficient offspring' which he even calls 'a monstrosity'. Aristotelian embryology thus leaves room for deviation from the ideal case: if during procreation conditions are not ideal, female children may be born, or children similar to their mothers, or both.

The fact that Aristotle considered the form inherited by children from their parents to be intelligible may indicate that Plotinus is engaging with Aristotle in the sentence under consideration. Galen did not hold that pure intelligible entities actually exist. Nevertheless, we must not exclude the possibility that Plotinus is addressing Galen in this sentence. Even though Galen as a Stoic held a materialistic view of the world, the Stoics also assumed that the world is ensouled. Wilberding (2020: 269) points out that in his treatise *On the Formation of the Embryo*, Galen 'articulates an *aporia* concerning the identity of the soul that is responsible for the formation of the embryo'. Galen considers two possible origins for embryos. The first possibility is the 'soul in the seed provided by the parents [as it] would be in a good position to account the family resemblance' (Wilberding, 2020: 269). The second possibility is the World Soul since it is 'responsible for the generation of the human embryo [and consequently] for the generation of all living beings'

Aristotle, *GA* 767b12–23: 'Thus: if the seminal residue in the menstrual fluid is well-concocted, the movement derived from the male will make the shape after its own pattern. (It comes to the same thing whether we say "the semen" or "the movement which makes each of the parts grow"; or whether we say "makes them grow" or "constitutes and 'sets' them from the beginning" – because the *logos* of the movement is the same either way.) So that if this movement gains the mastery it will make a male and not a female, and a male which takes after its father, not after its mother; if however it fails to gain the mastery, whatever be the "faculty" in respect of which it has not gained the mastery, in that "faculty" it makes the offspring deficient' (translated by A.L. Peck). *GA* 767a36–767b8: 'Males take after their father more than their mother, females after their mother. Some take after none of their kindred, although they take after some human being at any rate; others do not take after a human being at all in their appearance, but have gone so far that they resemble a monstrosity, and, for the matter of that, anyone who does not take after his parents is really in a way a monstrosity, since in these cases Nature has in a way strayed from the generic type. The first beginning of this deviation is when a female is formed instead of a male' (translated by A.L. Peck).

(Wilberding, 2020: 269). Both alternatives, attractive as they may be, also present Galen with great difficulties. The first proposal raises the question of how the souls of the parents acquire the anatomical knowledge required for the construction of an embryo. The second proposal 'seems blasphemous to Galen', for how can it be that such a noble principle as the World Soul should also bring forth 'ignoble creatures such as worms and scorpions, which would simply be beneath it' (Wilberding, 2020: 269–270). As we shall see throughout the rest of V. 7 [18] 2 and the commentary, Plotinus incorporates both of Galen's suggestions: both the parental souls and the World Soul are involved in reproduction and heredity.

In sum, Plotinus in this passage presents a theory that has elements in common with both the embryology of Aristotle and that of Galen. Unfortunately, his account is lacking in the kind of details that would clarify exactly with whom he is arguing here.

2, 5–7 Maybe, nothing prevents them [the parents] from producing also according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand.

Having rejected the theory according to which, first, each parent passes on only one logos to the offspring and, second, each parent passes on exclusively the logoi-combination actualised by himself or herself, Plotinus in this passage begins to outline an alternative model of heredity - his own embryological theory. First, he argues that 'nothing prevents them [the parents] from producing according to different ones [forming principles]'. Then, he adds that each time the parents reproduce, '[they have] other principles at hand', meaning those logoi that the parents themselves do not actualise. Plotinus draws this conclusion on the basis of his previous remark from the first chapter (V. 7 [18] 1, 10-12): 'Consequently, if the cosmos possesses [the forming principles] not only of the human being, but also of individual living beings, so, too, does the soul.' Accordingly, here in the second chapter he claims that parents 'have all the forming principles' - the logoi of each individual living being – and that the parents always have 'other principles at hand (procheirous)' to produce a child. In this way, each time they procreate, a unique mixture of paternal and maternal logoi is created. These mixtures are the logoi-combinations that parents pass on to their offspring. Only unique logoi-combinations can account for the peculiar properties of each individual child.

What does Plotinus actually mean when he says that parents have 'other principles at hand (*procheirous*)'? Plotinus does not regard offspring as mere combinations of parental properties. He does concede paternal and maternal properties to children, but at the same time offers the possibility that children can develop peculiar properties that cannot be traced back to either parents or grandparents. Plotinus' model, however, leaves many questions unanswered: if parents really do have all the *logoi* of all individual living beings at their disposal, then theoretically they could

also pass on *logoi* to their children that would produce properties of animals, such as fur, claws, hooves, and horns. We can sometimes observe abnormal phenomena in nature, where human babies are born, for instance, with hypertrichosis — excessive hairiness that covers the entire body.²⁴⁴ In such cases, pre-modern people would say that the baby was born with fur. This is why hypertrichosis is also called werewolf syndrome, because the excessive hairiness resembles fur and gives those affected a slightly animalistic appearance.

Cases like hypertrichosis, however, are exceptional anomalies caused by disease or genetic mutation. As a rule, human parents produce children exclusively with human properties, and Plotinus does not acknowledge any possibility of human children actualising animal *logoi*. How, then, should we conceive of the model of heredity that Plotinus presents here? What does Plotinus mean when he says that each time parents reproduce, they have 'other principles at hand'? What principle or mechanism decides which forming principles of the two parents – and which other forming principles actualised by neither parent – will be passed on to the child?

In V. 7 [18], we do not find any explicit answers to these questions. There are, however, statements elsewhere in the *Enneads*²⁴⁵ indicating that it is the World Soul that brings forth bodies, regulates the process of inheritance, and composes *logoi*-combinations for each living being to be born:

It is like the craftsmen (*dêmiurgoi*) who know how to make many forms and then make just this one, for which they had the order or which their material by its particular characteristics required. For what is there to prevent the power of the World Soul from drawing a preliminary outline, since it is the universal forming principle, even before the soul-powers come from it, and this preliminary outline being like illuminations running on before into matter, and the soul which carries out the work following traces of this kind and making by articulating the traces part by part, and each individual soul becoming this to which it came by figuring itself? (VI. 7 [38] 7, 6–15, translated by A.H. Armstrong).

^{&#}x27;Hypertrichosis, excessive, abnormal hairiness that may be localised or cover the entire body. Hypertrichosis is associated with disorders such as anorexia, repeated skin trauma, systemic illness, metabolic disorders, and exposure to certain drugs and chemicals. In very rare instances the disorder is present at birth. Hypertrichosis differs from hirsutism, which is excess hair growth in women resulting from mild androgen excess.' At: https://www.britannica.com/science/hypertrichosis.

Wilberding (2018: 275) compiled a list of eighteen passages (IV. 9 [8] 3, 23–29; V. 7 [18] 1, 24–25; VI. 4 [22] 15, 8–17; IV. 3 [27] 6, 13–18; IV. 3 [27] 11, 8–12; IV. 3 [27] 27, 1–3; IV. 4 [28] 32, 9–11; IV. 4 [28] 34, 1–3; IV. 4 [28] 37, 11–25; IV. 4 [28] 39, 5–13; IV. 4 [28] 43, 1–5; II. 9 [33] 18, 14–17; VI. 6 [34] 7, 5–7; III. 5 [35] 6, 28–35; II. 1 [40] 5, 18–20; II. 3 [52] 9, 6–14; II. 3 [52] 13, 40–45; II. 3 [52] 16–17) that imply the World Soul is responsible for the creation of bodies, and a list of fifteen passages (IV. 7 [2] 5, 40–51; III. 1 [3] 1, 32–36; III. 1 [3] 5, 20–34; III. 1 [3] 5, 53–55; III. 1 [3] 6, 1–17; V. 9 [5] 4, 8–10; V. 9 [5] 6, 9–24; III. 4 [1] 6, 37–45; V. 7 [18] passim; IV. 3 [27] 10, 11–13; III. 8 [30] 7, 18–26; II. 9 [33] 12, 18–23; III. 3 [48] 7, 26–28; II. 3 [52] 12, 1–11; II. 3 [52] 14, 29–34) that suggest the parents' soul is responsible for the creation of bodies. Based on this result, Wilberding concludes that the creation of bodies by the World Soul and by the parents' soul is compatible.

We, however, are formed by the soul given from the gods in heaven and heaven itself, and this soul governs our association with our bodies. The other soul, by which we are ourselves, is cause of our well-being, not of our being. It comes when our body is already in existence, making only minor contributions from reasoning to our being (II. 1 [40] 5, 18–23, translated by A.H. Armstrong).

These passages articulate the ontological dynamics between the World Soul, individual souls, and the material realm. The first passage discusses the individual soul's entrance into prefabricated bodies that have been pre-formed by the World Soul. The World Soul, referred to as 'the universal forming principle', imbues matter with a 'preliminary outline' even before the individual souls can enter. This 'preliminary outline', depicted as 'illuminations', signifies how the World Soul lights the way into the dark matter for the individual souls in advance, making it visible 'by articulating the traces part by part'. Only when the individual soul perceives what it is stepping into can it actualise itself (its inherent *logoi*-combination) and become 'that to which it came'. Plotinus highlights that all individual souls are *dêmiurgoi*, capable of producing any form (just as the World Soul does). However, individual souls can only fulfil one 'order' at a time, which is determined by both the client (probably the divine *pronoia*) and 'the physical necessity or *heimarmene* established by the World Soul and governing everything in the bodily universe' (Kalligas, 2012: 156).

The World Soul influences the formation of the embryo not only through its direct formative power on the embryo's matter but also through external factors such as climate (V. 7 [18] 2, 13–16; III. 1 [3] 5, 24–33; II. 3 [52] 14, 30–33), the mother's nutrition (III. 1 [3] 1, 34), and providence (III. 2 [47] 13). When examining the role of the World Soul in Plotinus' embryology, Wilberding (2018: 279) asserts that '[i]t is these non-parental, external influences that ultimately provide a way of saying that the World Soul is involved as a distinct agent in the formation of the embryo. For although these influences might prima facie seem coincidental, Plotinus at times suggests that they are all coordinated by a single universal *logos* that governs the cosmos.'

In accordance with the first passage, we learn in the second passage that the human being is basically made up of two souls – the World Soul that produces the body, and the rational soul that descends into the body, which 'is already in existence, making only minor contributions from reasoning to our being'. The World Soul, after having created the body, does not leave it. It 'governs our association with our bodies', endowing it with vegetative powers, such as growth and nourishment.²⁴⁶ The two kinds of soul in the human individual thus perform different functions: the World Soul produces the embryo and provides it with vegetative and perceptive

One might also imagine that the World Soul is responsible for the unconscious processes of our bodies, such as breathing, heartbeat, temperature regulation, and reflexes. However, I have not found any passages in the Enneads that support this idea.

abilities; the rational soul descends into the embryo once it is physically formed and endows the living being with intellectual power. It is this individual rational soul that Plotinus identifies with our true self, whereas the rest of us – namely, the body, which is created by the World Soul and endowed with perceptible and vegetative functions – is merely 'ours'. Plotinus explains that the body is something that we 'wear' like an organic suit (I. 4 [46] 4, 15) and serves as an instrument for the activities of our true self, which is the individual rational soul:

From these forms, from which the soul alone receives its lordship over the living being, come reasonings, and opinions and acts of intuitive intelligence; and this precisely is where 'we' are. That which comes before this is 'ours' but 'we,' in our presidency over the living being, are what extends from this point upwards. But there will be no objection to calling the whole thing 'living being'; the lower parts of it are something mixed, the part which begins on the level of thought is, I suppose, the true man: those lower parts are the 'lion-like,' and altogether 'the various beast.' Since man coincides with the rational soul, when we reason it is really we who reason because rational processes are activities of soul (I. 1 [53] 7, 14–24, translated by A.H. Armstrong).

Noble (2021: 269) suggests that the 'rational self view' might seem 'counterintuitive', yet he presents compelling arguments as to why Plotinus considers only our rational part to be our true self. Noble (2021: 271) argues that Plotinus identifies the rational soul with the self, not because it is associated with our self-consciousness, self-awareness, or identity. Instead, Noble (2021) cites specific numerous passages (IV. 4 [28] 18, 10–21; IV. 7 [2] 1, 20–25; V. 3 [49] 3, 35–40; I. 4 [46] 4, 15–29; IV. 4 [28] 44, 18–32) where Plotinus emphasises living in alignment with the rational soul, which he considers the authoritative part within us and our proper principle of action. Noble clarifies that this principle of action ensures we live in accordance with our nature and reflects who we are: humans, rational beings: 'This view that our true self is the rational part is based on a teleological view of the structure of a human organism, according to which the activity of the rational part represents our proper final end' (Noble, 2021: 271).

In accordance with Noble (2021), Remes' (2007: 121) analyses show that Plotinus uses the pronoun 'we' (i.e. *hêmeis*)²⁴⁷ to refer to the 'true self', which is an activity of the Intellect:

Plotinus uses third person plural 'we', to refer to the 'self'. A comprehensive analysis of the 'self' in Plotinus is offered by Pauliina Remes (2007) in her monograph *Plotinus on Self: The Philosophy of the 'We'*: 'In Plotinus, as we will see, the plural *hêmeis* ("we", "us") strives to distinguish our truest nature or self from the whole human being. In addition to this conceptual variety, there was no established topic of anything like the "philosophy of the self", and no works entitled, for instance, On self and person. Nor was there agreement about what kind of terminology or ontology would explain human nature, subjectivity and agency best' (Remes, 2007: 4).

The central claim is that our substance is the constant activity of the Intellect within. This substance is both happy, and apparently is in full knowledge of its happiness. And moreover, this is what "we" strictly speaking are. The embodied part is not a crucial part of the self, or, on a more radical reading, a part of it at all, for Plotinus also claims that "we are not that, but the activity of the Intellect" (I.4.9.28–9). The embodied self is sometimes aware only of what sense perception mediates to it, but there is an inner reality of which it is not aware. This reality is or belongs to our true selves (I.4.10.1–6)' (Remes, 2007: 121).

There is another difference between the two souls: while the World Soul always works from within the universe, since it is already present in the seminal material of the parents, the rational soul comes 'from an external source' (Wilberding, 2017: 133). Furthermore, the World Soul governs into which body each rational soul born in the physical cosmos is to descend. The World Soul thus works in accordance with providence and fate, which control the process of reincarnation: 'it looks as if [Plotinus] wants to collect all of the factors that are at work on the formation of the embryo-foetus, including both the seminal principles derived from the parents and all the other environmental factors, and put them under the governance of the World Soul' (Wilberding, 2020: 279). If a certain rational soul is predestined to be born into a certain family as a boy with such and such properties, the World Soul will produce a suitable body for that rational soul with the predetermined species, sex, appearance, and physical talents.

It is thus the World Soul that governs the inheritance of *logoi*, determining which of them the parents have 'at hand' each time they reproduce.²⁴⁸ In doing so, the World Soul must perform a number of tasks: it must ensure (1) that the offspring remain in the same genus (human, horse, spider, etc.) as the parents, (2) that the offspring receive certain *logoi* that are actualised by the parents or grandparents to maintain family resemblance, (3) that the offspring also receive *logoi* that are not actualised by their family, so that the individual may have peculiar properties, and (4) that the created body is connected to the rational soul for which it was created in the first place. The generation of offspring and heredity thus does not take place randomly but according to an intelligible plan (supreme *logos*) that is inherent in the World Soul.

Now that we have illustrated how the World Soul regulates the generation and formation of offspring, it becomes apparent why the soul of each individual has the *logoi* of every other individual living being: every living being is created and ensouled by the same soul, namely the World Soul, the soul of the universe. There is therefore no moment in the formation of the body of any living being that takes place without a soul: the very instant the genetic material/*logoi* of the father and the mother meet, the embryo is ensouled by the World Soul. But in the case of rational beings – humans – a second ensoulment by the rational soul is also supposed to

²⁴⁸ Compare Wilberding (2020: 278).

take place. Since Plotinus, as was shown in the first chapter, believed in the transmigration of rational souls into animal bodies, this second ensoulment must also be possible for animals (V. 7 [18] 1, 5-12).²⁴⁹ The question is, then, when does the second ensoulment of offspring by the rational soul take place?

In ancient embryology, there were several views as to the exact moment of the offspring's ensoulment. It was debated whether ensoulment occurs (1) at the moment of conception, (2) upon the formation of a vital organ, for example the heart, or (3) at the birth of the child. Wilberding (2017: 138–139) reports that some Platonists, such as Numenius and Longinus, assumed that ensoulment occurs at the moment of conception, when the genetic material of the father and the mother mix – what Aristotle calls *prôton migma*, i.e. the first mixture. In support of this, Platonists could invoke the embryological theory from Plato's *Timaeus* (91d1–5):

[F]inally the woman's desire and the man's love bring them together, and, like plucking the fruit from a tree, they sow the seed into the ploughed field of her womb, living things too small to be visible and still without form. And when they have again given them distinct form, they nourish these living things so that they can mature inside the womb. Afterwards, they bring them to birth, introducing them into the light of day (translated by D.J. Zeyl).

Some Platonists understood the 'living things', which are sown into the womb and then 'mature inside the womb', as ensouled living beings. Thus, they argued that Plato held that ensoulment happens at the moment of conception.

According to Aristotle, on the other hand, the ensoulment of the embryo occurs upon completion of the first and most central organ in the body – the heart. 250

In I. 1 [53] 11, 8–15, Plotinus discusses two possibilities: one where sinful human souls inhabit beasts, and another where no human soul is present. In the first scenario, even if a human soul is present in a beast, this part of the soul is separable and does not truly integrate with the beast – it exists within the beast but is not a part of its conscious being. The beast's own consciousness is shaped by an image of soul that combines with the body. In the second scenario, if a beast does not contain a human soul, it becomes a distinct type of living being through an illumination from the World Soul, which influences its nature and characteristics.

Unlike Plato, Hippocrates, and Alcmaeon – who considered the brain to be the main sensory organ of the body – 'Empedocles and Aristotle reverted to the older view that the heart is the central organ of sensation' (Peck, 1943: xviii). In addition, Aristotle was an epigenesist, i.e. he held the view that the body parts and organs of the embryo grow sequentially out of the seed. According to Aristotle the first organ to be formed from the seed is the heart: 'As the source of the sensations is in the heart, the heart is the first part of the whole animal to be formed; and, on account of the heat of the heart, and to provide a corrective to it, the cold causes the brain to "set", where the blood-vessels terminate above. That is why the regions around the head, begin to form immediately after the heart and are bigger than the other parts, the brain being large and fluid from the outset' (*GA* 743b26–33, translated by A.L. Peck). Besides Aristotle, Galen is also one of the most famous epigenesists. This position becomes problematic, however, when one tries to explain how information about the body parts yet to be developed is present in the semen and what processes gradually activate this information, to finally form a viable embryo out of something that was not there before. According to Aristotle, this information is transferred in the form of movements (*kinesis*). The male transfers the information-bearing

Unlike Plato, Hippocrates, and Alcmaeon – who considered the brain to be the main sensory organ of the body – 'Empedocles and Aristotle reverted to the older view that the heart is the central organ of sensation' (Peck, 1943: xviii). In addition, Aristotle was an epigenesist, i.e. he held the view that the body parts and organs of the embryo grow sequentially out of the seed. According to Aristotle the first organ to be formed from the seed is the heart: 'As the source of the sensations is in the heart, the heart is the first part of the whole animal to be formed; and, on account of the heat of the heart, and to provide a corrective to it, the cold causes the brain to "set", where the blood-vessels terminate above. That is why the regions around the head begin to form immediately after the heart and are bigger than the other parts, the brain being large and fluid from the outset' (GA 743b26-33, translated by A.L. Peck). Besides Aristotle, Galen is also one of the most famous epigenesists. This position becomes problematic, however, when one tries to explain how information about the body parts yet to be developed is present in the semen and what processes gradually activate this information, to finally form a viable embryo out of something that was not there before. According to Aristotle, this information is transferred in the form of movements (kinesis). The male transfers the information-bearing movements to the semen during coitus. After entering the uterus, the semen transfers the movements to the female menses. Finally, the movements stored in the male semen organise the female's matter into a living being.

Furthermore, Aristotle rejected the view that the rational soul of the child comes from an external source. He argued that the ensoulment of the embryo takes place by means of the male semen, through which the father transmits his own soul to his offspring. The first independent heartbeat of the embryo is the moment when the soul of the father has completely passed over to the child and become its own soul.

As for the Neoplatonists, Wilberding (2017: 133) asserts that '[t]here was a general consensus among the Neoplatonists that the rational souls descended into the body from the outside – that is, from a source other than the parents' souls – as soon as the body became a suitable receptacle, which was usually held to be at birth.' Plotinus, however, is not as easy to place into this group as his fellow Neoplatonists. He writes that the rational soul enters the finished body of the embryo, which, however, is still in the mother's womb:

But as for our following round the circuit of the All, and deriving our characters from it and being affected by it, this would be no sort of indication that our souls are parts [of the soul of the All]. For the soul is capable of taking many impressions from the nature of places and waters and air; and the situations of cities and the temperaments of bodies are different. And we stated that, since we are in the All, we have something from the soul of the whole, and we agreed that we were affected by the circuit of

movements to the semen during coitus. After entering the uterus, the semen transfers the movements to the female menses. Finally, the movements stored in the male semen organise the female's matter into a living being.

the universe; but we opposed another soul to this, and one which shows itself other especially by its opposition. As for the fact that we are begotten inside the universe, in the womb too we say that the soul which comes into the child is another one, not that of the mother (IV. 3 [27] 7, 20-31, translated by A.H. Armstrong).

In this passage, Plotinus lists several factors that have an influence on the formation of an individual. Besides the 'soul of the whole', of which 'we have something' – most likely the body – and 'the circuit of the universe', which affects our character and our life development, ²⁵¹ we have still another soul. This soul – most likely the rational soul – descends into the embryo while it is still in the mother's womb. In another passage considered above (II. 1 [40] 5, 18–23), Plotinus says that the rational soul descends into the body when it is 'already in existence', meaning when it is already finished and ready to be used by the rational soul. The moment when the body is fully formed but still in the womb must be shortly before birth. Plotinus also speaks here of an astrological influence on human individuals; as is well known, astrology is based on the time of birth. Considering all this, Plotinus most probably would have agreed with the other Neoplatonists that the embryo is ensouled by the rational soul at the moment of its birth, as Wilberding states. ²⁵²

The World Soul thus creates the human body; the rational soul then descends into the finished body and endows it with rationality and self-consciousness (*hêmeis*). The question arises as to the relationship between the two different souls that share the same body. If they are different souls, what kind of communication takes place between them? Plotinus describes the relationship between the World Soul and the individual rational souls as one of kinship. Both souls are descended from the highest soul, which makes them 'soul sisters':253

While we have bodies we must stay in our houses, which have been built for us by a good sister soul which has great power to work without any toil or trouble (II. 9 [33] 18, 14–17, translated by A.H. Armstrong, also referred to in Wilberding, 2020: 278).

It must be said that Plotinus rejected an overly strong astrological influence on people's lives. He was convinced that the stars do not determine our lives or our character, but are merely signs from which we can read what Providence has planned for us or what *logoi* have been put in us by the World Soul (III. 1 [3] 6, 1–25). On Plotinus' stance on astrology, see Merlan (1953), Armstrong (1955), Pigler (2001), Adamson (2008), Elgersma-Helleman (2010), Emilsson (2015).

Compare Hutchinson (2018: 48): 'Plotinus does not make explicit when the soul-trace animates the body or when the lower soul descends into the qualified body. However, Plotinus' student, Porphyry, does so in his *To Gaurus on How Embryos Are Ensouled*. According to Porphyry, the lowest power of the parent's souls provides the embryo with the vegetative power and they jointly contribute to the development of the embryo, with the mother's womb contributing to the embryo the way a rootstock does to a scion (*To Gaurus*, 10.1 – 16.9). Central to Porphyry's view is that the embryo possesses vegetative capacities similar to a plant, and only on exiting the womb at birth does the newborn acquire higher capacities stemming from the descended soul. Plotinus holds a similar view regarding the capacities of the embryo and the descent of the lower soul into the newborn, but he makes the world soul the primary agent of the formation of the embryo, not the soul of the parents.'

²⁵³ For more on the relationship of the two soul sisters, see Helleman-Elgersma (1980).

But there is, one might answer, a difference between souls, and all the more in that the Soul of the All has not separated itself from soul as a whole but remained there and put on the body, but the individual souls, since body exists already, received their allotted parts when their sister soul, as we may say, was already ruling, as if it had already prepared their dwellings for them (IV. 3 [27] 6, 10–15, translated by A.H. Armstrong, also referred to in Wilberding, 2020: 278).

Since the World Soul and the rational souls are related, there must be a harmonious arrangement between them when it comes to fulfilling their specific functions. The specific function of the World Soul is to remain permanently in the cosmic body and to build 'houses' for rational souls; the task of rational souls is to descend periodically into bodies and temporarily inhabit them.

2, 7–13 What about the cases where those of the same parents are different? Maybe [it is] because of the dominance that is unequal. But the thing is that it is not the case – even if it appears so – that sometimes most of the forming principles come from the male, at other times from the female, or that each of them contributes an equal part of forming principles. No, both of them contribute the whole, and it is then embedded [in the embryo], but either the part of the one or the other dominates over the matter.

Plotinus begins the second chapter by correcting the false idea that both father and mother pass on to their children only those *logoi* which they themselves actualise (V. 7 [18] 2, 5). According to Plotinus' own proposition, in addition to their own bodily properties, parents may also pass on to their children other properties not present in their own phenotypes. In other words, parents can pass on logoi that they themselves do not actualise. Plotinus justifies his proposition by referring to chapter one, in which he stated that all individual souls contain the *logoi* all of living beings born in the cosmos (V. 7 [18] 1, 9-12; V. 7 [18] 2, 5-6). In this way, children can develop peculiar properties which cannot be attributed to the phenotype of either parent. Plotinus then goes on to say that 'each time (i.e. whenever the parents procreate) [they have] other principles at hand' (V. 7 [18] 2, 6-7). Unfortunately, Plotinus does not elaborate on what exactly it means to have other logoi at hand, or what principle or mechanism governs the process of biological inheritance. In order to find an answer, we took an excursus into other passages of the *Enneads* in which Plotinus mentions various factors involved in procreation and the formation of embryos. There, we discovered that the World Soul – which pervades, ensouls, and governs the entire universe – is responsible for the creation of all living beings' bodies. Thus, the World Soul, including all the logoi, is contained in the genetic material secreted by the parents at conception. From the moment the genetic material of the parents is mixed, the World Soul works to produce the embryo's physical body. It determines which *logoi* of the father and the mother, as well as which other

logoi, will be actualised by the future child as part of its personal *logoi*-combination. Furthermore, we saw that Plotinus assumes (at least in humans) the presence of two souls, which he frequently refers to as 'soul sisters': ²⁵⁴ one is the World Soul, which forms the body, and the other is the rational soul, which descends into the completed body of the embryo shortly before its birth.

In the present passage, Plotinus addresses another important question on the topic of heredity, namely that of family resemblance. Behind the short and seemingly unoriginal question – 'What about the cases where those of the same parents are different?' – lurks in reality a complex catalogue of questions. On the one hand, there is the question of how it is that some children resemble their parents; on the other hand, how is it possible that other children do not resemble their parents at all? There are also cases in which children look more like one parent than the other. In addition, there is the question of how the child's biological sex develops: is the sex inherited through the semen, or is it determined by other factors involved in heredity?

In Plotinus we do not find comprehensive discussions of all these questions. Rather, Plotinus offers us the answer to all these questions succinctly in one sentence: 'Maybe [it is] because of the dominance that is unequal'. That is, unequal dominance between the paternal and maternal logoi determines whether the offspring will develop phenotypic properties and the biological sex of the father or the mother. Plotinus explains that the inequality in dominance is not a quantitative one. Thus, it is not the case that the child resembles the father more in both appearance and biological sex because the father has passed on more logoi to the child than the mother. Plotinus emphasises that both parents pass on the same number of logoi to their offspring, namely all the logoi that exist in the World Soul. Even though Plotinus does not mention the World Soul here, he did refer to it in the previous section (V. 7 [18] 2, 6) when he said that the parents 'have all the forming principles': this was an allusion to his statement from the first chapter (V. 7[18] 1, 9-12) that the soul of each individual – male and female – has the *logoi* of every living being. The child thus inherits two entire *logoi*-sets, one from each parent, which are identical in terms of the type and number of *logoi* that they contain. The only difference between them is which logoi are actualised: the paternal logoi-set contains logoi actualised by the father, while the maternal logoi-set contains logoi actualised by the mother.

Logoi that are actualised must somehow be different from the other, non-actualised logoi. Even though Plotinus does not comment on this, it might seem reasonable to assume that actualised logoi are dominant over non-actualised logoi. This is not necessarily the case, though: since one child can look more like their father while a sibling looks more like their mother, it is clear that which logoi are dominant

²⁵⁴ II. 9 [33] 18, 14–17; IV. 3 [27] 6, 10–15.

varies from conception to conception. Sometimes, *logoi* actualised by neither parent will dominate. The *logoi* of the father, mother, and any other *logoi* that prove to be dominant make up the *logoi*-combination that the conceived child will actualise.

Remarkably, Plotinus presents a theory of heredity that is very close to modern Mendelian genetics.²⁵⁵ If we conceive of *logoi* as genes, we get the following picture: mother and father have an equivalent gene set, but during conception and in heredity some genes turn out to be dominant and others recessive. According to scientific genetics, the genome of the child contains genes that have turned out to be dominant, but also genes that are recessive and have not developed in the phenotype of the child; using Plotinus' terms, one would say that the dominant *logoi* are actualised by the child, while all the other *logoi* (which Mendel would call recessive) are also present in the child's soul in a non-actualised state. There are also other similarities between Mendelian genetics and Plotinian embryology. Plotinus claims that parents do not only inherit only their own *logoi*, nor only *logoi* that are specific to humans, but *logoi* from all living beings that exist in the cosmos. Similarly, scientific genetics has shown that various species have many genes in common:

Genetic research also has demonstrated that virtually all organisms on this planet have similar genetic systems, with genes that are built on the same chemical principle and that function according to similar mechanisms. Although species differ in the sets of genes they contain, many similar genes are found across a wide range of species. For example, a large proportion of genes in baker's yeast are also present in humans. This similarity in genetic makeup between organisms that have such disparate phenotypes can be explained by the evolutionary relatedness of virtually all life-forms on Earth. This genetic unity has radically reshaped the understanding of

²⁵⁵ 'Gregor Mendel published his work in the proceedings of the local society of naturalists in Brünn, Austria (now Brno, Czech Republic), in 1866, but none of his contemporaries appreciated its significance. It was not until 1900, 16 years after Mendel's death, that his work was rediscovered independently by botanists Hugo de Vries in Holland, Carl Erich Correns in Germany, and Erich Tschermak von Seysenegg in Austria. Like several investigators before him, Mendel experimented on hybrids of different varieties of a plant; he focused on the common pea plant (Pisum sativum). His methods differed in two essential respects from those of his predecessors. First, instead of trying to describe the appearance of whole plants with all their characteristics, Mendel followed the inheritance of single, easily visible and distinguishable traits, such as round versus wrinkled seed, yellow versus green seed, purple versus white flowers, and so on. Second, he made exact counts of the numbers of plants bearing each trait; it was from such quantitative data that he deduced the rules governing inheritance. Since pea plants reproduce usually by self-pollination of their flowers, the varieties Mendel obtained from seedsmen were "pure" - i.e., descended for several to many generations from plants with similar traits. Mendel crossed them by deliberately transferring the pollen of one variety to the pistils of another; the resulting first-generation hybrids, denoted by the symbol F,, usually showed the traits of only one parent. For example, the crossing of yellow-seeded plants with green-seeded ones gave yellow seeds, and the crossing of purple-flowered plants with white-flowered ones gave purple-flowered plants. Traits such as the yellow-seed colour and the purple-flower colour Mendel called dominant; the green-seed colour and the white-flower colour he called recessive. It looked as if the yellow and purple "bloods" overcame or consumed the green and white "bloods." At: https://www.britannica.com/science/heredity-genetics/Mendelian-genetics#ref50772.

the relationship between humans and all other organisms (https://www.britannica.com/science/heredity-genetics).

Comparisons of specific DNA sequences between humans and their closest living relative, the chimpanzee, reveal 99 percent identity, although the homology drops to 96 percent if insertions and deletions in the organization of those sequences are taken into account. This degree of sequence variation between humans and chimpanzees is only about 10-fold greater than that seen between two unrelated humans. From comparisons of the human genome with the genomes of other species, it is clear that the genome of modern humans shares common ancestry with the genomes of all other animals on the planet and that the modern human genome arose between 150,000 and 300,000 years ago (https://www.britannica.com/science/human-genome).

Every individual thus shares genes with a whole host of other living beings, including those of different species. Unlike Plotinus, modern genetics does not hold that every single individual possesses every single gene in existence. However, the idea that there is a shared pool of genetic information from which all life derives is still strikingly similar to the theory Plotinus describes in V. 7 [18].

It is, however, not so much the similarity between Plotinus' and Mendel's models of heredity that provokes the greatest astonishment. Rather, it is the fact that Plotinus postulated equality between the male and female partners in procreation – in terms of their respective contributions to heredity – that seems particularly innovative in light of his predecessors' theories. This marked a bold advancement not only from a biological point of view but above all from a socio-cultural perspective.

2, 8-9 Maybe [it is] because of the dominance that is unequal.

As Liddell & Scott point out, the term *epikratêsis* ('dominance') is used in embryological contexts as a technical term meaning 'predominance in heredity': it is this usage of *epikratêsis* that occurs frequently in the *Corpus Hippocraticum* and in Galen. Plotinus uses the term *epikratêsis* only once in his work, namely in this sentence. 'Predominance in heredity' means that one partner's genetic material or sex prevails or dominates over the other, and is an attempt to explain why children sometimes bear a stronger resemblance to one parent than the other. Democritus of Abdera, for example, believed that this phenomenon can be explained by the fact that the semen of one parent prevails over the semen of the other parent in quantitative terms.²⁵⁷ Thus, if the quantity of the mother's semen predominates in reproduction, it is very likely that a girl with maternal characteristics will be conceived.

 $^{^{256}}$ Regrettably, in his latest commentary on V. 7 [18], Kalligas (2023: 333) completely overlooks the innovative and progressive embryology that Plotinus presents here.

Democritus, On Seed 6. See also Aristotle, GA 763b30-764a12.

The verb *kratein*, translated as 'to rule over, conquer, prevail, get the upper hand, to be superior', appears frequently in various contexts, including the context of biological heredity. In Aristotle's *GA*, we find frequent usage of the verb *kratein* in reference to genetic information of the male and the female. In contrast to Democritus, in Aristotle the predominance of one set of genetic material is not down to the quantity of semen, but the quality of the formative movements conveyed by the semen to the embryonic material: 'Usually the natural course of events is that when (the movement of the male parent) gains the mastery (kratein) – and when it is mastered (krateisthai) – it will do so both qua male and qua individual father' (GA 768a23-24). Aristotle sees it as natural for the formative movements of the male to dominate over those of the female. Plotinus, like Aristotle, emphasises that the predominance (epiktatêsis) of the forming principles should not be understood in a quantitative sense, but in a qualitative sense. Unlike Aristotle, he does not specify the male genetic material as inherently dominant. Plotinus instead argues that the predominance (epikratêsis) of certain logoi is not related to the sex of the parents but to the World Soul, which governs the process of biological inheritance.

2, 9-13 But the thing is that it is not the case – even if it appears so – that sometimes most of the forming principles come from the male, at other times from the female, or that each of them contributes an equal part of forming principles. No, both of them contribute the whole, and it is then embedded [in the embryo], but either the part of the one or the other dominates over the matter. We have identified the question 'What about the cases where those of the same parents are different?' as one about family resemblance (V. 7 [18] 2, 7–8). Plotinus seeks to explain how it is that siblings from the same parents develop so differently, in that each of the siblings resembles the father and mother to different degrees. To this question Plotinus first gives a quite lapidary answer: 'it is because of the dominance that is unequal' (V. 7 [18] 2, 8–9). Now, in the sentence under examination, he elaborates on how this unequal dominance is (or is not) to be understood. In doing so, Plotinus attaches a great deal of importance to making it understandable that reproduction and heredity do not depend on quantities of genetic material (i.e. logoi). A stronger resemblance of the child to one of the parents is not due to that parent contributing a greater number of logoi during conception. In fact, Plotinus emphasises that both parents contribute an equal number of logoi - 'the whole' of logoi in each case. In order to understand what is meant by the 'whole', we must recall the statement from chapter one, according to which the soul of each individual possesses all the *logoi* of all living beings existing in the cosmos. Accordingly, father and mother each pass on to their offspring their whole set, consisting of both the logoi they each actualise and all the other logoi in existence. Plotinus explains that the parental logoi are embedded in the embryo, and it is 'either the part of the one or the other dominates over the matter'. The matter here is, of course, the

embryonic matter, which Plotinus, in agreement with Aristotle, associates with the female menses. Plotinus does not specify here what criterion determines which *logoi* will prove to be dominant in the embryo and thus which *logoi* the future child will actualise, but as we have seen (pp. 134–135), he indicates elsewhere that the World Soul is the governing principle that produces the bodies of the embryos, and that astrology also plays a role in this.

The theory of heredity put forward here by Plotinus is able to explain why siblings resemble their parents to varying degrees. The concept, however, seems to contain two problems:

- (1) If both father and mother pass on their whole *logoi*-sets to the offspring, does this not result in a duplication of *logoi* in the soul of the offspring?
 - (1.a) If the answer is yes, then this would mean that over the generations there would be a steady multiplication of *logoi*. But this is impossible, since Plotinus states that each soul contains all the *logoi* that there are in the universe, meaning that the first generation must have just as many *logoi* as the second and, in fact, all subsequent generations.
 - (1.b) If the answer is no, then how is the multiplication of *logoi* avoided? To give a correct answer to this question, one must first understand what exactly is implied by 'mixtures' (*mixeis*) of *logoi*-sets, and how exactly inheritance of *logoi* works.
- (2) Suppose that the problem of duplication of *logoi* in biological inheritance is solved. Would there not be still another *logoi*-set associated with the soul that transmigrates into the child?
 - (2.a) If the answer is yes, we have yet another problem of duplication to solve. Moreover, the question arises as to whether this logoi-set affects the child's appearance.
 - (2.b) If the answer is no, one must be able to explain why the individual soul that descends into the child during transmigration does not have any *logoi*.

The concept of *idempotence* from set theory²⁵⁸ offers an explanation of how forming principles can be passed on without being duplicated. The definition of *idempotence* implies that whenever a set A is applied twice or more to any other value, it gives the same result as if it were applied once:

$A \cup A = A$ (A joined with A results in A)

²⁵⁸ 'Set theory, branch of mathematics that deals with the properties of well-defined collections of objects, which may or may not be of a mathematical nature, such as numbers or functions. The theory is less valuable in direct application to ordinary experience than as a basis for precise and adaptable terminology for the definition of complex and sophisticated mathematical concepts.' At: https://www.britannica.com/science/set-theory.

We can seemingly solve the duplication problem of (2.a) as well, since we can simply apply set theory and *idempotence* to the *logoi*-set of the child's own soul, thereby avoiding the duplication problem when the child's soul enters its body and unites with the World Soul. However, an additional *logoi*-set provided by the child's soul would only complicate the mixing of *logoi* and other mechanisms of biological heredity. We would accordingly have to account for a mixture of three *logoi*-sets, each having its own dominant *logoi*. But as has already been shown, according to Plotinus, the child's soul does not contribute a *logoi*-set to the formation of its body, since it enters the body at birth, by which point the body is already completely formed by the World Soul.

Since all inheritance processes take place in the World Soul and work with principles that are inherent in the World Soul, the World Soul suffers neither loss nor gain of new principles with the birth of each living being. However, before we turn in detail to the solution of the duplication problem and the notion of *idempotence*, I would first like to present some theories of family resemblance put forward by Plotinus' predecessors.

Explaining family resemblance has been the concern of many physicians and philosophers. A real challenge for ancient embryologist was to explain how biological sex is inherited. Since biological sex was also considered a type of resemblance – boys inheriting sex from their father and girls from their mother – embryologists struggled to find an explanation for cases in which sons resemble their mothers and daughters their fathers. How can it be that, for example, the father's genetic information has prevailed in relation to the appearance of the child, but not in relation to its sex?

In *GA*, Aristotle deals extensively with this question, and in doing so discusses some theories of the Presocratics such as Anaxagoras, Empedocles, and Democritus:

It is however not agreed whether one is male and another female even before the difference is plain to our senses, the difference being acquired by them either within the mother or earlier. Thus, some people, such as Anaxagoras and certain other physiologers, say that this opposition exists right back in the semens, alleging that the semen comes into being from the male, while the female provides the space for it, and that the male comes from the right side and the female from the left [and, as regards the uterus, that the males are in the right side and the female in the left]. Others, like Empedocles, hold that the opposition begins in the womb; according to him, the semens which enter a hot womb become males, those which enter a cold one, females; and that the cause of this heat and cold is the menstrual flow, according as it is hotter or colder, older or more recent. Democritus of Abdera holds that the difference of male and female is produced in the womb, certainly, but denies that it is on account of heat and cold that one becomes male and another female; this is determined, he asserts, according to which of the two parents' semen prevails (kratein), the semen, that is to say, which has come from the part wherein male and female differ from one another (GA 763b30-764a12, translated by A.L. Peck).

Aristotle presents here three alternative theories explaining how biological sex develops in embryos. (1) Anaxagoras held the view that sex is encoded in the male semen: semen which will produce a male is made in the right testicle, while semen which will produce a female comes from left. Accordingly, during reproduction, the corresponding semen should settle in the right part of the uterus for a boy to be born, or in the left part for a girl to be born. (2) Like Anaxagoras, Empedocles followed a rule based on duality to explain how embryos develop into either girls or boys. Empedocles thought that the woman's body temperature during fertilisation was decisive: if the male semen entered a 'hot womb', a boy was born, whereas if the semen entered a 'cold womb', the child would be a girl. (3) Democritus, who advocated the two-seed theory, believed that children become male or female depending on whether the male or female seed 'prevails' (*kratein*). 259 As was said above, Democritus uses the term *kratein* to express dominance of either the male or the female semen in heredity. Unlike Plotinus, Democritus has quantitative predominance of the semen in mind, which we can read in Hippocrates:

Sometimes the semen of the woman is stronger, sometimes it is weaker; the same for the man. In the man there is both female and male seed; same for the woman [...] If the seed that comes from both is strong, a male is born; if weak, a female. Whichever prevails (*kratein*) in quantity, that is what is born (*On Semen 6*, translated by T.U.H. Ellinger).

After presenting the Presocratic theories on family resemblance, Aristotle proceeds by pointing out their weaknesses. Then, he presents his own theory:

Arguments against Anaxagoras: The same argument which we used against Empedocles and Democritus holds good against those who allege that the male comes from the right side and the female from the left. [...] By what cause, then, will the uterus be present in those which come from the left side but not in those which come from the right? Supposing one comes (from the left) without having got this part, there will be a female without a uterus – or if it so chance, a male with one! [Again, as has in fact been said before, a female embryo has actually been observed in the right part of the uterus, and a male one in the left part, and both male and female in the self-same part, and that not once but several times over; or the male one on the right side, and the female on the left, and no less both are formed on the right side] (*GA* 765a4–7; 765a13–22, translated by A.L. Peck).

Arguments against Anaxagoras and Empedocles: Further, male and female twins are often formed together in the same part of the uterus. This has been amply observed by us from dissections in all the Vivipara, both in the land-animals and in the fishes. Now if Empedocles had not detected this, it is understandable that he should have made the mistake of assigning the cause he did; if on the other hand he

²⁵⁹ On the reproduction theory of Democritus see Perilli (2007).

had detected it, it is extraordinary that he should still continue to think that the cause is the heat and cold of the uterus, since according to his theory the twins should both turn out male, or both female; whereas in actual fact we do not observe this to occur (GA 764a32-764b1, translated by A.L. Peck).

Arguments against Empedocles and Democritus: Further, they cannot explain with any ease how it is that at the same time a female offspring takes after the father and a male offspring after the mother; for those who state the cause of male and female as Empedocles or Democritus state it, make statements which on another score are impossible while those who maintain that it all depends upon whether more or less semen comes from either the male or the female, and that this is why one offspring is formed as a male, and another as a female, these people, I am sure, are not in a position to show how the female is going to take after the father and the male after the mother, since it is impossible for more semen to come from both parents at one and the same time (*GA* 769a13–27, translated by A.L. Peck).

Aristotle's own theory on family resemblance: Some of the movements (those of the male parent and those of general kinds, e.g., of human being and animal) are present in (the semen) in actuality, others (those of the female and those of ancestors) are present potentially. Now when (a) it departs from type, it changes over into its opposites; but when (b) the movements which are fashioning the embryo relapse, they relapse into those which stand quite near them; for example, if the movement of the male parent relapses, it shifts over to that of his father — a very small difference — and in the second instance to that of his grandfather. And in this way too [not only on the male side but also on the female] the movement of the female parent shifts over to that of her mother, and if not to that, then to that of her grandmother; and so on with the more remote ancestors.

(1) Usually the natural course of events is that when (the movement of the male parent) gains the mastery – and when it is mastered – it will do so both qua male and qua individual father, since the difference between the two (faculties) is a small one, and so there is no difficulty in their both coinciding (for Socrates is a man who, while (a) he has the characteristics of a class, (b) is also an individual). Hence for the most part males take after their father – and females after their mother, since a departure from type takes place in both directions simultaneously, and the opposite of 'male' is 'female' and the opposite of 'father' is 'mother', departure from type always being into opposites. But (2) if the movement that comes from 'the male' gains the mastery and the movement that comes from Socrates does not, or the other way round, then the result is that male offspring taking after their mother are formed and female ones taking after their father. Supposing (3) the movements relapse: if (i) the male 'faculty' stands fast but the movement from Socrates relapses into that of his father, then the offspring will be male and take after its grandfather or some other more remote ancestor [according to this principle]; if (ii) the male-faculty gets mastered, the offspring will be female, and usually will take after the mother; but supposing this movement also relapses, it will take after the mother's mother or some other more remote ancestor on the same principle. Precisely the same scheme holds good

with the various parts of the body; very often, of course, some parts take after the father and some after the mother, and others after some of the ancestors, since the movements belonging to the parts as well are present in (the seminal substance), some of them in actuality, some potentially, as has often been stated (*GA* 768a12–768b5, translated by A.L. Peck).

Aristotle presents a theory which, like those of his predecessors, is based on the principle of duality: the male is the active principle and his formative movements are in actuality; the female is the passive principle and her formative movements are in potentiality. The formative movements are of different kinds: there are the formative movements of the parents' individual properties, of their sex (male or female), and also movements 'of general kinds, e.g., of human being and animal'.260 In heredity, the following possibilities can happen: (1) heredity occurs naturally, (2) natural heredity turns into its opposite, or (3) the formative movements 'relapse'. The natural course of events is when the movements of the male, both his individuality and his sex, prevail or 'gain mastery' (kratein) over the movements of the female. The result of natural heredity is, thus, a boy who resembles his father. But there are several variations that fall away from this natural or ideal case. If the movements of the male's individuality fail, but those of the male sex predominate, a boy is born who resembles his mother. If the movements of the male sex fail, but those of the male's individuality do not, a girl is born who resembles her father. If all the movements of the male fail, a girl is born who resembles her mother. Furthermore, Aristotle says that the movements of the male also may 'relapse'. In this case, the formative movements of the male's individuality are somehow dimmed. When this happens, the movements of the relatives come through (e.g. the movements of the male's father) and also 'those of general kinds, e.g., of human being and animal'. In these cases, the child might resemble a grandparent – or none of his or her relatives.

Even though Aristotle tries to provide explanations for various outcomes of family resemblance, his theory contains a few profound ambiguities. In particular, it is not clear how one should conceive of the formative movements. If the male movements, being in actuality, fail, and instead female movements, being in potentiality, have to become actual, what principle brings the female movements out of the state of potentiality into the state of actuality? Why does Aristotle need reproductive hylomorphism if the female actually does pass on movements to the embryo? How can the semen of the male contain in addition to his own movements also the movements of his father?²⁶¹ Last but not least, what are the movements of

On the heredity of the parent's individual properties and the general properties, see Balme (1987: 1): 'Here I argue that in the *G. A.* Aristotle holds that the animal develops primarily towards the parental likeness, including even non-essential details, while the common form of the species is only a generality which "accompanies" this likeness.'

²⁶¹ Aristotle claims that after the formation of the heart in the embryo is completed, the father's seed evaporates and the embryo begins to produce movements, i.e. heartbeat, with the help of its own

the 'general kinds'? By attributing different causes to the male and female agents of heredity, Aristotle puts himself at a disadvantage. Because the identification of the male with the efficient and formal causes and of the female with the material cause does not do justice to reality, Aristotle has to provide additional explanations in order to explain why girls are born or why children resemble their mothers. As a result, the theory loses its elegant simplicity. If Aristotle considered the dominance of male movements as natural, and heredity of female movements as a deviation from the standard, there should be significantly more boys born in the world who resemble their father. But this does not correspond to reality. 'In reality both parents transmit the heredity pattern equally, and, on average, children resemble their mothers as much as they do their fathers.' ²⁶²

As we have seen, Plotinus seems to agree with some theoretical components of Aristotle's embryology, particularly the latter's idea that the seminal fluid of the male by itself plays no part in either reproduction or the formation of the embryo. On this view, it is the formative movements stored in the seminal fluid that act on the embryonic matter and are thus essentially involved in reproduction and heredity. As soon as the formative movements have fulfilled their task, the seminal fluid evaporates, as it is no longer useful for the further development of the embryo. Thus, when it comes to passing on parental properties to the offspring, the material components are circumstantial. Nevertheless, the embryonic matter – the female menses – must be present and must also be able to adequately accommodate the formative movements.

Similar assumptions can be found in Plotinus' embryology. In his theory of biological inheritance, which he sets up here in chapter two, the essential components are the intelligible principles – the logoi. Material components fulfil only an instrumental function as, for example, carriers of the logoi and as initiators of reproduction. These material instruments are operated by the souls of both parents and the World Soul. In this respect, the theories of Plotinus and Aristotle differ radically, for in Aristotle the active principle that ideally governs heredity is exclusively the male, who uses semen as a carpenter uses his instruments (GA 730b9–19). Plotinus, on the other hand, considers neither the male nor the female to be an active or passive principle in heredity, but starts on a different level: the active principle is the parents' souls and the World Soul, while the passive principle is matter. In the interaction between the souls of the father, the mother, and the World Soul, a combination of dominant logoi for the future child is created, which is imparted onto the embryonic matter.

As already pointed out, Plotinus' theory seems to produce a problem of duplication of *logoi* in the offspring's soul. It is, however, doubtful that Plotinus thought

soul (GA 739b34-740a9).

²⁶² At: https://www.britannica.com/science/heredity-genetics.

that the *logoi* duplicate whenever a new child is conceived: if that were the case, it would lead to an infinite number of forming principles in the souls of individuals as the generations pass. As noted above, a suggestion as to how the forming principles are passed on without being duplicated is offered by a concept from set theory – *idempotence*. The definition of *idempotence* implies that whenever a set A is applied twice or more to any other value, it gives the same result as if it were applied once:

$$A \cup A = A \rightarrow (A \text{ joined with } A \text{ results in } A)^{263}$$

With the notion of *idempotence*, we are able to avoid the duplication of principles in the offspring. But can we really apply this mathematical concept to forming principles? Because mathematics is constructed on intelligible principles and operates with intelligible sets, this system should indeed be applicable to the intelligible set of *logoi*. The only requirement is that the parental sets joined together must be identical: the whole set of forming principles from the father must be equal to the whole set from the mother. The set given to the offspring must again be identical with the sets of its parents. In the first chapter, Plotinus writes that each individual possesses all the forming principles of all living beings born in the cosmos. From this, it follows that everyone possesses the same set of *logoi*, so that the requirement is met:

 $\{logoi \text{ from father}\} = A = \{logoi \text{ from mother}\} \rightarrow A \cup A = A = \{logoi \text{ from the offspring}\}$

In this way, the set of forming principles is not duplicated in the offspring's soul. The concept of *idempotence* is thus suitable for solving the problem of duplication. But things are more complicated than they seem at first sight. The question remains, if all human beings possess the same set of forming principles, how is it that different individuals are born, and that some children resemble one parent more than the other? This is where 'unequal dominance' in the *logoi*-sets of the two parents comes into play (V. 7 [18] 2, 8). With the help of set theory, I shall attempt to explain exactly how Plotinus' conception of dominant forming principles might work.

According to Plotinus' model of heredity, both parents have a set of forming principles, which is identical except for one thing: each of the parents actualises different *logoi* of this set. The dominant *logoi* in the father's set taken together form the *logoi*-combination which he actualises {*logos*^{combfather}}. The same is true for the

[&]quot;The symbol \cup is employed to denote the union of two sets. Thus, the set $A \cup B$ – read "A union B" or "the union of A and B" – is defined as the set that consists of all elements belonging to either set A or set B (or both). For example, suppose that Committee A, consisting of the 5 members Jones, Blanshard, Nelson, Smith, and Hixon, meets with Committee B, consisting of the 5 members Blanshard, Morton, Hixon, Young, and Peters. Clearly, the union of Committees A and B must then consist of 8 members rather than 10 – namely, Jones, Blanshard, Nelson, Smith, Morton, Hixon, Young, and Peters.' At: https://www.britannica.com/science/set-theory.

mother: the dominant *logoi* in the mother's *logoi*-set form the *logoi*-combination that she actualises { logos combmother}. When the father's and the mother's logoi-sets come together and mix to form a child, everything is the same except the father's {logoscombfather} and the mother's {logoscombmother} - they differ because both are unique combinations of dominant forming principles. Consider the following examples of how such sets of forming principles can be constructed. The curly brackets denote a set: for example, {father} is the entire *logoi*-set of the father; {mother} is the entire *logoi*-set of the mother. The *logoi*-set of both the father and the mother can now be sorted in different ways. For example, the *logoi* can be sorted according to properties. Considering the property of 'having hair', we can sort all possible *logoi* that match this property: a = brown hair, b = red hair, c = black hair, etc. Some of the traits turn out to be dominant, i.e. they are actualised by the parents. Next, the whole logoi-set, for example that of the father, can be sorted according to the dominant and non-dominant properties, so that the logoi-set of the father is composed as follows: $\{father\} = \{logos^{combfather}\}; \{non-dominant logoi\}.$ The same applies to the mother. Both sorting possibilities are shown here in detail:264

- a) {father} = {hair{a, b, c, ...}; nose{a, b, c, ...}; ...} = the whole set of forming principles of the male. Some principles within the set are marked as dominant.
 - b) {father} = {dominant{hair{c}; nose{a};...}; {non-dominant logoi}} = {{logos^{combfather}}; {non-dominant logoi}} = the same set as in 1.a) but sorted differently: the set is grouped into dominant and non-dominant categories.
- 2. a) {mother} = {hair{a, b, c, ...}; nose{a, b, c,...}; ...} = the whole set of forming principles of the female. Some principles within the set are marked as dominant.
 - b) {mother} = {dominant{hair{c}; nose{b};...}; {non-dominant logoi}} = {{logos^{combmother}}; {non-dominant logoi}} = the same set as in 2.a) but sorted differently: the set is grouped into dominant and non-dominant categories.

The question now is what mixture of dominant forming principles may result from the combination of these two parental sets. Both parents have the same hair type c, which I have simply defined as black. How many options are there for the child with regard to hair type? The first possibility is that the child can only inherit forming principles that are dominant in the parental sets. Accordingly, there will be only one possible hair type for the child to inherit, namely option c: because both parents have black hair, the child will be black-haired, too. It may also be possible

The curly brackets denote a set: $\{father\} = the\ entire\ logoi\ set\ of\ the\ father;\ \{mother\} = the\ entire\ logoi\ set\ of\ the\ mother.$ The dominant principles in these sets are marked with bold and italic print.

that at the moment of procreation, the hair type a becomes dominant in such a way that its dominance exceeds that of the hair type c of both parents. This should be possible, for Plotinus himself writes that 'nothing prevents them [the parents] from producing according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand' (V. 7 [18] 2, 5–7). Thus black-haired parents may get a child with red hair a, although this is a phenomenon that Plotinus might have rarely observed, if ever. This is why I think in our example it is more likely that the offspring will display hair type c, just like both the parents.

The parents in our example each have a different nose type. The father has the nose type a – let us say it stands for aquiline – while the mother has the nose type b, which can represent a snub nose. The question, then, is what nose type will the child have, aquiline or snub? This is something that depends on the unequal dominance of the two parents. Suppose that it is the mother's snub nose that is more dominant than father's aquiline nose. In this case, the child will receive the mother's nose type b. Next time they reproduce, it is possible that the father's nose type will dominate over the mother's, so that the second child's nose will be aquiline, like the father's. Again, it may also be that the child develops neither the mother's nor the father's nose shape, but receives the *logos* of nose type c. Regardless of which *logoi* the child will actualise, the parental *logoi*-sets, when combined, are not duplicated, but only re-sorted in the child.

3. {father} \cup {mother} = {{logos^{combfather}}}; {logos^{combmother}}; {non-dominant logoi}} = {{logos^{combchild}}}; {non-dominant logoi}}

In summary, it can be said that the notion of *idempotence* from set theory demonstrates that the duplication of forming principles is not necessary. Unfortunately, we cannot reconstruct how exactly a child's *logoi*-combination is composed, since the text is not informative on this matter. Plotinus briefly and vaguely explains that 'each time [the parents have] other principles at hand' and that there is a 'dominance that is unequal' (V. 7 [18] 2, 6–8). Accordingly, the child's *logoi*-combination may be composed of the dominant *logoi* of the parents as well as of any other *logoi* in the universe. The only requirement is that the principles must be ready for use at that particular moment of conception.

2, 13–18 Why are individuals, who live in other places, different? Is it really matter that makes the difference, because it is not being dominated in a similar way? All [individuals] are in that case unnatural except one. But if the difference is beautiful in many places, the form is not one. That which is on the side of matter must be linked to the ugliness alone, and even there the perfect forming principles are concealed, but given as wholes.

Having elucidated how parents pass on the intelligible forming principles (logoi) of their properties to their children, in this passage Plotinus aims to examine other factors that might have an influence on the development of the phenotype of the offspring. He begins the new investigation with the question of why individuals look different 'in other places' (chôra). There are various suggestions among the translators on how to read chôra, including 'season' (Armstrong), 'places in the womb' (Harder), 'places' (Gerson), and 'countries' (Brisson). Parallel passages in the <code>Enneads</code> suggest that chôra is rather to be read in the sense of different regions of the earth characterised by different geographical and climatic conditions. Accordingly, Plotinus is concerned with the question of why people living in certain regions of the earth develop certain phenotypes (such as skin colour, eye shape, body size, and other genetic differences) that are typical for these respective regions.

Next, Plotinus proposes that diverse populations with regional phenotypes result from the fact that in different regions of the earth matter $(hyl\hat{e})$ 'is not dominated in a similar way' by logoi. His assumption is thus that it is not different logoi that cause the different phenotypes, but that logoi affect matter differently in different regions of the world. For example, in a certain part of the world the effect of logoi on matter may be strong; in another region it may be weaker. Due to the varying efficacy of logoi on matter, the vegetation and populations found in different regions exhibit different phenotypic properties. These properties are therefore not due to the actual form transmitted by the logoi, but due to different material manifestations of the same form. In this way matter would contribute to the development of the various phenotypes of different peoples all over the world.

However, Plotinus points out that if this premise were true, then all the regional characteristics of different peoples would be unnatural (*para phusin*), except for the one phenotype that is entirely derived from the form of the *logoi* – an absurd conclusion. Thus, Plotinus goes on to argue that if the different peoples in many places (*pollachou*) exhibit beautiful properties, it cannot be that they are caused by only one form (*ouch hen to eidos*) conveyed by the same *logoi* but to varying degrees. Rather, there are different *logoi* at work, each producing different phenotypes.²⁶⁵

Kalligas (2011: 766–767) refers to an interesting concept 'battle over places' [μάχη περ τῶν τόπων] – a characteristic trait ascribed to Plotinian metaphysics in later Neoplatonist literature. Kalligas explains that whereas in the intelligible realm Forms coexist harmoniously, in the sensible world the images of the Forms compete for presence in specific regions of material substrate. The dominance of one species in an area prevents the appearance of its counterparts (for example hot vanishes when

Moreover, Plotinus remarks that any influence exerted by matter on individuals would only produce ugliness (*aischos*). By ugliness, of course, is meant any abnormal deformities of the body. Thus, Plotinus implicitly gives an answer to the question of why children are sometimes born with malformed body parts or other deficiencies: in these cases, matter has resisted the effect of the intelligible forming principles. But even in the ugly or malformed parts of the body, the 'perfect forming principles' (*teleiôn logôn*) are present 'as a whole set', but in a 'concealed' state. This means that, for example, in a malformed hand not only is the *logos* of the hand present, but all the *logoi* that exist in the universe. This can be explained by the fact that the soul, together with all the *logoi*, is omnipresent due to its intelligible nature.²⁶⁶

2, 13–15 Why are individuals, who live in other places, different? Is it really matter that makes the difference, because it is not being dominated in a similar way?

Different translators offer different readings of these two questions:

Armstrong: But how does it come about that children conceived in different seasons ($\dot{\epsilon}v\ \ddot{\alpha}\lambda\lambda\eta\ \ddot{\omega}\rho\alpha$) are different? Is it then the matter which makes the difference since it is not dominated in the same way [in the different seasons]?

Harder: Die aber an verschiedenen Stellen (*der Gebärmutter*) entstehen, wie sollen sie nicht verschieden sein? [next section] Bringt denn nun die Materie den Unterschied hervor, dadurch daß sie nicht gleichermaßen bewältigt wird?

Gerson: Why are people in different places different? Is it, then, the matter that causes the difference since it is not dominated in the same way?

Brisson: Mais, comment se fait-il que les rejetons nés dans un autre pays soient différents ? Est-ce donc la matière qui produit la différence, du fait qu'elle n'est pas dominée de la même manière ?

Armstrong explains that he deviates from the text provided by Henry and Schwyzer and instead follows Igal's suggestion: instead of *en allê chôra* (ἐν ἄλλη χώρᾳ), 'in different places', Igal and Armstrong read *en allê hora* (ἐν ἄλλη ὤρᾳ), 'in different seasons'. Unfortunately, Armstrong does not justify his preference for this reading. There are, however, good reasons for Armstrong's translation. In ancient embryology, the seasons were considered enormously important for the generation of animals. In GA, Aristotle notes that for different animal species there is an appro-

it gets cold), leading to continuous competition for control over portions of matter. Matter plays a role in providing the battleground for this battle but remains unaffected by it, as none of the competing features directly interacts with it.

See the discussion of the oneness of soul on p. 134–135.

priate season for reproduction. Furthermore, he links cold seasons with the birth of females and hot seasons with the birth of males:²⁶⁷

For this reason they do not put the jackasses to the females at the equinox, as is done with horses, but at the time of the summer solstice, so that the asses' foals may be born when the weather is warm. (Since the period of gestation in both horse and ass is a year, the young are born at the same season as that when impregnation takes place.) As has been said, the ass is by nature cold; and a cold animal's semen is, of necessity, cold like itself. (Here is a proof of it. If a horse mounts a female which has been impregnated by an ass, he does not destroy the ass's impregnation; but if an ass mounts her after a horse has done so, he does destroy the horse's impregnation - because of the coldness of his own semen.) Thus when they unite with each other, the impregnation remains intact by reason of the heat resident in one of the two, viz., that of the horse, whose secretion is the hotter. Both the semen from the male and the matter supplied by the female are hotter in the case of the horse; with the ass, both are cold. So when they unite - either the hot one added to the cold, or the cold added to the hot – the result is (a) that the fetation which is formed by them continues intact, i.e., these two animals are fertile when crossed with each other, but (b) the animal formed by them is not itself fertile, and cannot produce perfect offspring (GA 748a27–748b8, translated by A.L. Peck).

While it was common knowledge that the reproductive instinct of (almost) all animals is linked to a particular season, I doubt that Plotinus has seasons in mind here, because in the next passage he says that 'the difference is beautiful in many places (*pollachou*)' (V. 7 [18] 2, 14–15). Thus, it is probable that he also means 'places' in the present passage.

Unlike Armstrong and Igal, Harder, Gerson, and Brisson agree with Henry and Schwyzer in reading *en allê chôra* as 'in different places'. Here too, however, there are different interpretations of what exactly is meant by 'places'. Harder understands 'in different places' as referring to different parts of the uterus. According to Harder, Plotinus is considering the possibility of embryonic matter being differently dominated by the *logoi* in different parts of the uterus. Harder has in mind the Hippocratic doctrine (rejected by Aristotle but reintroduced by Galen) that the sex of an embryo depends on whether it grows in the left or the right part of the uterus. As the left side was associated with the female sex, and the right with the male, it was assumed that embryos on the left side of the uterus would become girls, whereas embryos on the right side would become boys.²⁶⁸ Unfortunately, I cannot see how

²⁶⁷ See also *GA* 717b5–15, 743a28–36, 755b13–20.

^{&#}x27;For example, some writers supposed that sex differentiation or other characteristics depend not on the right and left testicles, but on whether the fetus developed in the right or left side of the womb. This theory is often assumed in the Hippocratic writings, and may have been maintained by Parmenides' (Preus, 1977: 68). 'Ancient theories of sexual generation are often stated in terms of the opposition of right and left – some pre-Aristotelian writers believed that the right testicle produced male offspring, and the left, females; others thought that males were produced in the right side of the

this theory is appropriate in the context of Plotinus' embryology. Why should the dominance of the paternal and maternal *logoi* depend on where in the uterus the embryo is placed? There is no indication in the *Enneads* that Plotinus would have supported or even considered such a theory.

While Gerson translates *en allê chôra* very generally as 'in different places', Brisson is more specific, opting for 'dans un autre pays', i.e. 'in different countries'. Brisson thus assumes that Plotinus is asking why peoples in different countries have distinct properties. In fact, Plotinus had already proposed that environmental factors play an important role in the development of certain characteristics in an earlier treatise:

[A]nd the regions of the earth differ from each other according to their position in relation to the All, and particularly to the sun; and not only do the other animals and plants correspond to the regions but also the forms and sizes and colours, the tempers and desires and ways of life and characters of human beings. So the universal circuit rules all things. [...] But one must give to us what is ours [...] and make a distinction between what we do ourselves and what we experience of necessity and not attribute everything to those principles. And something certainly must come to us from the regions and the difference of the surrounding atmosphere, for instance, heat or coldness in our temperaments, but something also comes from our parents; at any rate, we are generally like our parents in our appearance and some of the irrational affections of our soul. [...] Again, too, people's likeness in appearance to their parents declares that beauty and ugliness come from the family, and not from the movements of stars. It is reasonable, too, to suppose that all sorts of living creatures and men are born together; and all of them, since they have the same position of the stars, ought to have the same destiny. How, then, are at one and the same time both men and other living creatures produced by the arrangements of the stars? (III. 1 [3] 5, 10–60, translated by A.H. Armstrong).

But, in fact, all individual things come into being according to their own natures, a horse because it comes from a horse, and a man from a man, and a being of a particular kind because it comes from a being of a particular kind. Admitted that the universal circuit co-operates (conceding the main part to the parents), and admitted that the stars contribute a great deal corporeally to the constituents of the body, heat and cooling and the consequent bodily temperaments; how, then, are they responsible for characters and ways of life, and especially for what is not obviously dominated by bodily temperament – becoming a man of letters, for instance, or a geometer, or a dice-player, and a discoverer in these fields? And how could a wicked character be given by the stars, who are gods? [...] We must rather say that the movement of the stars is for the preservation of the universe, but that they perform in addition another

womb, and females on the left; some seem to have thought that both oppositions operated in determining sexual and sex-linked characteristics. The opposition of right and left is approximately related to the opposition of hot and cold — with more heat, males (supposedly warmer) are produced, and with less heat, females' (Preus, 1977: 66). See also the discussion of Aristotle's critique of Anaxagoras on pp. 194–196.

service; this is that those who know how to read this sort of writing can, by looking at them as if they were letters, read the future from their patterns, discovering what is signified by the systematic use of analogy – for instance, if one said that when the bird flies high it signifies some high heroic deeds (III. 1 [3] 6, 1–26, translated by A.H. Armstrong).

In these texts, Plotinus considers the properties that individuals receive from external sources — such as geographical and climatic conditions, and the 'universal circuit' — as well as properties that are inherited from human to human. First, he notes that the various regions of the earth are located differently in relation to the stars and the sun. Depending on the climatic and landscape conditions different vegetation, animal species, and peoples have developed. The peoples differ not only in 'the forms and sizes and colours' but also in 'the tempers and desires and ways of life and characters'. Even though Plotinus concedes that external influences have a certain effect on the formation of individuals, he sees the main cause of individuality in heredity: 'And something certainly must come to us from the regions and the difference of the surrounding atmosphere, for instance, heat or coldness in our temperaments, but something also comes from our parents; at any rate, we are generally like our parents in our appearance and some of the irrational affections of our soul'.

In this very early text (the third chronologically), Plotinus does not speak of the inheritance of *logoi*, and nor does he consider the World Soul as the principle that governs the process of biological inheritance. However, it becomes clear that he attributes the development of different phenotypes and characters to human beings themselves, rather than some external influence. Plotinus' main concern here is to argue against astrologists who ascribe to the stars an overly deterministic influence on the formation of human beings. He states that stars are not actively involved in heredity or in any other factor of individual development. The stars are thus not causes or principles of individuals, but rather signs from which one can read information about individuals: 'this is that those who know how to read this sort of writing can, by looking at them as if they were letters, read the future from their patterns, discovering what is signified by the systematic use of analogy'.

In light of these texts, it is reasonable to read $ch\hat{o}ra$ as 'places', referring specifically to different regions of the earth. Plotinus is thus asking what causes the different phenotypes of the various peoples living in different regions.

2, 15–18 All [individuals] are in that case unnatural except one. But if the difference is beautiful in many places, the form is not one. That which is on the side of matter must be linked to the ugliness alone, and even there the perfect forming principles are concealed, but given as wholes.

Having discussed the inheritance of parental *logoi* by children, Plotinus turns to a new aspect of the development of individuals: he asks why individuals in different places (i.e. in different regions of the earth) look different (in terms of skin colour, eye shape, body size, etc.). Plotinus first proposes that regional phenotypes develop because *logoi* dominate matter to different degrees in different regions. The implication is that the varying appearance of different peoples is partly due to the effect of the *logoi* and partly to the influence of matter, which displays different properties depending on the efficacy of the *logoi*. As a consequence, in addition to the *logoi*, matter would also be a principle of individuation.

For Plotinus, however, matter being a cause of properties and of individual differentiation is inadmissible. Plotinus claims that if individuals had developed a certain phenotype due to the influence of matter, those individuals would be unnatural (*para phusin*); only individuals whose properties are entirely due to the activity of the *logoi* would be natural. A conclusion like this – which implies that only one particular people on earth is natural while all others are unnatural – sounds absurd. Accordingly, Plotinus argues in the next sentence that if people in many places (*pollachou*) have beautiful properties, then these cannot have been produced by just one form or principle (*ouch hen to eidos*): there must be different *logoi* at work, each producing different properties. Different properties cannot have been brought about by matter, because matter is only capable of producing what is ugly (*aischos*).

First of all, we must clarify why matter cannot be a principle of individuation and why Plotinus calls matter's products 'unnatural' (*para phusin*).²⁶⁹ Matter cannot cause properties and differentiation of individuals since matter itself is completely devoid of quality, power, and form. Blumenthal (1966: 62–63) gives several examples from the *Enneads* in which Plotinus characterises matter as *apoios* ('without quality *or* attribute', LSJ) (IV. 7 [2] 3, 8), *amorphous* ('without form, shapeless', LSJ) (VI. 1 [42] 27, 2), *aneideos* ('formless, without specific difference', LSJ) (II. 5 [25] 4, 12), and mere *sterêsis* ('deprivation, loss, negation', LSJ) (II. 4 [12] 14, 24). Essential features such as having eyes, and even non-essential features such as having a particular skin colour, cannot be the product of matter. Properties of all kinds are encoded in the forming principles, which act on matter by imprinting the intelligible information on it.

Note that Plotinus has a concept of intelligible matter, which he considers to be substance and form. He discusses the eternity of intelligible matter, stating that it always exists, derived from the primary principles of Otherness and Movement (i.e. two of the five *megista genê*), and becomes defined and illuminated through its relation to the First (II. 4 [12] 5, 21–39). On matter and intelligible matter in Plotinus, see O'Brien (1971), Schwyzer (1973), O'Brien (1996), Nikulin (1998), O'Brien (1999), Brisson (2000), Opsomer (2001), Pang-White & White (2001), Schaefer (2004), Gurtler (2005), Narbonne (2007), Opsomer (2007), Philips (2009), Rist (2009), O'Brien (2011a, 2011b, 2012), Noble (2013b), Long (2016), Emilsson (2019).

The transfer of information from *logoi* to matter is not always smooth and flaw-less.²⁷⁰ Sometimes a product is produced that Plotinus calls unnatural (*para phusin*) and ugly. Such a product lacks the order that only soul and *logoi* can transmit:

'Nature' is just what has been ordained by universal soul. Then again, since the whole soul is everywhere and, being the soul of the All, is not divided part to part, it gives omnipresence to the heaven too, as far as it is capable of it; and it is capable of it by pursuing and reaching all things (II. 2 [14] 1, 39–43, translated by A.H. Armstrong).

We maintain that the things in this world are beautiful by participating in form; for every shapeless thing which is naturally capable of receiving shape and form is ugly and outside the divine formative power (*theiou logou*) as long as it has no share in formative power (*logou*) and form (*eidous*). This is absolute ugliness (*to pantê aischron*). But a thing is also ugly when it is not completely dominated by shape and formative power, since its matter has not submitted to be completely shaped according to the form (I. 6 [1] 2, 14–18, translated by A.H. Armstrong).

Matter's only influence comes from its resistance to the principles that are supposed to imprint it with form. To resist these principles is to resist nature itself. The only possible result of such resistance is ugliness, deformity, and abnormality:

All the things, then, which exist as forms in the world of sense come from that intelligible world; those which do not, do not. Therefore none of the things which are contrary to nature are there, just as there are none of the things which are contrary to art in the arts, and there is no lameness in seeds. (Congenital lameness of the feet occurs when the forming principle does not master [the matter], accidental lameness by damage to the form) (V. 9 [5] 10, 1–6, translated by A.H. Armstrong).

To resist the *logoi* is not to destroy them or to erase them from the individual. For example, if a child is born without fingers, it is because the embryonic matter has resisted the *logoi* that impart the form of fingers. Nevertheless, the *logoi* responsible for the property of having fingers are still present in the child – 'concealed', yet 'perfect'. The *logoi* are 'concealed' because, despite their presence, one does not perceive their beautiful form, but ugliness instead. The failure here is not on the side of the *logoi*, which Plotinus characterises as 'perfect'; the responsibility for ugliness or malformation is borne by matter alone.

The passage quoted above (II. 2 [14] 1, 39–43) additionally explains how logoi can be everywhere, even in malformed body parts: as Plotinus often emphasises in the Enneads, due to the immaterial and non-spatial nature of the soul, 'the whole soul is everywhere'.

On ugliness due to matter's resistance to logoi, see also: I. 6 [1] 3; I. 8 [51] 5; I. 8 [51] 9; II. 9 [33] 17; III. 5 [50] 1; VI. 1 [42] 10.

At this point, I would like to highlight the profound implication of this passage, which may not be immediately apparent upon first reading. Essentially, Plotinus postulates the equality of all people by attributing the divine origin to each individual to the same extent: whether man or woman, Greek or Ethiopian, healthy or disabled, Plotinus views every human being as equal. This equality among people is also reflected in Plotinus' ethical considerations within his theory of providence: each individual receives justice to the same extent. Through the mechanism of transmigration of souls, this justice is administered by providence:

There is certainly no accident in a man's becoming a slave, nor is he taken prisoner in war by chance, nor is outrage done on his body without due cause, but he was once the doer of that which he now suffers; and a man who made away with his mother will be made away with by a son when he has become a woman, and one who has raped a woman will be a woman in order to be raped. Hence comes, by divine declaration, the name *Adrasteia* [the Inescapable]: for this world-order is truly *Adrasteia* and truly Justice and wonderful wisdom. We must conclude that the universal order is for ever something of this kind from the evidence of what we see in the All, how this order extends to everything, even to the smallest, and the art is wonderful which appears, not only in the divine beings but also in the things which one might have supposed providence would have despised for their smallness (III. 2 [47] 13, 11–27, translated by A.H. Armstrong).

The example of a man who wrongs a woman (such as committing murder or rape) and is then reborn in the next life as a woman who suffers the same fate suggests that Plotinus indeed envisions equality between the sexes. If women were not considered fully equal to men, such severe retribution would likely not be applied to men. ²⁷¹ By ensuring that a male wrongdoer is reincarnated as a female to undergo similar hardships, he underscores that the experiences of women are as significant and consequential as those of men. The severity of retribution is not diminished based on the gender of the perpetrator or the victim, implying an inherent equality in moral accountability.

2, 16 But if the difference is beautiful in many places, the form is not one.

The existing translations of this phrase differ in their rendering of the word *eidos*. ²⁷² While Harder and Gerson understand *eidos* as the Platonic Form, Armstrong and Brisson read *eidos* as 'form' in the general sense, such as form in matter:

Harder: So wahr aber die Verschiedenheit eine Vielfältigkeit des Schönen bedeutet, so kann die Idee (*eidos*) nicht nur eine sein.

²⁷¹ Consider the discussion of this section on pp. 137–138.

²⁷² See the discussion of the different meanings of *eidos* on pp. 96–97.

Gerson: If the difference is mainly with respect to beauty, then the Form (*eidos*) is not one

Armstrong: But if the difference is a great diversity of beauty, the form (*eidos*) is not one.

Brisson: Mais, si ce que diffère en beaucoup de manière est beau, la forme (*eidos*) n'est pas unique.

The term *eidos* occurs a total of three times in this treatise: here, at V. 7 [18] 3, 6, and at V. 7 [18] 3, 11. In all three cases, Harder translates eidos as 'Idee' (i.e. the Platonic Form). Armstrong and Brisson, meanwhile, always translate eidos as 'form' in the general sense. Gerson, on the other hand, thinks that eidos means the Platonic Form only in this passage, while in the other two passages from chapter three it means visible form. According to Gerson's reading, Plotinus is arguing here that differences in the phenotypes of different peoples are due to different Forms. But what exactly is this supposed to mean? Does this mean that there is a Form of the Asian phenotype and another Form of the European phenotype? In my view, this passage is not about the Platonic Forms at all, but about the forms that are imparted by logoi onto matter. This is supported by Plotinus' rejection of the idea that different peoples arise from differences in the degree to which matter is dominated by *logoi*. In this sentence, Plotinus implicitly affirms that *logoi* dominate matter to the same degree everywhere (pollachou). Explicitly, he says that peoples differ from each other because logoi impose different forms on matter. According to this reading, it is not necessary to posit a Form of the Asian phenotype since the phenotypical characteristics are also transferred from the *logoi* to matter.

2, 18–25 But let the forming principles be different: why is it necessary that there be as many [logoi^{comb}] as there are individuals born in one cosmic cycle, when it is possible that outwardly individuals look different even though the same forming principles are present? In fact, this has been granted insofar as [the forming principles] are given as wholes, but it is now asked whether [it is possible] if the same forming principles dominate [in several individuals in one cosmic cycle]. Is it the case, then, that the absolute identity is possible across different cosmic cycles, while in the same cosmic cycle, there is nothing absolutely identical?

This section is the conclusion of chapter two and at the same time a prelude to chapter three. It contains a series of questions whose meaning is not immediately obvious because, as indicated by the square brackets in my translation, the Greek of this section is highly elliptical. Some phrases need to be completed in order to reconstruct the intended meaning. It is also important to understand, first, how

this section contributes to the embryology developed in chapter two, and second, how this section relates to the subsequent discussions in chapter three.

Right at the beginning of chapter two, Plotinus stated that mixtures of paternal and maternal logoi-sets produce different children (V. 7 [18] 2, 1-2). He further expounded that both parental logoi-sets consist entirely of the same logoi insofar as both sets contain *logoi* of all individuals – human and animal – existing in the universe (V. 7 [18] 2, 5-6).²⁷³ Thus, in V. 7 [18] 2, 12 – as in the current section – Plotinus referred to the logoi-sets as holôn, which I translate as 'wholes'. It is therefore not the number of *logoi* that is decisive for family resemblance. Although the parental logoi-sets seem to be identical, they differ from each other insofar as different logoi are dominant in each set: in the paternal logoi-set, the logoi actualised by the father are dominant, while in the maternal logoi-set, the logoi actualised by the mother are dominant. Since the logoi are contained within the soul (or rather essentially constitute the soul), it is the soul that determines which *logoi* will be inherited by the offspring. In fact, there is evidence in the *Enneads* that the World Soul is the guiding principle in heredity. When the paternal and maternal sets mix to produce children, the World Soul determines which logoi of the father and mother will dominate the embryonic matter and will therefore manifest in the offspring's genetic phenotype (V. 7 [18] 2, 11–12). Furthermore, Plotinus postulates that it may also be the case that other *logoi*, which are actualised neither by the father nor the mother, can also dominate in procreation. In these cases, children are born with properties that belong to neither parent. Finally, Plotinus argues that, as far as beautiful forms and properties are concerned, matter is not a principle for individuation. Only malformations and anomalies are attributed to matter, due to matter's capacity to resist the influence of the intelligible *logoi*. Plotinus assures us, however, that even in malformed body parts, logoi are still present: 'even there the perfect forming principles are concealed, but given as wholes (holôn)' (V. 7 [18] 2, 17–18).

I would like to take up the last statement of the previous section, which I have just quoted, because it is part of the problem addressed in the present section: Plotinus claims that the whole set of *logoi* is present in malformed bodies. It has already been explained in the discussion of the previous section (V. 7 [18] 2, 13–18) that the omnipresence of the soul as a whole is due to the fact that it is immaterial and incorporeal. Since the *logoi* essentially constitute the soul, they are equally omnipresent. In other words, the entire set of *logoi* is present in all parts of the cosmos and all its individuals.

At first glance, the presence of the entire *logoi*-set in all individuals seems to be a problem: despite the presence of the same *logoi*, all individuals are different. It might therefore seem that the same *logoi* can give rise to several different individuals in

 $^{^{273}\,\,}$ This assertion was already made in the first chapter to explain the mechanisms of reincarnation.

one world cycle, so it would be unnecessary to assume as many principles as there are individuals. For this reason, Plotinus asks: 'why is it necessary that there be as many [forming principles] as there are individuals born in one world cycle, when outwardly individuals look different even though the same forming principles are present?' This kind of question was already raised in the first chapter: 'why should there be forming principles, that is, models for all things that come into being in [just] one cycle?' (V. 7 [18] 1, 14-16). In the first chapter, Plotinus answered this question by explaining that it is impossible for one forming principle to impose different forms on matter. Every single difference must result from its own particular forming principle (V. 7 [18] 1, 18–19); every individual must result from its particular model (paradeigma), i.e. a particular combination of dominant logoi (V. 7 [18] 1, 19–21). Accordingly, in the current section Plotinus answers that individuals all look different even though they have the same *logoi* 'insofar as [the forming principles] are given as a whole set'. The logoi-sets differ between individuals, however, in that each individual actualises a different *logoi*-combination from the whole set. This can be illustrated by the example of Pythagoras and Socrates: Socrates and Pythagoras both have the whole *logoi*-set, but both individuals actualise different *logoi* contained in this set. For example, Pythagoras actualises the logos for a straight nose, whereas in Socrates, the logos for a snub nose is dominant. This is what Plotinus means at the very beginning of the present section: 'But let the forming principles be different' (V. 7 [18] 2, 18–19).

Since it has become clear that there must be as many *logoi*-combinations as there are different individuals, Plotinus modifies his question to consider whether the same *logoi*-combination can produce several individuals in one world cycle: 'but it is now asked whether [it is possible for] the same forming principles to dominate [in several individuals in one world cycle]' (V. 7 [18] 2, 22–24). In other words, Plotinus asks whether it is possible for identical individuals to be born in one world cycle. The phrase in the square brackets is my supplementation. It is a long phrase, which is not justified by the Greek text; nevertheless, as I argue, it is justified by the context.

Armstrong, Gerson, Brisson, and Harder also agree that something needs to be added to make sense of the whole section:

Armstrong: but the question now is whether *individuals can be different when* the same forming principles dominate.

Gerson: whereas the question is whether *the individuals differ when* the identical expressed principles dominate?

Brisson: Mais ce que l'on demande, c'est si *les individus diffèrent dans le cas où* les mêmes raisons dominent.

Harder: hier aber handelt es sich um die Frage ob *verschiedenes enstehen kann, wenn* die gleichen Formen auch wirklich die Oberhand gewinnen.

Additions to the original Greek text I have marked in italics. Armstrong, Gerson, Brisson, and Harder all agree that the question posed by Plotinus here is whether it is possible for the same forming principles to dominate in different individuals. In my view, their interpretation does not fit the context for several reasons. First, the suggestion that the same combination of dominant *logoi* can produce different individuals was already rejected in the first chapter (V. 7 [18] 1, 18-22). Second, the question as Armstrong, Gerson, Brisson, and Harder understand it does not relate to the question that follows immediately after: 'Is it the case, then, that the absolute identity is possible across different cosmic cycles, while in the same cosmic cycle, there is nothing absolutely identical?' (V. 7 [18] 2, 24-25). The question of whether individuals can be different when the same *logoi* dominate has little to do with the question of whether it is possible for identical individuals to exist in the same world cycle. In my translation, on the other hand, it is clear that the second question is a follow-up to the previous one: the question of whether the same *logoi*-combination can produce several individuals in the same world cycle is directly related to the question of whether it is possible for identical individuals to exist in one world cycle. Third, there is a thematic link between the question as I interpret it and the third chapter, where Plotinus deals with the question of whether identical twins are produced by the same combination of dominant logoi. In view of these three reasons I consider my translation to be appropriate, as it is fully justified by the context of the treatise.

3. V. 7 [18] 3: DO SEEMINGLY IDENTICAL INDIVIDUALS ACTUALISE THE SAME *LOGOI*-COMBINATION?

ARGUMENT OF V. 7 [18] 3

The central question of chapter three has already been anticipated at the end of chapter two. It is therefore worthwhile to briefly recall the main findings of chapter two with a view to reconstructing how we arrived at the topic of chapter three.

Chapter two deals with the embryological question of how *logoi* are passed on from parents to their children:

- 1. The mixtures of parental *logoi* produce different children/siblings (V. 7 [18] 2, 1–2).
- 2. Parents may also pass on *logoi* to their children that they themselves do not actualise in their phenotypes (V. 7 [18] 2, 5–7).
- 3. Each parent passes on the entire *logoi*-set to their offspring (V. 7 [18] 2, 11–12), each set containing the *logoi* of every living being in the cosmos (V. 7 [18] 1, 11–12). Family resemblance depends on which of the paternal and maternal *logoi* prove dominant in biological heredity. For example, if the child shows a certain resemblance (e.g. eye colour) to the father, then the paternal *logos* of this property has dominated over the maternal one. The same rule holds when children resemble their mothers (V. 7 [18] 2, 7–13).
- 4. The phenotypic variations of peoples inhabiting different geographical regions is also due to the impact of *logoi*. Matter is not to be regarded as a *principium individuationis*, for matter can only give rise to ugliness by resisting the influence of *logoi* (V. 7 [18] 2, 13–18).
- 5. In chapter one it was shown that one *logoi*-combination cannot produce two (or more) *different* individuals (V. 7 [18] 1, 18–22). At the end of chapter two, the question was asked whether one *logoi*-combination can produce two (or more) *identical* individuals within a cosmic cycle (V. 7 [18] 2, 22–25).

Chapter two explores embryological questions such as how it is that siblings of the same parents differ from each other, why children resemble their parents, and how it is that different phenotypes develop in the first place. Answers to these questions are provided by Plotinus' model of biological inheritance, which is based on the *logoi* that parents pass on to their children. When the *logoi* of the parents are mixed, some *logoi* prove to be dominant. These can be *logoi* that are actualised by the father, the mother, or by neither parent. If, for example, an embryo develops a particular property, such as brown eyes, it is because the *logos* for brown eyes has proved dominant in heredity. An individual consisting of many properties thus actualises a particular *logoi*-combination, consisting of *logoi* that have proven dominant in heredity. Since

a logoi-combination cannot produce two different individuals (V. 7 [18] 1, 18–22), siblings (and all human beings in general) actualise a unique logoi-combination. But what about people who seem to be identical, like identical twins or cubs born in the same litter? 274 Are they produced by the same logoi-combination or does each twin and cub also actualise a unique logoi-combination? Answering this question is the main concern of chapter three. In total, Plotinus explores three questions here:

- (I) Do identical twins and cubs born in a litter actualise the same logoi-combination? (V. 7 [18] 3, 1–8).
- (II) How does a craftsman distinguish his indistinguishable products and how does nature distinguish her products? (V. 7 [18] 3, 8–12).
- (III) Is the number of individuals born in a cosmic cycle determined, and are the principles in the intelligible unlimited? (V. 7 [18] 12-24)

Chapter three opens with the question of whether twins ($poll\hat{o}n\ didum\hat{o}n$) and cubs born in the same litter (polutoka) are produced by the same logoi-combination (V. 7 [18] 3, 1–4). Even though one would intuitively assume that those twins and cubs who are indistinguishable (aparallakta) must actualise the same logoi-combination (V. 7 [18] 3, 3–4), the intuitive answer contradicts the Correspondence Premise from chapter one which states that each individual must be produced by its own unique logoi-combination (V. 7 [18] 1, 18–22). Consequently, Plotinus claims that the number of individuals (in a cosmic cycle) is equal to the number of different logoi-combinations (V. 7 [18] 3, 4–5), and thus that even indistinguishable individuals in reality have a distinct and unique form ($kata\ to\ eidos$) (V. 7 [18] 3, 5–6). To support this claim, Plotinus uses the example of a craftsman ($technit\hat{e}s$) who produces indistinguishable (adiaphora) products (V. 7 [18] 3, 8). Yet the craftsman is able to distinguish between his products by means of a 'logical difference' ($diaphora\ logik\hat{e}$) (V. 7 [18] 3, 8–9). He can thus produce identical products while applying a difference (diaphoron) to differentiate them (V. 7 [18] 3, 9). Next,

^{&#}x27;Identical twins are two individuals that have developed from a single egg fertilized by a single sperm. This fertilized egg is called a zygote. At a relatively early stage in its growth, the zygote splits into two separate cell masses which go on to become embryos; these embryos are genetically identical to each other and are always of the same sex. Three-fourths of such embryo pairs share a common placenta. Since they both developed from a single zygote, such twins are called monozygotic (MZ) twins. A zygote's atypical separation into two independent embryonic structures can occur at any of several growth stages. Its incomplete or late division into two cell masses results in conjoined twins, formerly known as Siamese twins. MZ twins usually show a striking physical resemblance to one another. It should be noted that even though hereditary characteristics such as eye colour and hair colour and texture are the same in MZ twins, these traits as well as the majority of physical characteristics may be modified during embryonic development. Identical twins may therefore not truly be "identical"; the correspondence between such twins is closer to what would be expected between the right and left sides of a single individual, which vary slightly from one another.' At: https://www.britannica.com/science/multiple-birth.

Plotinus claims that nature (en de tê phusei), unlike a craftsman, distinguishes its products not by discursive reasoning (mê logismô) but only by the logoi (alla *logois monon*) (V. 7 [18] 3, 10–11). Therefore, each individual must be produced by a unique logoi-combination, which implies that the difference between individuals is linked (sunezeuchthai) with the form (eide). Sometimes, however, we are unable to perceive the differences, as, for instance, in the case of twins (V. 7 [18] 3, 11–12). Accordingly, the number of individuals (and thus the size of the cosmos) is determined by the *logoi* located in the Soul (V. 7 [18] 3, 16–19). Likewise, in animals that give birth to a large number of offspring, each individual is produced by a unique logoi-combination (V. 7 [18] 3, 19-21). This, however, does not mean that there is an unlimited (apeiron) number of seeds and logoi (V. 7 [18] 3, 21-22). Even if the number of individuals existing within one cosmic cycle seems to be infinite, and thus also the number of logoi, everything is contained (as a unity) in the Soul (V. 7 [18] 3, 22). Finally, Plotinus claims that there is an unlimitedness of principles in the Intellect and the Soul – the unlimitedness referring not to the number of the principles but their power (V. 7 [18] 3, 22-23). Chapter three can thus be organised into three sections: (I) V. 7 [18] 3, 1–6; (II) V. 7 [13] 3, 6–13; and (III) V. 7 [18] 3, 13–24.

- (I) Sentences (i), (ii), (iii), and (iv): are seemingly identical individuals produced by the same *logoi*-combination? (V. 7 [18] 3, 1–6).
 - (i) Question to be examined: are twins and cubs born in the same litter produced by the same logoi-combination? (V. 7 [18] 3, 1–3).
 - (ii) Intuitive answer: identical/indistinguishable twins and cubs are most likely caused by the same *logoi*-combination (V. 7 [18] 3, 3–4).
 - (iii) Intuitive answer conflicts with the Correspondence Premise: if identical twins and cubs actualise the same *logoi*-combination, then the number of individuals born within one cosmic cycle would not correspond to the number of *logoi*-combinations, for there would be more individuals than *logoi*-combinations (V. 7 [18] 3, 4).
 - (iv) Reinforcement of the Correspondence Premise: the number of logoi-combinations corresponds to the number of individuals born in a cosmic cycle. Even seemingly identical individuals have peculiar differences that make them unique individuals (V. 7 [18] 3, 4–6).
- (II) Sentences (v), (vi), and (viii): how does a craftsman, on the one hand, and nature, on the other, differentiate between indistinguishable products? (V. 7 [18] 3, 6-12).
 - (v) Question: why should indistinguishable individuals if such individuals exist at all not be produced by different *logoi*-combinations? (V. 7 [18] 3, 6–8).

- (vi) Example of a craftsman: suppose a craftsman produces indistinguishable products. Nevertheless, he is able to discern the indistinguishable products by means of a logical difference. He can therefore produce a product that is indistinguishable from the first, but by applying an arbitrary difference, he sees them as distinct products (V. 7 [18] 3, 8–9).
- (viii) Comparing the craftsman with nature: suppose nature produces products that are indistinguishable from each other. Unlike the craftsman, nature does not distinguish its products using a logical difference or discursive reasoning, but solely through the logoi each product is produced by an individual logoi-combination. Hence, natural products must differ from each other in their form. The differences between the products, however, can be very subtle so that we are unable to perceive them (V. 7 [18] 3, 9–12).
- (III) Sentences (ix) and (x): is the number of individuals and *logoi* determined? (V. 7 [18] 3, 12-24).
 - (ix) Corollary of the Correspondence Premise: if creation contains a random number of individuals, there needs to be another explanation of how nature distinguishes its products. But if there is a set number of individuals in one cosmic cycle, then that number is determined by the unfolding of the sum-total of *logoi*. At the moment when all *logoi* are unfolded and actualised, the cosmic cycle arrives at its end and begins anew. The size of a cosmic cycle and how many individuals are born in it is fixed from the beginning in the World Soul and determined by the *logoi* (V. 7 [18] 12–19).
 - (x) Returning to the problem of infinity: we can therefore assume, even in the case of animals who produce a very large number of offspring, that each one of them actualises a unique *logoi*-combination. We should not fear that this would imply an unlimitedness of seeds and *logoi*, for the whole creation is contained in the Soul. There is, however, unlimitedness in the principles of the Intellect and the Soul: not in terms of their number, but in terms of their activity and actualisation (V. 7 [18] 3, 19–24).
- 3, 1–4 How, then, can we say in the case of many twins that the forming principles are different? And also if one turns to other living beings, especially those who give birth to many cubs in a litter? Perhaps in the case of those who are indiscernible, the forming principle [logoi^{comb}] is one.

The third chapter begins with the question of whether, in the case of twins ($didum\hat{o}n$) and other creatures ($alla~z\hat{o}a$) who give birth to many cubs in one litter (polutoka), each offspring actualises a different logoi-combination. Plotinus dealt with a similar question in chapter one. There, at V. 7 [18] 1, 13–16, he considered how the number of logoi-combinations relates to the number of individuals born within one cosmic cycle. Plotinus concluded that one logoi-combination cannot produce several different

individuals, because peculiar differences (*idikais diaphorais*) cannot be produced by the same *logoi* (V. 7 [18] 1, 18–22). Accordingly, a human individual, consisting of many peculiar differences, must actualise a unique *logoi*-combination, which alone accounts for his or her individuality.

In chapter three, Plotinus approaches the question of the number of *logoi*-combinations and individuals from a different angle, asking whether one *logoi*-combination can produce several identical individuals within a single cosmic cycle. Suitable candidates for identical individuals are twins (as well as triplets, etc.) in humans, and also multiple births in animals and insects.

In V. 7 [18], Plotinus does not address how the phenomenon of multiple births comes about in the first place. This is because in V. 7 [18] physical processes of reproduction and heredity do not play a role. There is, however, a passage elsewhere in the *Enneads* in which Plotinus uses the example of twins (*diduma*) and other living beings (*allois zôois*) producing offspring in large numbers (*pleista*) to argue against the corporeality or physicality of the soul. As can be seen, the formulation Plotinus uses there is very similar to V. 7 [18] 3, 1–4:

And besides, if the size of each soul is limited in both directions, that at any rate which is less [than the minimum size] will not be soul; when, therefore, from one act of intercourse and one seed twin offspring are produced or, as in other living things a great many, the seed being distributed to many parts [of the womb], and each is a complete whole, why does this not teach those who are willing to learn that, where the part is the same as the whole, this thing transcends quantity in its own essential being, and must necessarily itself be non-quantitative? For thus it would remain the same when robbed of quantity since it would not care about quantity and mass, because its own nature would be something else. The soul and rational principles, then, are without quantity (IV. 7 [2] 5, 43–52, translated by A.H. Armstrong).

Plotinus argues that if the soul were corporeal, it would consist of parts, each being something less than the total soul. If this were the case, for twins to be conceived, a soul transmitted through the semen would have to be divided between two living beings, so that each twin would receive only a part of that soul. In the case of animals that produce many offspring from one pregnancy, the corporeal soul would have to divide into even smaller parts. Reality, however, shows that all these living beings are born as 'a complete whole', which indicates that the parts of the soul in turn represent the whole soul, and this would only work if the soul transcends quantity.

Although Plotinus is not primarily concerned with embryological questions in this passage (i.e. IV. 7 [2] 5, 43–52), he offers one important piece of information on the subject: twins, or many offspring in general, are produced by 'the seed being distributed to many parts [of the womb]'. If, however, the distribution (and also the quantity) of the seed determines whether twins or even more individuals are conceived on a given occasion, then the generation of multiple offspring seems to be

rather arbitrary. We find a similar idea in Aristotle, who claims that the generation of multiple offspring depends on the quantity of matter contributed by both parents during reproduction. The crucial point is that the amount of male semen must be proportional to the amount of female menses. If the male semen is delivered in such a large quantity that several portions can be formed from it, there have to be as many portions of the female menses:

Now since, as it seems, there must be some proportional relationship between the residue of the female and that which comes from the male (this applies where the males emit semen), in the case of those animals which produce many offspring the male at the outset emits semen which is able, when divided up into portions, to give shape to a number of fetations, while the female contributes enough material so that a number of fetations can take shape out of it (*GA* 772a17–22, translated by A.L. Peck).

So then they do not emit a larger amount of such material, owing to the cause already mentioned; and the material which they do emit is, in the natural course, just sufficient in amount to provide for a single fetation only. If ever more of it is supplied, then twins are produced. *And hence, also, such creatures seem rather to be monstrosities, because their formation is contrary to the general rule and to what is usual.* Man, however, has a footing in all the classes, producing one offspring, or on occasion, many, or few, though most naturally and normally one is the number: the production of many offspring is due to fluidity of the body and to heat, [since the nature of semen is fluid and hot] of few or of one, to the size of the body (*GA* 772a35–772b6, translated by A.L. Peck).

For Aristotle, the phenomenon of multiple births in humans amounts to a 'monstrosity' because it 'is contrary to the general rule and to what is usual'.275 Aristotle considers one offspring per pregnancy in humans to occur 'most naturally and normally'.

With regard to the redundance of parts which occurs contrary to Nature, the cause of this is the same as that of the production of twins, since the cause occurs right back in the fetations, whenever more material gets 'set' than the nature of the part requires: the result then is that the embryo has some part larger than the others, e.g., a finger or a hand or a foot, or some other extremity or limb; or, if the fetation has been split up, several come to be formed – just as eddies are formed in rivers (*GA* 772b13–19, translated by A.L. Peck).

Aristotle observes that in humans, pairs of twins consisting of a boy and girl do not survive as frequently as pairs of twins of the same sex:

Aristotle has a rather narrow understanding of what is normal and natural, since he also considers the female sex and the resemblance of children to their mother to be monstrosities and deviations from the rule. On this see Aristotle, GA 767b12-23, and the discussion on p. 178.

The reason which I have just stated accounts also for the fact that (a) in human beings twins survive less well if one is male and the other female, but (b) in other animals they survive just as well: in human beings it is contrary to nature for the two sexes to keep pace with each other, male and female requiring unequal periods for their development to take place; the male is bound to be late or the female early; whereas in the other animals equal speed is not contrary to nature (GA 775a23-32, translated by A.L. Peck).

Aristotle draws this conclusion from the observation that girls mature faster than boys. He transfers this observation to embryos, but is not surprised by the fact that both male and female embryos have to be carried in the womb for nine months.

Let us return, then, to the question of whether Plotinus assigns the procreation of multiple offspring to chance, depending on how the semen is distributed to the womb (IV. 7 [2] 5, 43–52). According to V. 7 [18], procreation – whether of one or more offspring at a time – is not governed by chance but by the World Soul, and is determined by the *logoi*. As Plotinus asserts in the course of V. 7 [18] 3, 4–6, there are as many *logoi*-combinations as there are individuals, so that each of the multiple offspring actualises a unique *logoi*-combination. Each individual is therefore grounded in the intelligible, including animals and insects, which produce an immeasurable number of offspring (V. 7 [18] 3, 19–21). If, therefore, many offspring are procreated at a time due to 'the seed being distributed to many parts [of the womb]', then this also 'is grounded from the very beginning in that which contains the forming principles (i.e., the World Soul)' (V. 7 [18] 3, 18–19).

3, 3–4 Perhaps in the case of those who are indiscernible, the forming principle $[logoi^{comb}]$ is one.

To the question of whether twins and cubs born in the same litter are produced by the same *logoi*-combination as their siblings, Plotinus first presents an answer that seems intuitive: in the case of twins and cubs 'who are indiscernible' (*aparallakta*) (i.e. identical or monozygotic twins), there is likely to be only one *logoi*-combination at work.²⁷⁶ After all, identical twins really do appear identical — neither of them seems to have 'peculiar differences' (*idikais diaphorais*, V. 7 [18] 1, 20) that the other twin lacks. Implicitly, this statement suggests that in other cases where each of the twins or cubs has peculiar properties (such as fraternal/dizygotic twins), there must be different *logoi*-combinations for each of them.

Plotinus is implicitly suggesting here that there are also twins or multiples born who do not look identical. '*Twin*, either of two young who are simultaneously born from one mother. Twinning, common in many animals, is of two biological kinds: the one-egg (monozygotic), or identical, type and the two-egg (dizygotic), or fraternal, type. The latter type is more usual and can be thought of simply as a litter of two. In humans, psychological studies of sets of identical twins, since they are genetically identical, have provided much otherwise unobtainable information on the relative effects of genetic endowment and environment.' At: https://www.britannica.com/science/twin.

The term aparallakta, used by Plotinus to characterise twins and cubs as 'indiscernible', is an interesting word choice. Later in the chapter, Plotinus uses adiaphora ('indistinguishable', at V. 7 [18] 3, 7–8, which for the sake of consistency I also translate as indiscernible) and ti tô autô ('that which is the same', at V. 7 [18] 3, 9) instead of *aparallakta* to designate individuals or products which appear identical. The term *aparallaktos*, which Sleeman defines as 'exactly alike, indistinguishable', occurs only twice in the *Enneads* – in this passage and at II. 1 [40] 2, 9. The latter passage is a direct quotation from Plato's Republic 530b: for how, Plato asks, could things which have bodies and are visible be undisturbed (aparallaktôs) and the same (tô autô)? (II. 1 [40] 2, 8–10, translated by J. Wilberding). In his commentary on II. 1 [40], Wilberding (2006: 118) points out that the term parallaxis (i.e. the opposite of aparallaktos, meaning 'change', according to Sleeman) has a technical meaning in ancient astronomy, 'which Proclus defines in the case of the moon as "the difference between the moon's position with respect to the centre of the earth, and its position with respect to the earth's surface" (Hyp. astr. 4.53).' Wilberding (2006: 118) supposes that 'Plato had anything like this technical sense in mind' and refers to Adam (1902: 130), who says 'that Plato uses parallaxis "half-technically of any change or deviation in the courses of the heavenly bodies." The term *parallaxis* occurs only once in the *Enneads*, however – not in reference to the celestial bodies, but to the first two hypostases, the One and Intellect:

We must certainly not attribute memory to God [i.e. the One], or real being or Intellect; for nothing [external] comes to them and there is no time, but eternity in which real being is, and there is neither before nor after, but it is always as it is, in the same state not admitting of any change (*parallaxin*) (IV. 3 [27] 25, 14–17, translated by A.H. Armstrong).

The term *aparallaktos* thus expresses a strong sense of 'unchangingness', as can be applied to divine entities, such as the heavenly bodies, and the first two hypostases. Moreover, *aparallaktos* seems to refer to a subject remaining the same as itself, just as the Intellect always remains unchangingly the Intellect. It is therefore somewhat unclear how appropriate *aparallakta* is as a term to describe two individuals looking identical.

In this sentence, we again encounter the problem of Plotinus seemingly saying that only one forming principle (*heis logos*) produces an individual. I would argue, however, that here *heis logos* is also to be understood as a *logoi*-combination.²⁷⁷

Comparable passages can be found in chapter two. There, Plotinus uses logos in the singular, although he obviously has logoi-combinations in mind: V. 7 [18] 2, 2–3: 'there will not be some particular forming principle $[logoi^{comb}]$ for each individual that is born'. V. 7 [18] 2, 3–5: 'and each of the parents, for instance the male, will produce not according to different forming principles, but according to one $[logoi^{comb}]$, his own or his father's'. See the discussion of the singular and plural uses of logos and logoi on pp. 18–19 and 131–132.

Later, in V. 7 [18] 3, 10–11, Plotinus again switches to the plural form, leaving no doubt that he is talking about logoi-combinations. There, he says that 'the other [product]' is created 'solely by the forming principles (logoi)', implying that one thing or product is caused by a multiplicity of logoi, i.e. a logoi-combination. Throughout the treatise, Plotinus adheres to the model he presented in chapter one: one logos causes one particular property, implying that one individual consisting of many peculiar properties is created by a complex combination of different logoi. Another indication that individuals are caused by logoi-combinations is provided by the embryological model in chapter two. There, Plotinus stated that parents pass on their whole ($hol\hat{o}n$) logoi-set to their offspring (V. 7 [18] 2, 5–7, 11–12), meaning the logoi of all living beings stored in the souls of each individual (V. 7 [18] 1, 9–12). Plotinus thus repeatedly asks us to abandon the idea of a single forming principle (logos) creating a whole individual, and accordingly, heis logos in this instance must mean a logoi-combination.

3, 4–6 But if this is so, then there are not as many forming principles [logoi^{comb}] as there are individuals. But maybe, there are as many [logoi^{comb}] as the individuals are different, and as these are different not on account of a lack of form.

The third chapter opened with the hypothesis that identical twins and cubs born in one litter must actualise the same logoi-combination: since these individuals look exactly the same, common sense would suggest that they were produced by exactly the same logoi (V. 7 [18] 3, 1–4). In the present statement, however, Plotinus dismisses this hypothesis by reinforcing the Correspondence Premise, as he has done several times throughout the treatise (for example at V. 7 [18] 1, 22–23 and V. 7 [18] 2, 17–20). Here again he reaffirms 'that there are as many $[logoi^{\rm comb}]$ as the individuals are different'. This means that although twins may appear identical, they are not strictly so.

The additional remark that the differences in individuals are not due to a lack or deficiency in their form (*ou tô elleipein kata to eidos*) implies that the uniqueness of individuals is grounded in the intelligible. All individuals exhibit peculiar properties that make them unique. Individuals are unique not because they are composed of a particular portion of matter, but because their forms are created by unique *logoi*-combinations.

 $^{^{278}}$ The Correspondence Premise states that different individuals must result from different logoi-combinations so that the number of individuals born within one cosmic cycle equals the total number of logoi-combinations.

3, 5-6 and as these are different not on account of a lack of form.

While most translations broadly agree on this part, Harder's translation contains two major idiosyncrasies in that he translates (1) *logoi* as 'Formen' (forms), and (2) *eidos* as 'Idee' (Platonic Form):

Harder: Nun, es gibt soviele Formen wie es *verschiedene* Einzeldinge gibt, und zwar soweit als die Verschiedenheit nicht bloß auf einem Zurückbleiben hinter der Idee beruht.

In contrast to Harder, Armstrong, Gerson, and Brisson translate *logoi* as 'forming principles' and *eidos* as 'form' in the general sense, such as form in matter:

Armstrong: Yes, they [forming principles] are equal to the number of individuals which are different, and different not by reason of failure [to dominate the matter] on the side of the form.

Gerson: But they [expressed principles, i.e. *logoi*] are as many as the different individuals where the differences do not occur by a defect in form.

Brisson: Non, il y a autant de raisons [i.e. *logoi*] que d'individus différents, et qui diffèrent par autre chose qu'une déficience du côté de la forme.

Because the context here is *logoi*, *eidos* must represent a form that the *logoi* impose on matter. Armstrong's translation is thus correct to mention a failure occurring in the transferral of the form from the *logoi* to the matter. Harder's translation, on the other hand, is less convincing, as it strays away from the actual meaning: what does Harder mean by 'Zurückbleiben hinter der Idee' (falling short of the Form)? In my view, what Plotinus intends to say here is that each individual is unique because it is produced by a unique intelligible cause. According to Plotinus, it would be wrong to assume that a single *logoi*-combination produces many individuals who differ from each other only because matter has resisted the influence of the *logoi*. If this were the case, then individuation would be caused by individual defects in the form (*eidos*). Harder's translation fails to recognise the important position that *logoi* occupy here. It is precisely because of the different *logoi*-combinations that each individual has a unique form (*eidos*).

Harder translates *logoi* inconsistently throughout V. 7 [18]: sometimes he translates it as 'Formkräfte' (forming powers: V. 7 [18] 2, 1; V. 7 [18] 3, 1–2; V. 7 [18] 3, 10; V. 7 [18] 3, 18–19), but usually he translates *logos/logoi* as 'Form/Formen' (form/forms). If, like Harder, one translates *logoi* as forms instead of forming principles, one would have to assign only one form, i.e. one *logos*, to an individual. Thus, one would fail to recognise that an individual is produced by a multiplicity of *logoi*, each *logos* being responsible for a particular property. This important component in the conception of *logoi* is missing from Harder's translation of V. 7 [18].

3, 6–9 Or maybe, what prevents there being different forming principles also in indiscernibles? For there are generally individuals who are absolutely indiscernible. Just as a craftsman, even when he makes indiscernible things, must nevertheless conceive the product that is identical by means of a logical difference, according to which he will make another product by adding a difference to that which is the same.

In the last sentence, Plotinus rejected the intuitive assumption that identical twins and cubs are caused by the same *logoi*-combinations. Instead, he reasserted the Correspondence Premise, which states that each individual must be produced by an individual *logoi*-combination, which accounts for the uniqueness of the respective individual. He also claimed that identical twins and indeed any offspring produced in multiple births are all unique individuals possessing peculiar properties which, however, we are sometimes unable to discern with the naked eye.

In this passage, Plotinus wonders what should prevent (ê ti kôluei) indiscernible individuals (adiaphora) from being caused by different logoi-combinations. Next, he expresses doubt that there even are indiscernible individuals in the strict sense (pantê adiaphora). There was a similar formulation in chapter two: 'Maybe, nothing prevents (ê ouden kôluei) them [the parents] from producing also according to different (kata diaphorous) ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand' (V. 7 [18] 2, 5–7). In both passages, Plotinus argues against the idea that a logoi-combination can produce many different individuals. If this were the case, the differences between these individuals would be due to chance. As we shall see later, Plotinus cannot allow for chance in creation (V. 7 [18] 3, 12-13). If individuals were born with random peculiar (but non-essential) properties, the extent of variation in individuals would be unlimited: for example, people could be born with green skin or blue hair. In reality, however, only a certain range of variations is possible, which excludes blue skin and green hair. Hence, peculiar properties must be determined by means of *logoi*-combinations, and there is nothing in the world that is not accounted for by logoi, with the exception of ugliness and malformation, which result from matter (V. 7 [18] 2, 16–17). Remes (2007: 81-82) suggests that a specific set of laws governs the range of qualities that can manifest within a species, determining which attributes are feasible and which are not:

Real forms are completely actualised, that is, complete collections of all possible differentiations, plus a complete set of 'laws' – some kind of non-propositional principles or rules – about their possible combinations. A principle of this kind could be expressed as, for instance, the following law: 'rational animals are always also two-footed.' An individual is always an actualisation of only some properties and some laws. The Intellect and the forms stand primarily for the repeatable and substantial features of the universe, unifying different properties into meaningful wholes. Secondarily, through the principles governing the possible combinations of all properties, they stand also for accidental differentiations. But they stand only

derivatively for the actually instantiated possibilities or collections of properties in the material realm, that is, particulars (Remes, 2007: 81–82).

Next, Plotinus uses an example to demonstrate that there is nothing identical in the world. Suppose there is a craftsman (*technitês*) who makes outwardly indiscernible products. The craftsman can still distinguish between these products by applying an arbitrary, logical difference (*diaphora logikê*), for example by attaching a serial number to the products. The difference is logical in that it does not change the appearance of the products, which still look completely the same; the difference is only apparent in the craftsman's conceptualisation of these products. Plotinus is basically formulating the principle of the 'identity of indiscernibles', which states that two objects cannot have completely identical properties. This principle was originally introduced by the Stoics, but today we know it as Leibniz's law.²⁷⁹

Many other methods can be used to distinguish otherwise indiscernible things. One method has already been mentioned – counting. All products in supermarkets now have a serial number – how else would one be able to distinguish between two milk bottles? Additionally, even identical things have a separate history. Monozygotic twins cannot be born at the same time, but one after the other. And even if two things are completely indiscernible, each of them occupies a different place or, as the Stoics would say, a different substrate. As already mentioned, the Stoics held the view that there are no identical things, but that each is peculiarly qualified. Eric Lewis (1995: 90–91) writes that Stoics had both epistemological and metaphysical reasons for assuming this:

First, the epistemological motivation. In order to ensure the possibility of infallible knowledge, and so preserve the possibility of the existence of a sage, the Stoics needed to preclude the possibility of two qualitatively indistinguishable individuals.

The principle is expounded in Leibniz's *Discourse on Metaphysics*, Section 9 (Loemker 1969: 308), https://plato.stanford.edu/entries/identity-indiscernible/#His.

See for example Plutarch, Comm. not. 1077c-e = 28O LS, Cicero, Acad. 2.77-8 = LS 40D, and the notorious 'identity puzzle' of Dion and Theon posed by Chrysippus in Philo, de immut. mundo 48 11.397 = LS 28P. Michael B. Burke (1994: 129) summarises the puzzle as follows: 'Yesterday, there was a whole-bodied man called "Dion" who had a proper part called "Theon". Theon was that part of Dion which consisted of all of Dion except his left foot. Today, Dion's left foot was successfully amputated. So, if Dion and Theon both still exist, they are numerically different objects now occupying just the same place and wholly composed of just the same matter. Presuming this to be impossible, the question is which of the two, Dion or Theon, has ceased to exist.' In Philo we can read Chrysippus' answer: 'The question arises which one of them [Dion or Theon] has perished, and his [Chrysippus'] claim is that Theon is the stronger candidate. These are the words of a paradox-monger rather than a speaker of truth. For how can it be that Theon, who has had no part chopped off, has been snatched away, while Dion, whose foot has been amputated, has not perished? "Necessarily", says Chrysippus. "For Dion, the one whose foot has been cut off, has collapsed into the defective substance of Theon. And two peculiarly qualified individuals cannot occupy the same substrate. Therefore it is necessary that Dion remains while Theon has perished" (ibid., pp. 171-2)' (translated by Long and Sedley, quoted in Burke, 1994: 129-130). On individuals and identity in the Stoics, see Kerferd (1972), Sedley (1982), Burke (1994), Lewis (1995), Irwin (1996), and Hankinson (2003).

Were there to be qualitatively indistinguishable individuals, a Stoic sage, when faced with one such individual, might very well mistake it for the other. [...] The Stoics buttress their theory of unique qualities with a view concerning individuation. They claim that if there were seemingly two qualitatively indistinguishable individuals, this would in fact be a case of one peculiarly qualified individual in two substrata, something which they take to be simply an absurdity (Plut. CC 1077C= LS 280). They adhere to a related principle, that there could not be two peculiarly qualified individuals in one substrate (this is the famous Dion-Theon passage preserved by Philo, de *immut. mundo* 48 11.397= LS 28P).

Plotinus, too, has epistemological and metaphysical reasons for assuming that there are no indistinguishable individuals. But unlike the Stoics, whose arguments were based on the infallibility of the sage and on the substrate, Plotinus' assumption is grounded in the *logoi*. The *logoi* are the power and activity of the soul (VI. 2 [43] 5, 10–14). They are the soul's creative tools, with which the soul not only creates the physical cosmos but is also able to discursively contemplate the things it creates and also the higher intelligible spheres. Therefore, *logoi* are not only ontological principles of things, but also epistemological tools. ²⁸¹ Not only can we distinguish things from one another through the *logoi*, but we can recognise things for what they are because they inherently have an intelligible structure provided by the *logoi*:

[I]n the case of a living thing which is composite [i.e. composite of *logoi* and matter], one who in any way contemplates the form and the rational principle also contemplates the formed thing. For he does not contemplate an intelligible living thing and a composite living thing in the same way, but in the composite he contemplates the rational principle of the living thing (III. 3 [48] 6, 5–9, translated by A.H. Armstrong).

It is because human souls contain *logoi* of all things existing in the cosmos that we can recognise things as such and also distinguish them from one another. That *logoi* are both ontological and epistemological principles leads Plotinus to regard contemplation and creation as the same process:

That all things come from contemplation and are contemplation, both the things which truly exist and the things which come from them when they contemplate and are themselves objects of contemplation, some by sense-perception and some by knowledge or opinion; and that actions have their goal in knowledge and their driving-force is desire of knowledge; and that the products of contemplation are directed to the perfecting of another form and object of contemplation; and that in general all active things, which are representations, make objects of contemplation and forms; and that the realities which have come into existence, which are representations of real beings, show that their makers had as their goal in making, not makings or

²⁸¹ On the twofold nature of the *logoi* in Plotinus, see Helmig (2012: 186–195).

actions, but the finished object of contemplation; and that this is what processes of reasoning want to see, and, even before them, acts of sense perception, whose goal is knowledge; and that before them again nature makes the object of contemplation and the rational principle in itself, perfecting another rational principle (III. 8 [30] 7, 1–13, translated by A.H. Armstrong).

A craftsman, then, who plans to make indiscernible products, already begins to distinguish them in his mind before they even come into being. The plan according to which he makes them contains the number of products, the prototype, and what must be done to make them truly indiscernible. In nature, where the soul is directly at work, there is an even closer connection between contemplation and creation. When nature contemplates the *logoi* it contains within itself, the corresponding things are immediately created. Thus in nature, as we will see in the next section, every product must correspond to an individual *logoi*-combination, so it is impossible for identical living beings to come into existence.

3, 10–12 In nature, where the other [product] is not created by discursive reasoning, but solely by forming principles, the difference must be linked to the form; but we are unable to perceive the difference.

Having set out how a craftsman would distinguish his indiscernible products by means of a logical difference (*diaphora logikê*), Plotinus now looks at how things are distinguished in nature (*en de tê phusei*). At first, this consideration sounds a bit odd: why would nature, when it creates flowers or ants, want to distinguish between them? Along with this comes the question of whether nature is even aware of the things it produces. But for Plotinus, nature is a soul endowed with consciousness and self-perception. Nature, therefore, is aware of the things it produces and can also distinguish between them:

That what is called nature is a soul, the offspring of a prior soul with a stronger life; that it quietly holds contemplation in itself, not directed upwards or even downwards, but at rest in what it is, in its own repose and a kind of selfperception, and in this consciousness and selfperception it sees what comes after it, as far as it can, and seeks other things no longer, having accomplished a vision of splendour and delight. If anyone wants to attribute to it understanding or perception, it will not be the understanding or perception we speak of in other beings; it will be like comparing the consciousness of someone fast asleep to the consciousness of someone awake. Nature is at rest in contemplation of the vision of itself, a vision which comes to it from its abiding in and with itself and being itself a vision; and its contemplation is silent but somewhat blurred. For there is another, clearer for sight, and nature is the image of another contemplation (III. 8 [30] 4, 15–28, translated by A.H. Armstrong).²⁸²

²⁸² For a comprehensive explanation of Plotinus' concept of nature in relation to *logos*, see Gerson (2012). See also Rudberg (1956b), Deck (1967), Fruechtel (1970), Laurent (1992, 1999), Brisson (2009), Wildberg (2009).

Nature, like any other soul, is filled with *logoi* according to which it produces and contemplates its products. This means that when nature produces things, it is aware of each one of these things (e.g. flowers, ants, human beings, etc.) and perceives each of them as a part of itself. Plotinus characterises the contemplation of nature as 'not directed upwards or even downwards, but at rest in what it is', a kind of 'consciousness of someone almost asleep', 'silent', 'blurred', and 'at rest in contemplation of the vision of itself'. One could say that nature is like a computer program written by the World Soul and consisting of *logoi* according to which things are created. Emilsson (2017: 169) also employs the analogy of a computer program, not in reference to nature's mode of production but to address how an essentially eternal soul can create a sensible cosmos that is temporal. His account, however, fits very well in this context:

So Plotinus thinks the soul does not have to give specific orders based on the blueprint of the world each time it does something in the sensible realm. The blueprint, the arrangement, is the same things that which determines each step. We may fruitfully compare this with a computer program that determines a temporal process, e.g. on a computer screen: the program stays the same all the time but the events on the screen happen in a certain temporal order according to the program (Emilsson, 2017: 169).

Just like a computer program, the processes in nature run automatically without nature consciously directing them, as, for example, the World Soul does. To run the program, nature needs nothing more than itself, for it is a rational principle (logos) that contemplates itself. As we saw in the last section, for Plotinus, creating and contemplating are the same activity of the soul. This is because of the twofold character of the logoi, as both ontological and epistemological principles at the same time. When nature, thus, contemplates a certain logoi-combination within itself, a corresponding living being is born in the physical cosmos. Plotinus even calls the reproduction of living beings contemplation:

For when living things, too, produce, it is the rational principles within which move them, and this is an activity of contemplation, the birthpain of creating many forms and many things to contemplate and filling all things with rational principles, and

In contrast to my understanding of Plotinus' characterisation of nature's operation mode, Hutchinson (2018: 154) argues that 'Nature needs self-awareness to function as a structured and coherent whole. And like any level in the procession of realities from the One, Nature needs self-awareness to contemplate itself and in order to become what it is. The point Plotinus is making is that since Nature is the last phase of intelligible realities, the awareness (*sunaisthêsis*) it has is less clear than those belonging to the levels above it, namely, the rational capacities of the world soul and the hypostasis Soul. Plotinus qualifies Nature's awareness with "kind of" to distinguish its awareness from higher levels of awareness.' However, somewhat later Hutchinson (2018: 154) speaks of nature's production in similar terms as I do: 'Relatedly, Nature directs its contemplation exclusively on the *logoi* it contains, and it produces bodies spontaneously, without any conscious reflection on, or deliberation over, what it is doing.'

²⁸⁴ III. 8 [30] 7, 1–13. See also the discussion on pp. 23–24.

a kind of endless contemplation, for creating is bringing a form into being, and this is filling all things with contemplation. And failures, too, both in what comes into being and what is done, are failures of contemplators who are distracted from their object of contemplation; and the bad workman is the sort of person who makes ugly forms. And lovers, too, are among those who see and press on eagerly towards a form (III. 8 [30] 7, 18–27, translated by A.H. Armstrong).

Unlike a craftsman, however, nature does not comprehend its products by means of discursive reasoning (*logismos*), but solely through the *logoi*:

But how does this, nature, possess contemplation? It certainly does not have the contemplation that comes from reasoning (*ek logou*): I mean by 'reasoning' (*ek logou*) the research (*skopeisthai*) into what it has in itself. But why [should it not have it] when it is a life and a rational principle (*logos*) and a power which makes? Is it because research (*skopeisthai*) means not yet possessing? But nature possesses, and just because it possesses, it also makes. Making, for it, means being what it is, and its making power is coextensive with what it is. But it is contemplation (*theôria*) and object of contemplation (*theôrêma*), for it is a rational principle (*logos*). So by being contemplation and object of contemplation and rational principle, it makes in so far as it is these things. So its making has been revealed to us as contemplation, for it is a result of contemplation, and the contemplation stays unchanged and does not do anything else but makes by being contemplation (III. 8 [30] 3, 12–24, translated by A.H. Armstrong).

The kind of reasoning (*logos*) that Plotinus calls 'research' (*skopeisthai*) in this passage corresponds to 'discursive reasoning' (*logismos*) in the sentence we are examining. The term *logismos*, which Sleeman defines as 'calculation, reasoning, planning', is used frequently in the *Enneads* – mostly to denote the way human beings deliberate (I. 1 [53] 7, 23–24; I. 4 [46] 4, 6–9; II. 1 [40] 5, 21–24). Plotinus describes *logismos* as 'rational planning' (II. 2 [14] 2, 24–28), and contrasts it with the kind of reasoning that the soul does by means of *logoi* (II. 3 [52] 17, 7–13). Whereas rational planning is a discursive process in which a human being tries to arrive at knowledge, the reasoning of the soul has already arrived at knowledge, for everything that can be known is contained in the soul in form of *logoi*.

In V. 7 [18] 3, 10–12, this instance is not unique in contrasting nature's mode of production to that of a person who engages in discursive and rational planning during creation. The following text contrasts nature with a geometer, who uses his hand to guide a pencil, drawing lines sequentially. However, nature's creations appear to emerge effortlessly and all at once from her contemplation:

And if anyone were to ask nature why it makes, if it cared to hear and answer the questioner it would say: You ought not to ask, but to understand in silence, you, too, just as I am silent and not in the habit of talking. Understand what, then? That what comes into being is what I see in my silence, an object of contemplation which

comes to be naturally, and that I, originating from this sort of contemplation have a contemplative nature. And my act of contemplation makes what it contemplates, as the geometers draw their figures while they contemplate. But I do not draw, but as I contemplate, the lines which bound bodies come to be as if they fell from my contemplation (III. $8 \ [30] \ 4$, 1-10).

According to this text, all the products that nature contemplates and produces are already contained within it, meaning that it does not have to plan what to produce next. But why can nature not produce two (or more) identical individuals when it contemplates a particular *logoi*-combination? Every time nature contemplates a particular *logoi*-combination, it 'sends out' the *logoi* into matter, as it were, so that the enmattered *logoi*-combination can form the corresponding living being from it:

For it is not fire which has to come to matter (*hylê*) in order that it may become fire, but a forming principle (*logon*); and this is a strong indication that in animals and plants the forming principles (*logous*) are the makers and nature is a forming principle (*logon*), which makes another principle (*logon allon*), its own product, which gives something to the substrate (*hypokeimenô*), but stays unmoved itself. This forming principle (*logos*), then, which operates in the visible shape, is the last, and is dead and no longer able to make another, but that which has life is the brother of that which makes the shape, and has the same power itself, and makes in that which comes into being (III. 8 [30] 2, 25–34, translated by A.H. Armstrong).

A particular *logoi*-combination therefore acts in a particular substrate (*hypokeime-non*) and cannot possibly be split between two (or more) different substrates. For this reason, all living beings – including monozygotic twins – must be produced by an individual *logoi*-combination. Because the *logoi*-combination of each individual is always unique, nature can distinguish every plant, insect, animal, or human from one another, no matter how identical they may appear on the outside. Today, we know from genetic research that the DNA of monozygotic twins is indeed identical. Nevertheless, monozygotic twins are not completely identical in their bodily structure: each of the twins has peculiar properties, such as individual fingerprints and irises.²⁸⁵ To detect such subtle differences as fingerprints, the twins would have to be examined closely; by merely looking at them one would probably be unable to recognise such subtleties. This also corresponds to Plotinus' observation that human perception is sometimes unable to grasp very subtle differences.

^{&#}x27;Fingerprint, impression made by the papillary ridges on the ends of the fingers and thumbs. Fingerprints afford an infallible means of personal identification, because the ridge arrangement on every finger of every human being is unique and does not alter with growth or age. Fingerprints serve to reveal an individual's true identity despite personal denial, assumed names, or changes in personal appearance resulting from age, disease, plastic surgery, or accident. The practice of utilizing fingerprints as a means of identification, referred to as dactyloscopy, is an indispensable aid to modern law enforcement.' At: https://www.britannica.com/topic/fingerprint. Likewise, iris recognition is a very reliable method of identification, as iris patterns are also unique to each person.

3, 11 the difference must be linked to the form

In the various translations of this phrase, there is another discrepancy between Harder and the other translators with regard to *eidos*. While Harder, as at V. 7 [18] 2, 16 and V. 7 [18] 3, 6, 286 translates *eidos* as 'Idee' (i.e. the Platonic Form), Armstrong, Gerson, and Brisson translate *eidos* as 'form' the general sense, such as the visible form:

Harder: so muß auch in der Natur, wo das 'andere' nicht durch Überlegung entsteht sondern nur durch die Formkräfte, mit der Idee (*eidei*) ein unterscheidendes Moment verbunden sein; nur wir können diese Unterschiedenheit nicht fassen.

Armstrong: so in nature, where the other thing does not come into being by reasoning but only by rational forming principles, the difference must be linked with the form (*eidei*); but we are unable to grasp the difference.

Gerson: so in nature where things do not come to be by calculative reasoning but only by expressed principles, the difference must be joined with the form (*eidei*). We, however, are unable to grasp the difference.

Brisson: dans le cas de la nature, où l'altérité ne vient pas du raisonnement, mais des raisons seulement, la différence doit être associée à la forme (*eidei*). Mais nous ne sommes pas capables de saisir la différence.

All translations agree that according to Plotinus, products in nature are all different, but the differences between them are brought about not by reasoning (*logismos*) but by different *logoi*. According to Harder's translation, however, Plotinus argues here that the differences in nature's products are linked with the 'Idee', i.e. the Form of each individual. The other translators (myself included) believe that Plotinus is really concerned with differences relating to visible form. This is made especially clear by the subsequent remark that 'we are unable to perceive the difference', such as the difference between identical twins. Plotinus is thus arguing that there can be no individuals in nature that share absolutely identical properties. Because each individual is produced by an individual *logoi*-combination, all individuals must have peculiar properties that differentiate them from other individuals. Sometimes, however, differences in form are so subtle that they cannot be seen with the naked eye.

 $^{^{286}}$ V. 7 [18] 2, 16: 'But if the difference is beautiful in many places, the form (eidos) is not one.' V. 7 [18] 3, 5–7: 'But maybe, there are as many [$logoi^{comb}$] as the individuals are different, and as these are different not on account of a lack of form (eidos).' These passages are also not about Forms, but rather about the form that is transferred from the logoi to matter and which thus becomes visible in matter. See the discussion of V. 7 [18] 2, 13–15 on pp. 203–206, and the discussion of V. 7 [18] 3, 4–6 on p. 224.

3, 12–19 And if the creation process involves a random number of individuals, another explanation will be necessary; but if there is a measure of how many individuals there are to be, the quantity [of individuals] will be determined by the unrolling and unfolding of the sum-total of forming principles; so that when all things come to an end, there will be another beginning. For how vast the cosmos has to be, and how many individuals he [the cosmos] will pass through in the course of his life, is grounded from the very beginning in that which contains the forming principles.

As a reminder, Plotinus opened chapter three with the question of whether identical twins (and any offspring of a multiple birth) are produced by the same *logoi*-combination. He then showed that actually, each individual has its own cause: even seemingly identical individuals are each produced by a unique *logoi*-combination. Accordingly, the number of individuals born within one cosmic cycle is equal to the number of *logoi*-combinations that exist in the Soul (the Correspondence Premise). Next, he argued that nature creates and distinguishes all its products by contemplating different *logoi*-combinations.

In the present passage, Plotinus explains in more detail what the Correspondence Premise entails for the whole of creation. If the number of living beings born in a cosmic cycle corresponds to the number of *logoi*-combinations, it follows that the size and evolution of the cosmos are determined from the outset by the 'unrolling and unfolding of the sum-total of forming principles'. This implies that nothing can come into being that is not contained in the World Soul. But if the number of individuals did not correspond to the number of *logoi*-combinations, the number and kind of individuals born in the cosmos would be random (*eikê*), and nature would not be able to distinguish between them. Chaos would reign and nature would not be able to control or manage its products. Such a cosmos would require 'another explanation' than that which Plotinus offers here.

Plotinus thus considers the total number of individuals born within one cosmic cycle to have been 'measured' (*memetrêtai*). If something has been precisely measured, it means that there is a rational principle behind it: 'and measuring is an activity of the measurer which is a rational principle in relation to the measured' (VI. 1 [42] 10, translated by A.H. Armstrong). Everything about the production of individuals, from their properties to their number, is determined from the outset by the *logoi*, so that there is nothing random about creation and the cosmos.

The correspondence between *logoi* and individuals must be understood dynamically. The totality of what comes into being in the physical cosmos is linked to the process of the 'unrolling and unfolding of the sum-total of the forming principles'. It is thus a complex, fluid, and dynamic process of *logoi* being actualised and things manifesting themselves accordingly in the physical cosmos. When the process of actualisation of the *logoi* is complete, 'all things come to an end' and 'there will be

another beginning'. In the previous section, we compared nature's productivity to a kind of program written by the World Soul. Staying with the computer analogy, the actualisation process of the *logoi* resembles an algorithm which, once it has been fully completed, starts anew. The question is, what happens 'when all things come to an end'? Will there be an end of the world?

In the *Enneads*, there is no trace that Plotinus assumed a conflagration of the world (*ekpurôsis*) like the Stoics did.²⁸⁷ For Plotinus, the physical cosmos could only cease to exist if the activity of the World Soul was interrupted. This, however, will never happen:

We must understand, too, from this that this nature is time, the extent of life of this kind which goes forward in even and uniform changes progressing quietly, and which possesses continuity of activity. Now if in our thought we were to make this power turn back again, and put a stop to this life which it now has without stop and never-ending, because it is the activity of an always existing soul, whose activity is not directed to itself or in itself, but lies in making and production – if, then we were to suppose that it was no longer active, but stopped this activity, and that this part of the soul turned back to the intelligible world and to eternity, and rested quietly there, what would there still be except eternity? [...] For the heavenly sphere itself would not be there, since its existence is not primary, for it exists and moves in time, and, if it comes to a stop we shall measure the duration of its stop by the activity of soul, as long as soul is outside eternity. If, then, when soul leaves this activity and returns to unity time is abolished, it is clear that the beginning of this movement in this direction, and this form of the life of soul, generates time. This is why it is said that time came into existence simultaneously with this universe, because soul generated it along with this universe. For it is in activity of this kind that this universe has come into being; and the activity is time and the universe is in time (III. 7 [45] 12, 1–25, translated by A.H. Armstrong).

Thus, when Plotinus says that 'all things come to an end', he does not mean it in a strict sense. Rather, the transition from one cosmic cycle to another will be continuous and steady. However, in order for things to begin anew, and in an identical way to the previous cycle, it seems that they will have to be destroyed first. How else, for example, could the earth in the next cycle be identical to the earth in the previous cycle if the latter is still existent? On the other hand, the stars and planets are considered eternal and divine, so perhaps the earth does not have to be destroyed for the next cycle, only the living beings on it. Since Plotinus nowhere comments more extensively on this subject, we can only speculate.

 $^{^{287}}$ See the discussion on the Stoic doctrine of cosmic cycles on pp. 141–145.

3, 19–21 And is it also the case with other animals that produce a huge number of offspring from one birth, that there are as many forming principles [logoi^{comb}] [as individuals]?

In the course of the treatise, Plotinus endeavours to dispel all doubts about the validity of the Correspondence Premise. Thus, when speaking about the products of nature, Plotinus explains that each product must have its own individual cause if creation is to be 'measured' (*memetrêtai*, V. 7 [18] 3, 13), which is to say determined by a plan and not simply random. Consequently, there must be as many individual *logoi*-combinations as there are individuals born in the cosmos. However, given the tremendous size of the cosmos, questions and doubts about the Correspondence Premise are to be expected. Consider animal species that give birth to enormous numbers of offspring. The female naked mole-rat, for example, can give birth to up to twenty-seven young in one litter. In the course of her life, she can give birth to up to 1,100 offspring. Certain species of insect are even more prolific: forest ant queens produce about 300 eggs per day. Now, can each of these larvae really be the product of an individual *logoi*-combination? Can it really be that every single ant born in a cosmic cycle has its own unique cause?

Plotinus maintains that every living thing is contained in the intelligible world (i.e. in the Soul: V. 7 [18] 3, 21–22) and that even creatures as small as ants each have their own place in the intelligible plan. For Plotinus, even an almost infinitely large number of creatures coming into the world does not speak against the fact that each individual, whether naked mole-rat, ant, or human being, is produced by its own *logoi*-combination. The intelligible forming principles are able to account for everyone and everything, no matter how vast the cosmos may be.

3, 21–24 Maybe, there is no need to fear the unlimitedness in seeds and forming principles, since Soul contains them all. Or maybe in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles that in the Soul become available.

The end of chapter three takes up the subject of unlimitedness once again and thus establishes a connection with the first chapter. In fact, Plotinus paraphrases the wording of the last sentence of the first chapter, which gives the whole treatise a circularity:

- 1, 25–27: One must not fear (*ou dei dedienani*) unlimitedness (*apeirian*) in the intelligible world (*en tô noêtô*); for the unlimitedness as a whole rests in the indivisible and comes forth, as it were, whenever it comes into actuality.
- **3,** 21–23: In fact, there is no need to fear (*ou phobêteon*) the unlimitedness (*to apeiron*) in seeds (*spermasi*) and forming principles (*logois*), since Soul contains them all. Or maybe in the same respect as in the Soul, also in Intellect, there is again unlimitedness of those principles that in the Soul become available (*procheirôn*).

Much has already been said on the subject of unlimitedness. As a reminder, we have seen that unlimitedness can be understood in two senses: (i) numerical unlimitedness, which is inadmissible for both the intelligible and the physical cosmos, and (ii) unlimitedness in terms of the creative power (energeia) of the intelligible principles. Now, at the end of chapter three, Plotinus maintains that one should not 'fear the unlimitedness in seeds (spermasi) and forming principles (logois)'. Numerical unlimitedness is not to be feared, since the introduction of cosmic cycles rules out the possibility of the cosmos becoming infinitely large. If creation produces a finite number of living beings in a cosmic cycle, there cannot be an infinite number of seeds and correspondingly an infinite number of logoi-combinations, even if it seems so. An unlimited power of the logoi is also not to be feared, since it is resides as a unity in the Soul.

Interestingly, the term *sperma* (seed/semen) appears here for the first and only time. Although the entire second chapter is devoted to embryological questions, Plotinus does not mention seeds or semen once, since he speaks only of the heredity of *logoi*. But here, at the end of the third chapter, Plotinus finally makes a connection between *logoi* and seeds, probably in the sense that seeds are the carriers of *logoi*.

Moreover, Plotinus connects the *logoi* with the principles of the Intellect – Forms. He begins by stating that the principles of the Intellect are as unlimited (in power) as the principles of the Soul (*logoi*). Then he asserts that the unlimited power of the principles of the Intellect is at the disposal (*procheirôn*) of the Soul (*ekei*). How is this to be understood? As we already know, *logoi* are 'unfolded' Forms. ²⁸⁹ This means that the Soul draws its creative power and content from the Intellect and the Forms. Everything that is present in the Intellect is at hand in the Soul in an 'unfolded' manner, and the Soul creates the sensible cosmos using what the Intellect gives to her.

As for the meaning of *ekei* in this sentence, there are discrepancies among the existing translations:

Armstrong: Yes, in intellect, as in Soul, there is again the infinity of these principles which come out ready for use in Soul.

Gerson: And in Intellect, as in Soul, the unlimited number of these is, again, available in the intelligible world for use.

Harder: ja auch im Geist (daher auch in der Seele) ist nochmals die Unendlichkeit dieser Dinge, die dort in der Seele an den Tag treten.

Brisson: Oui, dans l'Intellect aussi, comme dans l'Âme, se rencontre l'illimité, puisque les principes qui sont là-bas sont toujours à notre disposition.

²⁸⁸ See pp. 102–103, 138–141, 146–154, 216–218.

²⁸⁹ See p. 21.

I agree with Armstrong and Harder that *ekei* here refers to the Soul. Brisson, on the other hand, thinks that *ekei* refers to the sensible world and means that the unlimitedness of intelligible principles is at our disposal ('à notre disposition'). But how exactly are Forms and *logoi* at the disposal of sensible mortal beings? Gerson, meanwhile, translates *ekei* as 'the intelligible world', as I did in the first chapter of V. 7 [18] (V. 7 [18] 1, 3; V. 7 [18] 1, 5; V. 7 [18] 1, 9). There are, however, good reasons to assume that *ekei* in this case refers to the Soul. The Soul uses the Forms and *logoi* to create and sustain the sensible cosmos. Moreover, the term *procheirôn* (at hand) has already been used in this text in reference to the *logoi* in the souls of parents:

V. 7 [18] 2, 5–7: Maybe, nothing prevents them [the parents] from producing also according to different ones [forming principles], since they have all the forming principles, but each time [they have] other principles at hand (*procheirous*).²⁹⁰

I therefore agree with Armstrong and Harder in reading *ekei* in the last sentence of the treatise as referring to the Soul (and also to the individual souls), because it is the Soul that uses the Forms and *logoi* to create the sensible world and to regulate all the processes in it, such as biological heredity and the evolution of cosmic cycles.

See the commentary on this part on pp. 180–188.

BIBLIOGRAPHY

1. EDITIONS AND TRANSLATIONS

Plotinus

- Bréhier (1924–1938): *Plotin, Ennéades*. Translated by Émile Bréhier, 3 vols. Paris: Les Belles Lettres, 1924–1938.
- CILENTO (1947–1949): *Plotino Enneadi. Prima versione integra e commentario critic.* Translated by Vincenzo Cilento, 3 vols. Bari: Laterza, 1947–1949.
- HENRY / SCHWYZER (1951–1973): *Plotini Opera, editio maior.* Edited by Paul Henry and Hans Rudolf Schwyzer (H–S¹), 3 vols. Paris Brussels Leiden: Desclée de Brouwer Edition universalle, 1951–1973.
- HARDER / BEUTLER / THEILER (1956–1971): *Plotins Schriften 1–54*. Translated by Richard Harder [1930–1937], 2 vols., reworked with commentary by Richard Harder, Rudolf Beutler, and Willy Theiler. Hamburg: Meiner, 2020 [1956–1971].
- HENRY / SCHWYZER (1964–1982): *Plotini Opera, editio minor*. Edited by Paul Henry and Hans Rudolf Schwyzer (H–S²), 3 vols. Oxford: Clarendon Press, 1964–1982.
- ARMSTRONG (1966–1988): *Plotinus Enneads*. Translated by Arthur Hilary Armstrong, 7 vols. Cambridge Massachusetts London: Harvard University Press, 1966–1988.
- HENRY / SCHWYZER (1982): *Plotini Opera, addenda et corrigenda ad textum et apparatum lectionum*. Edited by Paul Henry and Hans Rudolf Schwyzer (H–S³). Oxford: Clarendon Press, 1982.
- ATKINSON (1983): *Plotinus Ennead V. 1: on the three principal hypostases.* Translated with a commentary by Michael Atkinson. Oxford: Oxford University Press, 1983.
- Casaglia, Guidelli / Linguity / Fausto (1997): *Plotino, Enneadi*. Translated by Mario Casaglia, Chiara Guidelli, Alessandro Linguiti, and Moriani Fausto, with an introduction by Francesco Moriani. Torino: UTET, 1997.
- DILLON / MACKENNA (1991): *Plotinus, the Enneads.* Edited by John Dillon, translated by Stephen MacKenna, with an introduction and notes by John Dillon. Penguin Books: London, 1991.
- VORWERK (2001): *Plotins Schrift 'Über den Geist, die Ideen und das Seiende': Enneade V 9* (5). Translated with a commentary by Matthias Vorwerk. München: Saur, 2001.
- Brisson (2004): *Plotin Traités*. Translated by Luc Brisson, 3 vols. Paris: GF Flammarion, 2002–2004.
- Kalligas / Key Fowden / Pilavachi (2004): *Plotinus. The Enneads of Plotinus*. Translated into Greek by Paul Kalligas (1994), translated into English by Elizabeth Key Fowden, and Nicolas Pilavachi, vol. 1. Princeton Oxford: Princeton University Press, 2004.
- WILBERDING (2006): *Plotinus' Cosmology: A Study of Ennead II.1 (40)*. Translated with an introduction and commentary by James Wilberding. Oxford New York: Oxford University Press, 2006.
- GERSON / BOSY-STONES / DILLON / KING / SMITH / WILBERDING (2018): *Plotinus. The Enneads.* Edited by Lloyd P. Gerson, translated by George Boys-Stones, John M. Dillon,

Lloyd P. Gerson, R.A.H. King, Andrew Smith, and James Wilberding. Cambridge: Cambridge University Press, 2018.

Alcinous

DILLON (1993): *Alcinous, The Handbook of Platonism (Didaskalikos)*. Translated with an introduction and commentary by John Dillon. Oxford: Clarendon Press, 1993.

Alexander of Aphrodisias

MADIGAN (1993): *Alexander of Aphrodisias. On Aristotle Metaphysics 4* (Ancient Commentators on Aristotle). Translated by Arthur Madigan. London: Bloomsbury Academic, 1993.

Ammonius

Busse (1891): Ammonius. In Porphyrii Isagogen sive V voces: Editio consilio et auctoritate academiae litterarum regiae Borussicae. Translated by Adolf Busse. Berlin: De Gruyter, 2020. [1891]

Aristotle

- TREDENNICK (1926–1957): *Aristotle. Aristotle in 23 Volumes.* Translated by Hugh Tredennick. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd., 1926–1957 [reprint 1989].
- TREDENNICK (1933–1935): *Aristotle, The Metaphysics*. Translated by Hugh Tredennick, 2 vols. Cambridge: Harvard University Press, 1933–1935.
- PECK (1949): *Aristotle. Generation of Animals.* Translated by Arthur Leslie Peck. London Cambridge: Harvard University Press, 1949.

Hesiod

EVELYN-WHITE (1914): *Hesiod. The Homeric Hymns and Homerica: Works and Days.* Translated by Hugh G. Evelyn-White. Cambridge: Harvard University Press, 1914.

Hippocrates

- Ellinger (1952): *Hippocrates. On Intercourse and Pregnancy: An English Translation of On Semen and On the Development of the Child.* Translated by Tage U.H. Ellinger. New York: Henry Schulman, 1952.
- Potter (2012): *Hippocrates, Generation. Nature of the Child. Diseases 4. Nature of Women and Barrenness.* Edited and translated by Paul Potter, vol. X. Cambridge, MA: Harvard University Press, 2012.

Olympiodorus

Westerink (1976): Olympiodorus. The Greek Commentaries on Plato's 'Phaedo': Olympiodorus. Translated by Leendert Gerrit Westerink. Amsterdam: North-Holland Publ. Co., 1976.

Philoponus

LACEY (2013): *Philoponus. On Aristotle Physics* 2 (Ancient Commentators on Aristotle). Translated by A.R. Lacey. London: Bloomsbury Academic, 2013.

Plato

- Adam (1902) *The Republic of Plato*. Text with critical notes, commentary, and appendices by James Adam, with an introduction by D.A. Rees. Cambridge: Cambridge University Press. 1902.
- Saunders (1970): *Plato, The Laws.* Translated with an introduction by Trevor J. Saunders. New York: Penguin Classics, 1970.
- GRUBE (1977): *Plato, Phaedo*. Translated by G.M.A. Grube. Indianapolis: Hackett Publishing Company, 1977.
- GRUBE / REEVE (1992): *Plato, Republic.* Translated by G.M.A. Grube, revised by C.D.C. Reeve. Indianapolis Cambridge: Hackett Publishing Company, 1992.
- NEHAMAS / WOODRUFF (1995): *Plato, Phaedrus.* Translated by Alexander Nehamas and Paul Woodruff. Indianapolis Cambridge: Hackett Publishing Company, 1995.
- Rowe (1995): Plato, Statesman. Translated by C.J. Rowe. Warminster: Aris & Phillips, 1995.
- GILL / RYAN (1996): *Plato, Parmenides*. Translated by Mary Louise Gill and Paul Ryan. Indianapolis Cambridge: Hackett Publishing Company, 1996.
- COOPER / HUTCHINSON (1997): *Plato. Complete Works*. Edited by John M. Cooper and D.S. Hutchinson. Indianapolis Cambridge: Hackett Publishing Company, 1997.
- Zeyl (2000): *Plato, Timaeus*. Translated with an introduction by Donald J. Zeyl. Indianapolis: Hackett Publishing Company, 2000.

Porphyry

- Bréhier (1924): *Porphyre, Vie de Plotin*. Translated by Émile Bréhier. Paris: Les Belles Lettres, 1924.
- Armstrong (1966): *Porphyry on the life of Plotinus and the order of his books.* Translated by Arthur Hilary Armstrong. Cambridge Massachusetts London: Harvard University Press, 1966.
- HARDER / BEUTLER / THEILER (1971): *Porphyrios. Über Plotins Leben.* Translated by Richard Harder [1937], reworked with commentary by Richard Harder, Rudolf Beutler, and Willy Theiler. Hamburg: Meiner, 2020 [1971].
- IGAL (1982): *Porfirio Vida de Plotino*. Translated with an introduction and commentary by Jesús Igal. Madrid: Gredos, 1982.
- Brisson / Goulet-Gazé / Goulet / O'Brien / Pépin (1982): *Porphyry's Life of Plotinus*. Edited by Luc Brisson, Marie-Odile Goulet-Gazé, Richard Goulet, and Denis O'Brien, with an introduction by Jean Pépin. Paris: Vrin, 1982.
- Brisson / Cherlonneix / Goulet-Gazé / Goulet / Grmek / Flamand / Matton / O'Brien / Pépin / Saffrey / Segonds / Tardieu / Thillet (1992): Porphyre, La Vie de Plotin II. Translated with a commentary by Luc Brisson, Jean-Louis Cherlonneix, Marie-Odile Goulez-Gazé, Richard Goulet, Mirko D. Grmek, Jean-Marie Flamand, Sylvain Matton, Denis O'Brien, Jean Pépin, Henri Dominique Saffrey, Alain P. Segonds, Michel Tardieu, and Pierre Thillet, and an introduction by Jean Pépin. Paris: Vrin, 1992.

- FAGGIN / RADICE (1992): *Porfirio, Vita di Plotino*. Translated by Giuseppe Faggin, reworked by R. Radice. Milano: Rusconi, 1992.
- STRANGE (1992): *Porphyry: on Aristotle's Categories* (Ancient Commentators on Aristotle).

 Translated by Steven K. Strange. London New Delhi New York Sydney: Bloomsbury, 1992.
- LIBERA / SEGONDS (1998): *Porphyrius. Isagoge.* Translated by Alain de Libera and Alain Philippe Segonds, with an introduction and notes by Alain de Libera. Paris: Vrin, 1998.
- WILBERDING (2011): *Porphyry: To Gaurus on How Embryos Are Ensouled*. Translated by James Wilberding. London: Bloomsbury Academy, 2011.

Proclus

DILLON / MORROW (1987): *Proclus' Commentary on Plato's Parmenides*. Translated by Glenn Morrow and John Dillon, with introduction and notes by John Dillon. Princeton: Princeton University Press, 1987.

Simplicius

URMSON (1992): *Simplicius: On Aristotle Physics 4.1–5, 10–14* (Ancient Commentators on Aristotle). Translated by J.O. Urmson. London: Bloomsbury Academic, 1992.

2. SECONDARY LITERATURE

- ADAM (1902): Adam, James. *The Republic of Plato*. Text with critical notes, commentary, and appendices, 2 vols. Cambridge: Cambridge University Press, 1902.
- Adamson (2008): Adamson, Peter. 'Plotinus on Astrology.' Oxford Studies in Ancient Philosophy 35 (2008): 265–291.
- ADDEY (2018): Addey, Crystal. 'Plato's women readers.' In eds. Harold Tarrant, François Renaud, Dirk Baltzly, and Danielle A. Layne, *Brill's Companion to the Reception of Plato in Antiquity*, Leiden Boston: Brill, 2018, 411–432.
- AINSWORTH (2016): Ainsworth, Thomas. 'Form vs. Matter.' *The Stanford Encyclopedia of Philosophy* (first published 2016, revised 2020). https://plato.stanford.edu/entries/form-matter/#toc
- Albritton (1957): Albritton, Rogers. 'Forms of particular substances in Aristotle's *Metaphysics.' Journal of Philosophy* 54 (1957): 699–708.
- ALGRA ET AL. (1999): Algra, K., J. Barnes, J. Mansfeld, and M. Schofield, eds. *The Cambridge History of Hellenistic Philosophy*. Cambridge: Cambridge University Press, 1999.
- Algra (2003): Algra, Keimpe. 'Stoic Theology.' In ed. Brad Inwood, *The Cambridge Companion to the Stoics*. Cambridge New York Melbourne Madrid Cape Town Singapore Sao Paulo: Cambridge University Press, 2003, 153–178.
- ARMATO (2005): Armato, Giorgio. 'Stoics on Bodies, Identity and *Idiōs Poios.' Classica et Mediaevalia. Revue danoise de philologie et d'histoire* 56 (2005): 129–154.
- Armstrong (1937): Armstrong, Arthur Hilary. "Emanation" in Plotinus.' *Mind* 46, no. 181 (Jan. 1937): 61–66.

- ARMSTRONG (1955): Armstrong, Arthur Hilary. 'Was Plotinus a Magician?' *Phronesis* 1, no. 1 (1955): 73–79.
- Armstrong (1977): Armstrong, Arthur Hilary. 'Form, Individual and Person in Plotinus.' *Dionysius* 1 (1977): 49–68.
- Arnou (1967): Arnou, René. *Le désir de Dieu dans la philosophie de Plotin*. Rome: Presses de l'Université Grégorienne, 1967.
- AUBRY (2008): Aubry, Gwenaëlle. 'Individuation, particularisation et détermination selon Plotin.' *Phronesis* 53, no. 3 (2008): 271–289.
- Aubry (2014): Aubry, Gwenaëlle. 'Metaphysics of soul and self in Plotinus.' In eds. Pauliina Remes and Svetla Slaveva-Griffin, *The Routledge Handbook of Neoplatonism*. New York: Routledge, 2014, 310–322.
- AUDI R. / AUDI P. (2015): Audi, Robert, and Paul Audi, eds. *The Cambridge Dictionary of Philosophy* (3rd edition). New York: Cambridge University Press, 2015 [first published 1995].
- Balme (1962): Balme, D.M. 'ΓΕΝΟΣ and ΕΙΔΟΣ in Aristotle's Biology.' Classical Quarterly 12 (1962): 81-98.
- BALME (1980): Balme, D.M. 'Aristotle's Biology was not Essentialist.' *Archiv für Geschichte der Philosophie* 62, no. 1 (1980): 1–12.
- Beierwaltes (1988): Beierwaltes, Werner. 'Plotins Erbe.' *Museum Helveticum* 45, no. 2 (1988): 75–97.
- BEIERWALTES (2013): Beiwerwaltes, Werner. 'Plotins Theorie des Schönen und der Kunst.' In eds. Filip Karfík and Euree Song, *Plato Revived. Essays on Ancient Platonism in Honour of Dominic J. O'Meara*. Berlin: De Gruyter, 2013, 3–23.
- Belfiore (1983): Belfiore, Elizabeth S. 'Plato's Greatest Accusation against Poetry.' *Canadian Journal of Philosophy* 13 (Supplementary Volume) (1983): 39–62.
- Belfiore (1984): Belfiore, Elizabeth S. 'A Theory of Imitation in Plato's *Republic.' Transactions of the American Philological Association* 114 (1984): 121–146.
- Benardete (1991): Benardete, Seth. *The Rhetoric of Morality and Philosophy: Plato's Gorgias and Phaedrus*. Chicago: University of Chicago Press, 1991.
- BIEN (1999): Bien, C.G. 'Galen zum Problem der Mißbildungen.' Südhoffs Archiv 83, no. 1 (1999): 67–72.
- Blumenthal (1966): Blumenthal, Henry Jacob. 'Did Plotinus believe in ideas of individuals?' In ed. Henry Jacob Blumenthal, *Soul and Intellect: Studies in Plotinus and later Neoplatonism*. Aldershot: Variorum, 1993 [1966], 61–80.
- Blumenthal (1993): Blumenthal, Henry Jacob, ed. *Soul and Intellect: Studies in Plotinus and later Neoplatonism*, Aldershot: Variorum, 1993 [1966].
- BOYLAN (1984): Boylan, Michael. 'The Galenic and Hippocratic Challenges to Aristotle's Conception Theory.' *Journal of the History of Biology* 17, no. 1 (Spring 1984): 83–112.
- BOYLAN (1986): Boylan, Michael. 'Galen's Conception Theory.' *Journal of the History of Biology* 19, no. 1 (Spring 1986): 47–77.
- Brancacci / Morel (2007): Brancacci, A., and P.M. Morel. *Democritus: Science, The Arts, and The Care of The Soul*. Leiden Boston: Brill, 2007.
- Brisson (1999): Brisson, Luc. 'Logos et Logoi chez Plotin: Leur nature et leur role.' In ed. Jean Francois Pradeau, *Plotin, des principes*. Strasbourg: Presses Universitaire de Strasbourg, 1999, 87–108.

- Brisson (2000): Brisson, Luc. 'Entre physique et métaphysique: Le terme *ogkos* chez Plotin, dans ses rapports avec la matière et le corps.' In ed. Michel Fattal, *Études sur Plotin*. Montréal: L'Harmattan, 2000, 87–111.
- Brisson (2009): Brisson, Luc. 'Logos and Logoi in Plotinus. Their Nature and Function.' Schole 3, no. 2 (2009): 433–444.
- Brisson (2014): Brisson, Luc. 'Plotinus' style and argument.' In eds. Pauliina Remes and Svetla Slaveva-Griffin, *The Routledge Handbook of Neoplatonism*. New York: Routledge, 2014, 126–144.
- Britannica (N.D.): The Editors of Encyclopaedia Britannica. 'embryology.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/embryology.
- Britannica (n.d.): The Editors of Encyclopaedia Britannica. 'hypertrichosis.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/hypertrichosis.
- Britannica (N.D.): The Editors of Encyclopaedia Britannica. 'multiple birth.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/multiple-birth.
- Britannica (N.D.): The Editors of Encyclopaedia Britannica. 'phenotype.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/phenotype.
- Britannica (N.D.): The Editors of Encyclopaedia Britannica. 'twin.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/twin.
- Brogan (1993): Brogan, T.V.F. 'Representation and Mimesis.' In eds. Alex Preminger and T.V.F. Brogan, *The New Princeton Encyclopedia of Poetry and Poetics*. Princeton: Princeton University Press, 1993, 1307–1344.
- Brogan / Preminger (1993): Brogan, T.V.F., and Alex Preminger, eds. *The New Princeton Encyclopedia of Poetry and Poetics*. Princeton: Princeton University Press, 1993.
- Brunner (1973): Brunner, Fernand. 'Création et emanation: fragment de philosophie compare.' *Studia Philosophia* 33 (1973): 33–63.
- BUCKELS (2018): Buckels, Christopher. 'Triangles, Tropes, and τὰ τοια τοια τοια Τορε Theory.' *Plato Journal* 18 (2018): 9–24.
- Buckels (2020): Buckels, Christopher. 'A Platonic Trope Bundle Theory.' *Ancient Philosophy Today* 2, no. 2 (2020): 91–112.
- BURKE (1994): Burke, Michael B. 'Dion and Theon: An Essentialist Solution to an Ancient Puzzle.' *The Journal of Philosophy* 91, no. 3 (Mar. 1994): 129–139.
- Caluori (2015): Caluori, Damian. *Plotinus on the Soul*. Cambridge: Cambridge University Press, 2015.
- Cambron-Goulet / Côté-Rémy (2021): Cambron-Goulet, Mathilde, and François-Julien Côté-Rémy. 'Plotinus and Porphyry on Women's Legitimacy in Philosophy.' In eds. Isabelle Chouinard, Zoe McConaughey, and Aline Medeiros Ramos, Women's Perspectives on Ancient and Medieval Philosophy. Cham: Springer, 2021, 179–200.
- Casullo (1988): Casullo, Albert. 'A Fourth Version of the Bundle Theory.' *Philosophical Studies* 54 (1988): 125–139.
- Charlton (1972): Charlton, William. 'Aristotle and the Principle of Individuation.' *Phronesis* 17, no. 3 (1972): 239–249.
- CHERNISS (1944): Cherniss, Harold. *Aristotle's criticism of Plato and the Academy*. Baltimore: The Johns Hopkins Press, 1944.

- CHERNISS (1952): Cherniss, Harold. 'Plotinus: A Definitive Edition and a New Translation.' *The Review of Metaphysics* 6, no. 2 (Dec. 1952): 239–256.
- Chlup (2012): Chlup, Radek. *Proclus: an introduction*. Cambridge: Cambridge University Press. 2012.
- CHOUINARD / McConaughey / Medeiros Ramos (2021): Chouinard, Isabelle, Zoe McConaughey, and Aline Medeiros Ramos, eds. *Women's Perspectives on Ancient and Medieval Philosophy*. Cham: Springer, 2021.
- COHEN (1984): Cohen, Saul Marc. 'Aristotle and Individuation.' *Canadian Journal of Philosophy* 10 (1984): 41–65.
- Cole (1992): Cole, E.B. 'Plotinus on the soul of beasts.' *The Journal of Neoplatonic Studies* 1 (1992): 63–90.
- CONNELL (2016): Connell, Sophia. *Aristotle on Female Animals: A Study of the Generation of Animals.* Cambridge: Cambridge University Press, 2016.
- COOPER (2007): Cooper, Jane. 'Escapism or Engagement? Plotinus and Feminism.' *Journal of Feminist Studies in Religion* 23 (2007): 73–93.
- CORRIGAN (1986): Corrigan, Kevin. 'Is There More than One Generation of Matter in the *Enneads*?' *Phronesis* 31, no. 2 (1986): 167–181.
- CORRIGAN (1988): Corrigan, Kevin. 'On the Generation of Matter in the *Enneads*, A Reply.' *Dionysius* 12 (1988): 17–24.
- D'Ancona Costa (2002): D'Ancona Costa, Cristina. 'To Bring the Divine in us to the Divine in the All.' In eds. Theo Kobusch and Michael Erler, *Metaphysik und Religion*. München Leipzig: K.G. Saur, 2002, 517–565.
- DE RIBERA-MARTIN (2019): de Ribera-Martin, Ignacio. 'Seed (Sperma) and Kuêma in Aristotle's Generation of Animals.' *Journal of the History of Biology* 52 (2019): 87–124.
- DECK (1967): Deck, John N. *Nature, Contemplation, and the One: A Study in the Philosophy of Plotinus.* Toronto: University of Toronto Press, 1967.
- DELONG / REID (2018): DeLong, Jeremy C., and Heather L. Reid. *The Many Faces of Mimesis*. Fonte Aretusa: Parnassos Press. 2018.
- DESTRÉE / HERRMANN (2011): Destrée, Pierre, and Fritz Gregor Herrmann, eds. *Plato and the Poets*. Leiden: Brill, 2011.
- DILLON J. (1990A): Dillon, John. *The Golden Chain: Studies in the Development of Platonism and Christianity*. Aldershot Brookfield: Variorum, 1990.
- DILLON J. (1990B): Dillon, John. 'Female principles in Platonism.' In ed. John Dillon *The Golden Chain: Studies in the Development of Platonism and Christianity*. Aldershot Brookfield: Variorum, 1990, 107–123.
- DILLON S. / JAMES (2012): Dillon, Sheila, and Sharon L. James, eds. *A Companion to Women in the Ancient World*. Oxford: Blackwell Publishing, 2012.
- DOBZHANSKY / GRIFFITHS / ROBINSON (N.D.): Dobzhansky, Theodosius, Anthony J.F. Griffiths, and Arthur Robinson. 'heredity.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/heredity-genetics.
- DÖRRIE / BALTES (1993): Dörrie, Heinrich, and Matthias Baltes. *Der Platonismus in der Antike III: Der Platonismus im 2. und 3. Jahrhundert nach Christus*, Bausteine 73–100: Text, Übersetzung, Kommentar. Stuttgart Bad Cannstatt: Frommann-Holzboog, 1993.

- DÖRRIE / BALTES (1998): Dörrie, Heinrich, and Matthias Baltes. Der Platonismus in der Antike V: Die philosophische Lehre des Platonismus (2), Platonische Physik (im antiken Verständnis) II., Bausteine 125–150: Text, Übersetzung, Kommentar. Stuttgart Bad Cannstatt: Frommann-Holzboog, 1998.
- DÖRRIE / BALTES (2002A): Dörrie, Heinrich, and Matthias Baltes. *Der Platonismus in der Antike VI 1: Die philosophische Lehre des Platonismus (3), Von der 'Seele' als der Ursache aller sinnvollen Abläufe*, Bausteine 151–168: Text, Übersetzung, Kommentar. Stuttgart Bad Cannstatt: Frommann-Holzboog, 2002.
- DÖRRIE / BALTES (2002B): Dörrie, Heinrich, and Matthias Baltes. *Der Platonismus in der Antike VI 2: Die philosophische Lehre des Platonismus (3), Von der 'Seele' als der Ursache aller sinnvollen Abläufe*, Bausteine 169–181: Text, Übersetzung, Kommentar. Stuttgart Bad Cannstatt: Frommann-Holzboog, 2002.
- EBOROWICZ (1991): Eborowicz, W. 'Two episodes in Porphyry's Life of Plotinus.' *Historia* 40, no. 4 (1991): 456–464.
- EDWARDS (1993): Edwards, M.J. 'A Portrait of Plotinus.' *The Classical Quarterly* 43, no. 2 (1993): 480–490.
- EHNMARK (1957): Ehnmark, Erland. 'Transmigration in Plato.' *The Harvard Theological Review* 50, no. 1 (Jan. 1957): 1–20.
- EHRING (2001): Ehring, Douglas. 'Temporal Parts and Bundle Theory.' *Philosophical Studies* 104, no. 2 (2001): 163–168.
- EHRING (2011): Ehring, Douglas. *Tropes: Properties, Objects, and Mental Causation*. Oxford: Oxford University Press, 2011.
- ELGERSMA-HELLEMAN (2010): Elgersma-Helleman, Wendy. 'Plotinus as Magician.' *International Journal of the Platonic Tradition* 4, no. 2 (2010): 114–146.
- EMILSSON (1988): Emilsson, Eyjólfur Kjalar. *Plotinus in Sense-Perception: A Philosophical Study*. Cambridge New York New Rochelle Melbourne Sydney: Cambridge University Press, 1988.
- EMILSSON (2015): Emilsson, Eyjólfur Kjalar. 'Plotinus on *sympatheia*.' In ed. Eric Schliesser, *Sympathy: A History*. Oxford: Oxford University Press, 2015, 36–60.
- EMILSSON (2017): Emilsson, Eyjólfur Kjalar. Plotinus. London New York: Routledge, 2017.
 EMILSSON (2019): Emilsson, Eyjólfur Kjalar. 'Plotinus' doctrine of badness as matter in Ennead I.8 [51] 1.' In eds. Panagiotis G. Pavlos, Lars Fredrik Janby, Eyjólfur Kjalar Emilsson, and Torstein Theodor Tollefsen, Platonism and Christian Thought in Late Antiquity.
- Falcon / Lefebvre (2018): Falcon, Andrea, and David Lefebvre, eds. *Aristotle's Generation of Animals: A Critical Guide*. Melbourne New York Cambridge: Cambridge University Press, 2018.
- FATTAL (1998): Fattal, Michel. *Logos et image chez Plotin*. Paris Montréal: L'Harmattan, 1998.
- FATTAL (2000): Fattal, Michel, ed. Études sur Plotin. Montréal: L'Harmattan, 2000.

London – New York: Routledge, 2019, 78–99.

- FATTAL (2003): Fattal, Michel. Logos et Langage chez Plotin et avant Plotin. Paris: L'Harmattan, 2003.
- FATTAL (2014): Fattal, Michel. *Du* Logos *de Plotin au* Logos *de saint Jean. Vers la solution d'un problème métaphysique?* Paris: Editions du Cerf, 2014.

- Ferrari (1989): Ferrari, Franco. 'Plato and Poetry.' In ed. George Alexander Kennedy, *The Cambridge History of Literary Criticism*, vol. I. Cambridge: Cambridge University Press, 1989, 92–148.
- Ferrari (1997): Ferrari, Franco. 'Esistoro forme di καθ' ἔκαστα? Il problema dell'individualita in Plotino e nella tradizione platonica antica.' *Atti della Academia delle scienze di Torino. Classe di scienze morali, storiche e filologiche* 131 (1997): 23–63.
- FERRARI (1998): Ferrari, Franco. 'La collocazione dell'anima e la questione dell'esistenza di idee di individui in Plotino.' *Rivista di Storia della Filosofia* 53, no. 4 (1998): 629–653.
- FÖLLINGER / KULLMAN (1997): Föllinger, Sabine, and Wolfgang Kullman. *Aristotelische Biologie: Intentionen, Methode, Ergebnisse*. Stuttgart: Franz Steiner Verlag, 1997.
- FÖLLINGER / BUSH (2022): Föllinger, Sabine, and Theo Bush, eds. *Aristotle's Generation of Animals. A Comprehensive Approach*. Berlin: De Gruyter, 2022.
- FORREST (2020): Forrest, Peter. 'The Identity of Indiscernibles.' *The Stanford Encyclopedia of Philosophy* (Winter 2020 Edition), ed. Edward N. Zalta. https://plato.stanford.edu/archives/win2020/entries/identity-indiscernible/
- Frede (1987A): Frede, Michael, ed. *Essays in Ancient Philosophy*. Minneapolis: University of Minnesota Press, 1987.
- FREDE (1987B): Frede, Michael. 'Individuals in Aristotle.' In ed. Michael Frede, *Essays in Ancient Philosophy*. Minneapolis: University of Minnesota Press, 1987, 49–71.
- Frede (1990): Frede, Michael. 'The Definition of Sensible Substances in *Metaphysics Z.*' In eds. Daniel Devereux and Pierre Pellegrin, *Biologie, logique et métaphysique chez Aristote*. Paris: Éditions du CNRS, 1990, 113–129.
- Frede (1999A): Frede, Michael. 'Stoic epistemology.' In eds. K. Algra, J. Barnes, J. Mansfeld, and M. Schofield, *The Cambridge History of Hellenistic Philosophy*. Cambridge: Cambridge University Press, 1999, 295–322.
- Frede (1999B): Frede, Michael. 'On the Stoic Conception of the Good.' In ed. Katerina Iero-diakonou, *Topics in Stoic Philosophy*. Oxford: Clarendon Press, 1999, 71–94.
- Fridovich-Keil (N.D.): Fridovich-Keil, Judith L. 'human genome.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/human-genome.
- FRUECHTEL (1970): Fruechtel, E. Weltentwurf und Logos. Zur Metaphysik Plotins. Frankfurt: Klostermann, 1970.
- Gadamer (1980): Gadamer, Hans Georg. 'Plato and the Poets.' In ed. and trans. P. Christopher Smith, *Dialogue and Dialectic: Eight Hermeneutical Studies on Plato*. New Haven: Yale University Press, 1980, 39–72.
- Gelber (2010): Gelber, Jessica. 'Form and Inheritance in Aristotle's Biology.' *Oxford Studies* in Ancient Philosophy 39 (2010): 183–212.
- Gelber (2018): Gelber, Jessica. 'Females in Aristotle's Embryology.' In eds. Andrea Falcon and David Lefebvre, *Aristotle's Generation of Animals: A Critical Guide.* Melbourne New York Cambridge: Cambridge University Press, 2018, 171–187.
- GERSON (1993): Gerson, Lloyd P. 'Plotinus's Metaphysics: Emanation or Creation?' *Review of Metaphysics* 46, no. 3 (Mar. 1993): 559–574.
- GERSON (1994): Gerson, Lloyd P. *Plotinus*. Edited by Ted Honderich. London New York: Routledge, 1994.

248 BIBLIOGRAPHY

- GERSON (1996): Gerson, Lloyd P., ed. *The Cambridge Companion to Plotinus*. Cambridge: Cambridge University Press, 1996.
- GERSON (2012): Gerson, Lloyd P. 'Plotinus in "logos".' In eds. James Wilberding and Christoph Horn, *Neoplatonism and the Philosophy of Nature*. Oxford: Oxford University Press, 2012, 17–29.
- GILL / PELLEGRIN (2006): Gill, Mary Louise, and Pierre Pellegrin, eds. *A Companion to Ancient Philosophy*. Malden, MA: Blackwell Publishing, 2006.
- GRACIA (2015): Gracia, Jorge J.E. 'Individuation.' In eds. Robert and Paul Audi, *The Cambridge Dictionary of Philosophy* (3rd edition). Cambridge: Cambridge University Press, 2015 [first published 1995], 507.
- GRAESER (1996): Graeser, Andreas. 'Individualität und individuelle Form als Problem in der Philosophie der Spätantike und desfrühen Mittelalters.' *Museum Helveticum* 53, no. 2 (1996): 187–196.
- GRIMSHAW (1986): Grimshaw, Jean. Feminist Philosophers: Women's Perspectives on Philosophical Traditions. Brighton, Sussex: Wheatsheaf, 1986.
- GRISWOLD (2020): Griswold, Charles L. 'Plato on Rhetoric and Poetry.' *The Stanford Ency-clopedia of Philosophy* (Spring 2020 Edition), ed. Edward N. Zalta. https://plato.stanford.edu/entries/plato-rhetoric/
- GRUEN (2011): Gruen, Eric S. *Rethinking the Other in Antiquity. Martin Classical Lectures*. Princeton Oxford: Princeton University Press, 2011.
- GURTLER (2005): Gurtler, G.M. 'Plotinus: Matter and Otherness, "On Matter" (II 4[12]).' *Epoche* 9, no. 2 (2005): 197–214.
- Hadot (1987): Hadot, Pierre. *Exercises spirituels*. *Exercise Spirituel et Philosophie Antique*. Paris: Études Augustiniennes, 15–58.
- HALFWASSEN (2004): Halfwassen, Jens. *Plotin und der Neuplatonismus*. München: Beck, 2004.
- HALFWASSEN (2007): Halfwassen, Jens. 'Schönheit und Bild im Neuplatonismus.' In eds. Verena Olejniczak Lobsien and Claudia Olk, Neuplatonismus und Ästhetik. Berlin: De Gruyter, 2007, 43–57.
- Halliwell (2000A): Halliwell, Stephen. 'Plato and Painting.' In eds. N. Keith Rutter and Brian Sparkes, *Word and Image in Ancient Greece*. Edinburgh: Edinburgh University Press, 2000, 99–116.
- Halliwell (2000B): Halliwell, Stephen. 'The Subjection of *Muthos* to *Logos*: Plato's Citations of the Poets.' *Classical Quarterly* 50 (2000): 94–112.
- Halliwell (2011): Halliwell, Stephen. 'Antidotes and Incantations: Is there a Cure for Poetry in Plato's *Republic*?' In eds. Pierre Destrée and Fritz Gregor Herrmann, *Plato and the Poets*. Leiden: Brill, 2011, 241–266.
- HANKINSON (2003): Hankinson, R.J. 'Stoic Epistemology.' In ed. Brad Inwood, *The Cambridge Companion to the Stoics*. Cambridge New York Melbourne Madrid Cape Town Singapore Sao Paulo: Cambridge University Press, 2003, 59–84.
- HAYDUCK (1891): Hayduck, M., ed. *Alexander of Aphrodisias: In Commentaria in Aristotelem Graeca. Vol. 1: On the Metaphysics.* Berlin: Reimer, 1891.
- Heinaman (1982): Heinaman, Robert. 'Form and Universal in Aristotle [Book Review].' *The Classical Review* 32, no. 1 (1982): 44–48.

- HEINEMANN (1921): Heinemann, Frederick Henry. *Plotin. Forschungen über die plotinische Frage, Plotins Entwicklung und sein System.* Leipzig: Meiner, 1921.
- HELLEMAN-ELGERSMA (1980): Helleman-Elgersma, Wypkje. Soul-Sisters: A Commentary on Enneads IV 3 (27), 1–8 of Plotinus. Amsterdam: Rodopi, 1980.
- Helmig (2012): Helmig, Christoph. *Forms and concepts: concept formation in the Platonic tradition*. Berlin: De Gruyter, 2012.
- Helmig / Marongiu (2020): Helmig, Christoph, and Laura Marongiu, eds. *World Soul Anima Mundi: On the origins and fortunes of a fundamental idea*. Berlin: De Gruyter, 2020.
- HENRY D. (2005): Henry, Devin. 'Embryological Models in Ancient Philosophy.' *Phronesis* 50, no. 1 (2005): 1–42.
- HENRY D. (2006A): Henry, Devin. 'Understanding Aristotle's Reproductive Hylomorphism.' *Apeiron* 39, no. 3 (2006): 257–287.
- HENRY D. (2006B): Henry, Devin. 'Aristotle on the Mechanisms of Inheritance.' *Journal of the History of Biology* 39 (2006): 425–455.
- HENRY D. (2007): Henry, Devin. 'How Sexist Is Aristotle's Developmental Biology?' *Phronesis* 52, no. 3 (2007): 251–269.
- HENRY P. (1953): Henry, Paul. 'La dernière parole de Plotin.' Studi Classici e Orientali 2 (1953): 116–120.
- HÖFFE (2005): Höffe, Otfried, ed. Aristoteles-Lexikon. Stuttgart: Kröner, 2005.
- HOOVER (N.D.): Hoover, J. Edgar. 'fingerprint.' *Encyclopedia Britannica*, no date. https://www.britannica.com/topic/fingerprint.
- HORN (2012): Horn, Christoph. 'Aspects of biology in Plotinus.' In eds. James Wilberding and Christoph Horn, *Neoplatonism and the Philosophy of Nature*. Oxford: Oxford University Press, 2012, 214–228.
- HORN / WILBERDING (2012): Horn, Christoph, and James Wilberding, eds. *Neoplatonism* and the Philosophy of Nature. Oxford: Oxford University Press, 2012.
- HUTCHINSON (2018): Hutchinson, D.M. *Plotinus on Consciousness*. Cambridge: Cambridge University Press, 2018.
- IERODIAKONOU (1999): Ierodiakonou, Katerina, ed. *Topics in Stoic Philosophy*. Oxford: Clarendon Press, 1999.
- IGAL (1972): Igal, Jesus. 'Una nueva interpretación de las últimas palabras de Plotino.' *Cuadernos de filología clásica* 4 (1972): 441–462.
- INGE (1929): Inge, William Ralph. *The Philosophy of Plotinus*. 2 vols. London: Longmans, Green and Co., 1929.
- INWOOD (2003): Inwood, Brad, ed. The Cambridge Companion to the Stoics. Cambridge –
 New York Melbourne Madrid Cape Town Singapore Sao Paulo: Cambridge University Press, 2003.
- IONESCU (2020): Ionescu, Cristina. 'Images and Paradigms in Plato's Sophist and Statesman.' *Ancient Philosophy* 40, no. 2 (2020): 285–306.
- IRIGARAY (1985A): Irigaray, L. *Speculum of the Other Woman*. Translated by G. Gill. New York: Cornell University Press, 1985.
- IRIGARAY (1985B): Irigaray, L. *This Sex Which Is Not One*. Translated by Catherine Porter and Carolyn Burke. Ithaca, NY: Cornell, 1985.

- IRWIN (1996): Irwin, T.H. 'Stoic Individuals.' *Philosophical Perspectives* 10 (1996): 459–480.
 JONES (2003): Jones, Alexander. 'The Stoics and the astronomical siences.' In ed. Brad Inwood, *The Cambridge Companion to the Stoics*. Cambridge New York Melbourne Madrid Cape Town Singapore Sao Paulo: Cambridge University Press, 2003, 328–344.
- Kalligas (1997A): Kalligas, Paul. 'Forms of Individuals in Plotinus: A Re-Examination.' *Phronesis* 52, no. 2 (1997): 206–227.
- KALLIGAS (1997B): Kalligas, Paul. 'Logos and the Sensible Object in Plotinus.' Ancient Philosophy 17, no. 2 (1997): 397–410.
- Kalligas (2011): Kalligas, Paul. 'The structure of appearances: Plotinus on the constitution of sensible objects.' *The Philosophical Quarterly* 61, no. 245 (2011): 762–782.
- Kalligas (2012): Kalligas, Paul. *'Eiskrisis*, or the Presence of Soul in the Body: A Plotinian Conundrum.' *Ancient Philosophy* 32 (2012): 147–166.
- Kalligas (2014): Kalligas, Paul. *The* Enneads *of Plotinus. A Commentary. Vol 1.* Translated by Elizabeth Key Fowden and Nicolas Pilavachi. Princeton Oxford: Princeton University Press, 2014.
- Kalligas (2023): Kalligas, Paul. *The* Enneads *of Plotinus. A Commentary. Vol 2.* Translated by Nickolaos Koutras. Princeton Oxford: Princeton University Press, 2023 [first published in Greek under the titles *Plōtinou: Enneas Tetartē* and *Plōtinou: Enneas Pemptē* by The Academy of Athens, Athens, 2009 and 2013].
- KARAMANOLIS (2020): Karamanolis, George. 'Seele und Seelenwanderung.' *Reallexikon für Antike und Christentum* 50 (2020): 107–136, 150–177.
- KARFIK / SONG (2013): Karfik, Filip, and Euree Song. *Plato Revived. Essays on Ancient Platonism in Honour of Dominic J. O'Meara*. Berlin: De Gruyter, 2013.
- Kennedy (1989): Kennedy, Alexander, ed. *The Cambridge History of Literary Criticism*, vol. I. Cambridge: Cambridge University Press, 1989.
- Kerferd (1972): Kerferd, G.B. 'The search for personal identity in Stoic thought.' *Bulletin of the John Rylands Library* 55, no. 1 (1972): 177–196.
- Kraut (1997): Kraut, Richard, ed. *Plato's Republic: Critical Essays*. Lanham, MD: Rowman and Littlefield, 1997.
- Kraut (2022): Kraut, Richard. 'Plato.' *The Stanford Encyclopedia, of Philosophy* (Spring 2022 Edtion), ed. Edward N. Zalta. https://plato.stanford.edu/entries/plato/
- LAURENT (1992): Laurent, Jérôme. Les fondements de la nature dans la pensee de Plotin: procession et participation. Paris: Vrin, 1992.
- LAURENT (1999): Laurent, Jérôme. 'Les limites de la conformite a la nature selon Plotin.' In ed. Jean François Pradeau, *Plotin, des principes*. Strasbourg: Presses Universitaires de Strasbourg, 1999, 11–21.
- Layne (2021): Layne, Danielle. 'Divine Mothers: Plotinus' Erotic Productive Causes.' In eds. Jessica Elbert Decker, Danielle Layne, and Monica Vilhauer, *Otherwise than the Binary:* New Feminist Readings of Ancient Greek Philosophy and Culture. New York: SUNY Press 2021, 304–330.
- Layne (2022): Layne, Danielle. 'Otherwise Than the Father: Night and the Maternal Causes in Proclus' Theological Metaphysics.' In ed. J. Schultz, *Women and the Female in Neoplatonism*. Leiden: Brill 2022.

- Lefebvre (2016): Lefebvre, David. 'LE SPERMA : FORME, MATIÈRE OU LES DEUX ? Aristote critique de la double semence.' *Philosophie antique* no. 16 (2016): 31–62.
- LENNOX (2009): Lennox, James Gordon. 'Form, Essence, and Explanation in Aristotle's Biology.' In ed. Georgios Anagnostopoulos, *A Companion to Aristotle*. Oxford: Blackwell Publishing, 2009, 348–367.
- Lewis (1995): Lewis, E. 'The Stoics on Identity and Individuation.' *Phronesis* 40, no. 1 (1995): 89–108.
- LIDDELL / SCOTT / JONES (1996): Liddell, Henry George, and Robert Scott and Henry Stuart Jones, eds. *A Greek English lexicon* 9th edition, revised and augmented throughout by Henry Stuart Jones. Oxford: Clarendon Press, 1996.
- LLOYD A.C. (1970): Lloyd, A.C. 'Aristotle's Principle of Individuation.' *Mind New Series* 79, no. 316 (Oct. 1970): 519–529.
- LLOYD G. (1984): Lloyd, Genevieve. *The Man of Reason: 'Male' and 'Female' in Western Philosophy*. Minneapolis: University of Minnesota Press, 1984.
- LLOYD G.E.R. (1990): Lloyd, Geoffrey Ernest Richard. 'Aristotle's Zoology and His Metaphysics: The *status quaestionis*. A Critical Review of Some Recent Theories.' In eds. Daniel Devereux and Pierre Pellegrin, *Biologie, logique et métaphysique chez Aristote*. Paris: Éditions du CNRS, 1990, 7–35.
- LOEMKER (1969): Loemker, L., ed. and trans. *G. W. Leibniz: Philosophical Papers and Letters*. Dordrecht: D. Reidel, 1969.
- LONG / SEDLEY (1987A): Long, A.A., and D.N. Sedley. *The Hellenistic Philosophers: Volume 1, Translations of the Principal Sources with Philosophical Commentary.* Cambridge: Cambridge University Press, 1987.
- Long / Sedley (1987B): Long, A.A., and D.N. Sedley. *The Hellenistic Philosophers: Volume 2, Greek and Latin Texts with Notes and Bibliography.* Cambridge: Cambridge University Press, 1987.
- Long (2016): Long, A.A. 'What Is the Matter with Matter, according to Plotinus?' *Royal Institute of Philosophy Supplement* 78 (2016): 37–54.
- Lo Presti (2014): Lo Presti, Roberto. 'Informing Matter and Enmattered Forms: Aristotle and Galen on the "Power" of the Seed.' *The British Journal for the History of Philosophy* 22, no. 5 (special issue on 'Medical Powers') (2014): 929–950.
- MAMO (1969): Mamo, P.S. 'Forms of Individuals in the "Enneads".' Phronesis 14, no. 2 (1969): 77–96.
- MANSFELD (1995): Mansfeld, Jaap. 'Plotinian ancestry.' *Illinois Classical Studies* 20 (1995): 149–156.
- MAURIN (2018): Maurin, Anna-Sofia. 'Tropes.' *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), ed. Edward N. Zalta. https://plato.stanford.edu/entries/tropes/
- MAYHEW (2004): Mayhew, Robert. *The Female in Aristotle's Biology: Reason or Rationalization*. Chicago: University of Chicago Press, 2004.
- McDaniel (2001): McDaniel, K. 'Tropes and Ordinary Physical Objects.' *Philosophical Studies* 104, no. 3 (2001): 269–290.
- MCPHERRAN (1988): McPherran, Marc L. 'Plato's Particulars.' *The Southern Journal of Philosophy* 26, no. 4 (1988): 527–553.

- MENDEL (1866): Mendel, Gregor. 'Versuche über Pflanzen-Hybriden.' Verhandlungen des naturforschenden Vereines in Brünn IV (1866): 3–47.
- MERLAN (1953): Merlan, Ph. 'Plotinus and Magic.' Isis 44 (1953): 341-348.
- MICHALEWSKI (2021): Michalewski, Alexandra. 'Women and Philosophy in Porphyry's *Life of Plotinus*.' In eds. Isabelle Chouinard, Zoe McConaughey, and Aline Medeiros Ramos, *Women's Perspectives on Ancient and Medieval Philosophy*. Cham: Springer, 2021, 211–220.
- MÜLLER / OLSSON (2003): Müller, G.B., and L. Olsson. *Epigenesis and Epigenetics*. In eds. B.K. Hall and W.O. Olson, *Keywords and concepts in evolutionary developmental biology*. Cambridge, MA: Harvard University Press, 2003, 114–123.
- MÜLLER (1914): Müller, Hermann Friedrich. 'Ist die Metaphysik des Plotins ein Emanationssystem?' *Hermes* 48 (1914): 416–422.
- MURRAY (1996): Murray, Penelope, ed. *Plato on Poetry*, Cambridge: Cambridge University Press, 1996.
- NADAFF (2002): Nadaff, Ramona A. *Exiling the Poets: the Production of Censorship in Plato's Republic*. Chicago: University of Chicago Press, 2002.
- NARBONNE (2007): Narbonne, Jean-Marc. 'La controverse à propos de la génération de la matière chez Plotin: l'énigme résolue?' *Quaestio* 7 (2007): 123–163.
- NICKEL (1989): Nickel, D. *Untersuchungen zur Embryologie Galens*. Berlin: Akademie, 1989. NIELSEN (2008): Nielsen, Karen. 'The Private Parts of Animals: Aristotle on the Teleology of Sexual Difference.' *Phronesis* 53, no. 4-5 (2008): 373–405.
- NIKULIN (1998): Nikulin, Dmitri. 'Intelligible matter in Plotinus.' *Dionysius* 16 (1998): 85–114. NIKULIN (2005): Nikulin, Dmitri. 'Unity and Individuation of the Soul in Plotinus.' In ed. Ricardo Chiaradonna, *Studi sull'anima in Plotino*. Napoli: Bibliopolis, 2005, 277–304.
- NOBLE (2013A): Noble, Christopher Isaac. 'Plotinus' Unaffectable Matter.' Oxford Studies in Ancient Philosophy 44 (2013): 233–277.
- NOBLE (2013B): Noble, Christopher Isaac. 'How Plotinus' Soul Animates his Body: The Argument for the Soul-Trace at Ennead IV.4.18.1–9.' *Phronesis* 58, no. 3 (2013): 249–279.
- NOBLE (2021): Noble, Christopher Isaac. 'Human Nature and Normativity in Plotinus.' In eds. P. Adamson and C. Rapp, *State and Nature: Essays in Ancient Political Philosophy.* Berlin Boston: De Gruyter, 2021, 269–291.
- O'Brien (1971): O'Brien, Denis. 'Plotinus on Evil: A Study of Matter and the Soul in Plotinus' Conception of Human Evil.' In ed. Pierre-Maxime Schuhl, *Le néoplatonisme*. Paris: Éditions du CNRS, 1971, 113–146.
- O'Brien (1991): O'Brien, Denis. *Plotinus on the Origin of Matter: An Exercise in the Interpretation of the* Enneads. Napoli: Bibliopolis, 1991.
- O'Brien (1996): O'Brien, Denis. 'Plotinus on Matter and Evil.' In ed. Lloyd P. Gerson, *The Cambridge Companion to Plotinus*. Cambridge: Cambridge University Press, 1996, 171–195.
- O'Brien (1999): O'Brien, Denis. 'La matière chez Plotin: Son origine, sa nature.' *Phronesis* 44, no. 1 (1999): 45–71.
- O'Brien (2011A): O'Brien, Denis. 'Plotinus on the Making of Matter Part I: The Identity of the Darkness.' *Journal of the Platonic Tradition* 5, no. 2 (2011): 6–57.

- O'Brien (2011B): O'Brien, Denis. 'Plotinus on the Making of Matter Part II: "A Corpse Adorned" (Enn. II 4 [12] 5.18).' *Journal of the Platonic Tradition* 5, no. 2 (2011): 209–261.
- O'Brien (2012): O'Brien, Denis. 'Plotinus on the Making of Matter Part III: The Essential Background.' *Journal of the Platonic Tradition* 6, no. 1 (2012): 27–80.
- O'MEARA (1993): O'Meara, Dominic J. *An Introduction to the Enneads*. Oxford: Oxford University Press, 1993.
- O'MEARA (1999): O'Meara, Dominic J. 'Forms of Individuals in Plotinus.' In ed. J.J. Cleary, Traditions of Platonism: Essays in Honour of J. Dillon. Aldershot: Ashgate Publishers, 1999, 263–269.
- Opsomer (2001): Opsomer, Jan. 'Proclus vs. Plotinus on Matter (De Mal. Subs. 30–7).' *Phronesis* 46, no. 2 (2001): 154–188.
- Opsomer (2007): Opsomer, Jan. 'Some Problems with Plotinus' Theory of Matter/Evil: An Ancient Debate Continued.' *Quaestio* 7, no. 1 (2007): 165–189.
- Ousager, (2004): Ousager, Asger. Plotinus on Selfhood, Freedom and Politics. Aarhus: Aarhus University Press, 2004.
- Pang-White / White (2001): Pang-White, Ann A., and David White. 'On the Generation of Matter in Plotinus' *Enneads*.' *Modern Schoolman* 78, no. 4 (2001): 289–299.
- Pellegrin (2006): Pellegrin, Pierre. 'Ancient Medicine and Its Contribution to the Philosophical Tradition.' In eds. Mary Louise Gill and Pierre Pellegrin, *A Companion to Ancient Philosophy*. Malden, MA: Blackwell Publishing, 2006, 664–685.
- PÉPIN (1992): Pépin, Jean. 'La dernière parole de Plotin.' In eds. and translated with a commentary by Luc Brisson, Jean-Louis Cherlpnneix, Marie-Odile Goulez-Gazé, Richard Goulet, Mirko D. Grmek, Jean-Marie Flamand, Sylvain Matton, Debis O'Brien, Jean Pépin, Henri Dominique Saffrey, Alain P. Segonds, Michel Tardieu, and Pierre Thillet, and an introduction by Jean Pépin, *Porphyre, La Vie de Plotin II. Porphyre, La Vie de Plotin II.* Paris: Vrin, 1992, 355–383.
- Perilli (2007): Perilli, L. 'Democritus, Zoology and the Physicians.' In ed. A. Brancacci and P.M. Morel, *Democritus: Science, The Arts, and The Care of The Soul.* Leiden Boston: Brill, 2007, 143–179.
- Petit (2000): Petit, Alain. 'L'éternel retour chez Plotin, un paradox plotinien.' In ed. Michel Fattal, *Études sur Plotin*. Montréal: L'Harmattan, 2000, 75–86.
- Phillips (2009): Phillips, John. 'Plotinus on the Generation of Matter.' *International Journal of the Platonic Tradition* 3 (2009): 103–137.
- PIGLER (2001): Pigler, Agnès. 'La réception plotinienne de la notion stoïcienne de sympathie universelle.' *Revue de philosophie ancienne* 19, no. 1 (2001): 45–78.
- PISTORIUS (1952): Pistorius, P.V. *Plotinus and Neoplatonism: An Introductory Study.* Cambridge: Bowes & Bowes, 1952.
- PORTER (2010): Porter, James I. 'Plato and the Platonic Tradition: The Image Beyond the Image.' The *Yearbook of Comparative Literature*, Vol. 56 (2010): 75–103.
- Preus (1977): Preus, Anthony. 'Galen's Criticism of Aristotle's Conception Theory.' *Journal of the History of Biology* Vol. 10, no. 1 (Spring, 1977): 65–85.
- Remes (2007): Remes, Pauliina. *Plotinus on Self: The Philosophy of the 'We'*. Cambridge: Cambridge University Press, 2007.

- Remes (2008): Remes, Pauliina. 'Inwardness and infinity of selfhood: From Plotinus to Augustine.' In eds. Pauliina Remes and Juha Sihvola, *Ancient Philosophy of the Self.* London: Springer, 2008.
- Remes / Slaveva Griffin (2014): Remes, Pauliina, and Svetla Slaveva Griffin. *The Routledge Handbook of Neoplatonism*. New York: Routledge, 2014.
- RIST (1963): Rist, John M. 'Forms of Individuals in Plotinus.' *The Classical Quarterly* 13, no. 2 (1963): 223–231.
- RIST (1967A): Rist, John M. 'Integration and the Undescended Soul in Plotinus.' *The American Journal of Philology* 88, no. 4 (Oct. 1967): 410–422.
- RIST (1967B): Rist, John. *The Road to Reality*. Cambridge: Cambridge University Press, 1967. RIST (1970): Rist, John M. 'Ideas of individuals in Plotinus: A reply to Dr Blumenthal.' *Revue Internationale de Philosophie* 24, no. 92 (1970): 298–303.
- RIST (2009): Rist, John M. *The Indefinite Dyad and Intelligible Matter in Plotinus*. Cambridge: Cambridge University Press, 2009.
- RICH (1957): Rich, Audrey N.M. 'Reincarnation in Plotinus.' *Mnemosyne* 10 (Jan. 1957): 232–238.
- RUDBERG (1956A): Rudberg, Gunnar. *Platonica selecta*. Stockholm: Almqvist et Wiksell, 1956.
- RUDBERG (1956B): Rudberg, Gunnar. 'Plotinus' conception of nature.' In ed. Gunnar Rudberg, *Platonica selecta*. Stockholm: Almqvist et Wiksell, 1956, 127–132.
- RUTTER / Sparkes (2000): Rutter, Keith N., and Brian Sparkes, eds. Word and Image in Ancient Greece. Edinburgh: Edinburgh University Press, 2000
- SAFFREY (1996): Saffrey, Henri D. 'Florence, 1492: The Reappearance of Plotinus.' *Renaissance Quarterly* 49, no. 3 (1996): 488–508.
- Salmieri (2018): Salmieri, Gregory. 'Something(s) in the Way(s) He Moves: Reconsidering the Embryological Argument for Particular Forms in Aristotle.' In eds. Andrea Falcon and David Lefebvre, *Aristotle's Generation of Animals: A Critical Guide*. Melbourne New York Cambridge: Cambridge University Press, 2018, 188–206.
- SCHÄFER (2004): Schäfer, Christian. 'Matter in Plotinus's Normative Ontology.' *Phronesis* 49, no. 3 (2004): 266–294.
- Schaffer (2001): Schaffer, Jonathan. 'The Individuation of Tropes.' *Australasian Journal of Philosophy* 79, no. 2 (2001): 247–257.
- Schliesser (2015): Schliesser, Eric, ed. *Sympathy: A History*. Oxford: Oxford University Press, 2015.
- SCHULTZ (2019): Schultz, Jana. 'Conceptualizing the "female" soul a study in Plato and Proclus.' *British Journal for the History of Philosophy* 27, no. 5 (2019): 883–901.
- SCHULTZ (2021): Schultz, Jana. 'Soul, Gender and Hierarchy in Plotinus and Porphyry: A Response to Mathilde Cambron-Goulet and François-Julien Côté-Rémy's "Plotinus and Porphyry on Women's Legitimacy in Philosophy".' In eds. Isabelle Chouinard, Zoe McConaughey, and Aline Medeiros Ramos, Women's Perspectives on Ancient and Medieval Philosophy. Cham: Springer, 2021, 201–210.
- Schwyzer (1950): Schwyzer, Hans Rudolf. 'Die älteste Plotin-Handschrift.' *Rheinisches Museum für Philologie* 93, no. 2 (1950): 154–155.

- Schwyzer (1951): Schwyzer, Hans Rudolf. 'Plotinos.' Realencyclopädie der Classischen Altertumswissenschaft XXI, no. 1 (1951): 471–592.
- Schwyzer (1973): Schwyzer, Hans Rudolf. 'Zu Plotins Deutung der sogennanten platonischen Materie.' In ed. T. Lefevre, *Zetesis: Festschrift E. de Strijker*. Antwerp Utrecht: Nederlandsche Boekhandel, 1973, 266–280.
- Schwyzer (1976): Schwyzer, Hans Rudolf. 'Plotins letztes Wort.' *Museum Helveticum* 33, no. 2 (1976): 85–97.
- Schwyzer (1987): Schwyzer, Hans Rudolf. 'Corrigenda ad Plotini textum.' *Museum Helveticum* 44 (1987): 191–210.
- SEDLEY (1982): Sedley, David. 'The Stoic criterion of identity.' *Phronesis* 27, no. 3 (1982): 255–275.
- SEDLEY (2013): Sedley, David. 'Plato and the one-over-many principle.' In eds. Riccardo Chiaradonna and Gabriele Galluzzo, *Universals in Ancient Philosophy*. Pisa: Edizioni Della Normale, 2013, 113–137.
- Sellars (1957): Sellars, Wilfrid. 'I. Substance and Form in Aristotle.' *The Journal of Philosophy* 54, no. 22 (24 Oct. 1957): 688–699.
- SHARPLES (1996): Sharples, R.W. Stoics, Epicureans and Sceptics: An introduction to Hellenistic philosophy. London New York: Routledge, 1996.
- SHARPLES (2004): Sharples, R.W. *Philosophy and the Sciences in Antiquity*. London: Ashgate, 2004.
- SIKKEMA (2009): Sikkema, James. 'On the Necessity of Individual Forms in Plotinus.' *The International Journal of the Platonic Tradition* 3 (2009): 138–153.
- SILVERMAN (2002): Silverman, Allan. *The Dialectic of Essence*. Princeton: Princeton University Press, 2002.
- SLEEMAN (1980): Sleeman, John H., and Gilbert Pollet, eds. *Lexicon Plotinianum*. Leiden: Brill, 1980.
- SMITH (1984): Smith, A. 'Did Porphyry Reject the Transmigration of Human Souls into Animals?' *Rheinisches Museum für Philologie* 127, no. 3 (1984): 276–284.
- SORABJI (2004A): Sorabji, Richard. *The Philosophy of the Commentators* 200-600 AD. A Sourcebook. Vol. 3 Logic and Metaphysics. London: Duckworth, 2004.
- SORABJI (2004B): Sorabji, Richard. *The Philosophy of the Commentators* 200-600 AD. A Sourcebook. Vol. 3 Physics. London: Duckworth, 2004.
- SORABJI (2006A): Sorabji, Richard. *Self, Ancient and Modern Insights about Individuality, Life, and Death.* Chicago: University of Chicago Press, 2006.
- SORABJI (2006B): Sorabji, Richard. 'Is the true self individual in the Platonist tradition from Plato to Averroës?' In ed. Richard Sorabji, *Self, Ancient and Modern Insights about Individuality, Life, and Death.* Chicago: University of Chicago Press, 2006, 115–136.
- SORABJI (2006C): Sorabji, Richard. 'Bundles and differentiation of individuals.' In ed. Richard Sorabji, *Self, Ancient and Modern Insights about Individuality, Life, and Death.* Chicago: University of Chicago Press, 2006, 137–153.
- Spelman (1982): Spelman, Elizabeth. 'Woman as Body: Ancient and Contemporary Views.' Feminist Studies 8 (1982): 109–131.
- STAMATELLOS (2013): Stamatellos, Giannis. 'Plotinus on Transmigration: A Reconsideration.' *Journal of Ancient Philosophy* 7, no. 1 (2013): 49–64.

256 BIBLIOGRAPHY

- Steel (1978): Steel, Carlos. *The Changing Self. A Study on the Soul in Later Neoplatonism: Iamblichus, Damascius and Priscianus.* Brussel: Paleis der Academies, 1978.
- Steinhart (1848): Steinhart, Karl. 'Plotinus.' Realencyclopädie der classischen Alterthumswissenschaft V (1848).
- STERN-GILLET (2000): Stern-Gillet, Suzanne. 'Singularité et ressemblance: le portrait refuse.' In ed. by Michel Fattal, *Études sur Plotin*. Montréal: L'Harmattan, 2000, 13–46.
- STOLL / ENDERTON (N.D.): Stoll, Robert R., and Herbert Enderton. 'set theory.' *Encyclopedia Britannica*, no date. https://www.britannica.com/science/set-theory.
- SYKES (1975): Sykes, R.D. 'Form in Aristotle: Universal or Particular?' *Philosophy* 50, no. 193 (Jul. 1975): 311–331.
- TORNAU (2009): Tornau, Christian. 'Qu'est-ce qu'un individu? Unité, individualité et conscience de soi dans la métaphysique plotinienne de l'âme.' Les études philosophiques 3 (2009): 333–360.
- TORNAU (2010): Tornau, Christian. 'Was ist ein Individuum? Einheit, Individualität und Selbstbewußtsein in Plotins Metaphysik der Seele.' *Tabula Rasa*, 28 April 2010. https://www.tabularasamagazin.de/was-ist-ein-individuum-einheit-individualitaet-und-selbstbewusstsein-in-plotins-metaphysik-der-seele1/
- TROUILLARD (1955): Trouillard, Jean. *La Purification Plotinienne*. Paris: Presses Universitaires de France, 1955.
- TURLOT (1985): Turlot, Fernand. 'Le *logos* chez Plotin.' *Les Études philosophiques*, no. 4 (1985): 517–528.
- URMSON (1997): Urmson, J.O. 'Plato and the Poets.' In ed. Richard Kraut, *Plato's Republic: Critical Essays*. Lanham, MD: Rowman and Littlefield, 1997, 223–234.
- Vassallo (2017): Vassallo, Christian. 'The Legacy of Heraclitean *Logos* in Plotinus' Ontology.' In ed. Christian Vassallo, *Physiologia. Topics in Presocratic Philosophy and its Reception in Antiquity*. Trier: Wissenschaftlicher Verlag Trier, 2017, 41–60.
- VASSILOPOULOU (2003): Vassilopoulou, Panayiota. 'From a Feminist Perspective: Plotinus on Teaching Learning Philosophy.' *Women: A Cultural Review* 14 (2003): 130–143.
- VASSILOPOULOU (2006): Vassilopoulou, Panayiota. 'Plotinus and Individuals.' *Ancient Philosophy* 26, no. 2 (2006): 371–383.
- VOLKOVA (2015): Volkova, Nadezhda. 'Is the Soul of Socrates Eternal? (On the problem of explanation of the individual qualities in Plotinus).' *Philosophical Anthropology* 1, no. 1 (2015): 10–13.
- VON BAER (1827): von Baer, Karl Ernst. *De ovi mammalium et hominis genesi* [On the Mammalian Egg and the Origin of Man]. Leipzig: Leopold Voss, 1827.
- Weiner (2012): Weiner, Sebastian. 'Platons *Logon Didonai.' Archiv für Begriffsgeschichte* 54 (2012): 7–20.
- WHITE (2003): White, Michael J. 'Stoic Natural Philosophy (Physics and Cosmology).' In ed. Brad Inwood, *The Cambridge Companion to the Stoics*. Cambridge New York Melbourne Madrid Cape Town Singapore Sao Paulo: Cambridge University Press, 2003, 124–152.
- WHITING (1986): Whiting, Jennifer. 'Form and Individuation in Aristotle." *History of Philosophy Quarterly* 3 (1986): 359–377.

257

- WHITTAKER (1997): Whittaker, John. "Plotinus at Alexandria: scholastic experiences in the second and third centuries." *Documenti E Studi Sulla Tradizione Filosofica Medievale* 8 (1997):159-190.
- WILBERDING (2008): Wilberding, James. "Porphyry and Plotinus on the Seed." *Phronesis* 53, no. 4-5 (2008): 406-432.
- WILBERDING (2012): Wilberding, James. 'Neoplatonists on "Spontaneous" Generation.' In eds. James Wilberding and Christoph Horn, *Neoplatonism and the Philosophy of Nature*. Oxford: Oxford University Press, 2012, 197–213.
- WILBERDING (2015A): Wilberding, James. 'The Revolutionary Embryology of the Neoplatonists.' Oxford Studies in Ancient Philosophy 49 (2015): 321–361.
- WILBERDING (2015B): Wilberding, James. 'Plato's Embryology.' *Early Science and Medicine* 20 (2015): 150–168.
- WILBERDING (2017): Wilberding, James. Forms, Souls, and Embryos: Neoplatonists on Human Reproduction. London New York: Routledge, 2017.
- WILBERDING (2020): Wilberding, James. 'The World Soul in the embryological theories of Porphyry and Plotinus.' In eds. Christoph Helmig and Laura Marongiu, *World Soul Anima Mundi: On the origins and fortunes of a fundamental idea*. Berlin: De Gruyter, 2020, 269–288.
- WILDBERG (2009): Wildberg, Christian. 'A World of Thoughts: Plotinus on Nature and Contemplation (Enn. III.8 [30] 1–6).' In eds. Riccardo Chiaradonna and Franco Trabattoni, *Physics and Philosophy of Nature in Greek Neoplatonism*. Leiden: Brill, 2009, 121–143.
- WITT R.E. (1931): Witt, R.E. 'The Plotinian *Logos* and Its Stoic Basis.' *The Classical Quarterly* 25, no. 2 (1931): 103–111.
- WITT C. (1985): Witt, Charlotte. 'Form, Reproduction, and Inherited Characteristics in Aristotle's "Generation of Animals".' *Phronesis* 30, no. 1 (1985): 46–57.
- WITT C. (1989): Witt, Charlotte. *Substance and Essence in Aristotle: An Interpretation of* 'Metaphysics' *VII–IX.* Ithaca: Cornell University Press, 1989.
- YOFFE (1980): Yoffe, Aron M. 'Plotinus's Theory of Mimesis, and Its Implications for the Actual Composing of Music.' *International Review of the Aesthetics and Sociology of Music* 11, no. 1 (Jun. 1980): 87–91.
- ZOVKO (2018): Zovko, Jure. 'Mimēsis in Plotinus's Philosophy of Art.' In eds. Heather L. Reid and Jeremy C. DeLong, *The Many Faces of Mimesis*. Fonte Aretusa: Parnassos Press, 2018, 149–157.
- Zucchi (2024): Zucchi, Roberto. Plotino Se esistono idee anche di particolari V 7[18], introduzione, testo Greco, traduzione e comment di Roberto Zucchi; prefazione di Cristina D'Ancona. Pisa: Pisa University Press, 2024.

INDEX LOCORUM

Alcinous 743a28-36: 204 The Handbook of Platonism 743b26-33: 185-186 (Didaskalikos) 748a27-748b8: 204 748b31-33: 177 9.2: 104 755b13-20: 204 Alexander of Aphrodisias 763b30-764a12: 191, 194 On Aristotle Metaphysics 4. 764a32-764b1: 196 216, 2-3: 157 765a4-7: 195 765a13-22: 195 **Ammonius** 767a36-767b8: 39, 179 In Porphyrii Isagogen sive V voces 767b12-23: 179, 220 60,16-21:157 768a12-768b5: 197 768a23-24: 192 Aristotle 769a13-27: 196 Metaphysic 772a17-22: 220 I 981b28f: 113 772a35-772b6: 220 I 990b: 52 772b13-19: 220 I 991 a8-b20: 6, 42 775a23-32: 221 VII 1031b3-31: 7 VII 1034a1-9: 157 Cicero VII 1036a1-8: 52 Academica Posteriora VII 1037a-1037b: 24 2.77-78 (LS 40D): 41, 226 VII 1038b34-1039a7: 13 VII 1040b: 118 Hesiod XIII 1079b12-1080a8: 6, 42 Works and Days Generation of Animals 106-201: 144-145 716a 4-6: 177 717b5-15: 204 **Hippocrates** On Semen 6: 195 727a27-30: 170 728a17-25: 177 Olympiodorus 728a18-21: 9 The Greek Commentaries on Plato's 729a9-12: 177 "Phaedo" 729229-33: 178 10 \$ 1, 1-5: 139 729b13-19: 178 730b9-19: 198 **Philoponus** 737a8-13: 178 On Aristotle Physics 2. 737a25-30: 9 4.2. 209b11-13: 171 739b34-35: 170

739b34-740a9: 198

Plato	617b4-5: 142
Cratylus	619d7: 142
40002: 142	620a-d: 136
Gorgias	Statesman
523e-527: 122	268-274e: 145
Laws	Theaetetus
838e4-839a3: 171	157b-c 156
870d-e: 122	209¢ 155
872e: 122	Timaeus
881a: 122	27c-28a: 6
Meno	27c-29d: 142
72b-c: 104	28a6-28b2: 151
Parmenides	28b-29b: 139
130a-e: 104	3124: 151
130a-134e: 106	34a6: 142
130c5-d5: 150	34b8: 142
Phaedo	37C8: 151
62b2-5: 142	39C1-5: 143
67d1: 142	39C2: 142
70a-72d: 122	39d2-e1: 40-41, 143, 160
70C: 122	41a-b: 139
73a-b: 24	41d ff.: 122
76b: 24	43a5: 142
81e-82d: 122	47b7: 142
106e-115a: 122	49a3-50d5: 171
Phaedrus	49d-50a3: 156, 160
245d-e: 113	76d6-e2: 138
246a-254e: 122	90d-91c: 122
246c2: 142	90d2: 142
247d4-5: 142	90e8-9: 138
249a6: 142	91c-d7: 170
Republic	91d1-5: 185
502c-509c: 104	91e5: 142
511b-c: 113	
514a5: 142	Plutarch
515C4: 142	De Stoicorum Repugnantiis
530b: 222	1054b (LS 47 M): 52
531e4-5: 24	Moralia (De Communibus Notitiis)
596a6-7: 49	1077c-e (LS 28O): 41, 226-227
611d7-612a5: 124	1083c-d (LS 28A): 155
614b-621c: 122, 136-137	

Plotinus

- I. 1 [53] 2, 6-7: 119
- I. 1 [53] 7, 14-24: 183
- I. 1 [53] 7, 17-23: 126
- I. 1 [53] 7, 22: 64
- I. 1 [53] 8, 7-8: 21, 131
- I. 1 [53] 11, 8-15: 185
- I. 1 [53] 11, 9-15: 8, 14
- I. 1 [53] 12: 124
- I. 1 [53] 13, 1-5: 110
- I. 1 [53] 13, 6-8: 64
- I. 2 [9] 3, 27-30: 16
- I. 2 [19]: 32
- I. 3 [20] 1, 1-5: 111
- I. 3 [20] 1, 14-17: 111
- I. 4 [46] 4, 6-9: 230
- I. 4 [46] 4, 15: 183
- I. 4 [46] 4, 15-29: 183
- I. 4 [46] 9, 28-9: 183
- I. 4 [46] 10, 1-6: 184
- I. 6 [1] 2, 14-18: 208
- I. 6 [1] 3: 208
- I. 6 [1] 7, 1-11: 124
- II. 1 [40] 2, 4-17: 116
- II. 1 [40] 2, 8-10: 222
- II. 1 [40] 2, 9: 222
- II. 1 [40] 5, 18-20: 181
- II. 1 [40] 5, 18-23: 39, 182, 187
- II. 1 [40] 5, 21-24: 230
- II. 2 [14] 1, 39-43: 208
- II. 2 [14] 2, 24-28: 230
- II. 3 [52] 9, 6-14: 181
- II. 3 [52] 13, 40-45: 181
- II. 3 [52] 14, 29-34: 181
- II. 3 [52] 16-17: 181
- II. 3 [52] 17, 7-13: 230
- II. 4 [12] 3, 6-11: 18, 131
- II. 4 [12] 5, 21-39: 207
- II. 4 [12] 14, 13-17: 112
- II. 4 [12] 14, 24: 207 II. 4 [12] 15, 26-37: 141

- II. 5 [25] 4, 4-12: 112
- II. 5 [25] 4, 12: 207
- II. 6 [17] 1, 41-43: 15
- II. 6 [17] 1, 30-43: 11, 150
- II. 6 [17] 2, 11: 25
- II. 6 [17] 3, 1: 25, 131
- II. 6 [17] 3, 15-16: 25
- II. 6 [17]: 32
- II. 7 [37] 3, 6-15: 16, 19
- II. 9 [33] 1, 16: 111
- II. 9 [33] 2, 4: 46
- II. 9 [33] 12, 20-23: 174
- II. 9 [33] 17: 208
- II. 9 [33] 18, 14-17: 39, 135, 181, 187, 189
- III. 1 [3] 1, 32-36: 7, 174, 181
- III. 1 [3] 4, 18: 111
- III. 1 [3] 5, 10-60: 205
- III. 1 [3] 5, 24-33: 182
- III. 1 [3] 6, 1-17: 181
- III. 1 [3] 6, 1-25: 187
- III. 2 [47] 1, 20-27: 151
- III. 2 [47] 2, 39-42: 157
- III. 2 [47] 4, 18-20: 15, 25
- III. 2 [47] 7, 6-12: 45, 53, 106
- III. 2 [47] 13, 1-18: 138
- III. 2 [47] 13, 1-5: 145
- III. 2 [47] 13, 11-27: 209
- III. 2 [47] 13: 182
- III. 2 [47] 15, 14-31: 8, 14
- III. 2 [47] 15, 50-51: 124
- III. 2 [47] 15, 58-59: 124
- III. 4 [1] 6, 37-45: 181
- III. 4 [15] 2, 12-24: 8, 14, 20, 38
- III. 4 [15] 3, 20-27: 111
- III. 4 [15] 3, 21-27: 136
- III. 5 [35] 6, 28-35: 181
- III. 6 [26] 4, 26-35: 64
- III. 6 [26] 19, 17-41: 7, 172
- III. 7 [45] 12, 1-25: 234
- III. 8 [30] 2, 25-34: 231
- III. 8 [30] 2, 27-30: 15

V. 1 [10] 7, 19-23: 113

V.	9	[5]	8,	4-7:	112
----	---	-----	----	------	-----

Porphyry

Isagoge

7, 16-24: 158

To Gaurus on How Embryos Are

Ensouled

10.1-16.9: 187

Vita Plotini

Proclus

Commentary on Plato's Parmenides

824.12-825.9: 115

Hypotyposis astronomicarum

positionum

4.53: 222

Simplicius

On Aristotle Categories 66.32-67.2 (LS 27 F): 154

On Aristotle Physics

150.23: 113

539.8-542.12: 171

INDEX OF NAMES AND SUBJECTS

activity/actuality (energeia) 23, 135-137,	Demiurge 139, 142, 171, 181			
162, 170, 201-202, 236	Democritus 169, 191-192, 194-196			
Alexander 157, 171	difference (diaphorôn) 15, 63, 66, 102-			
Alcinous 104	103, 148, 153, 166-167, 169, 175, 216,			
ascent (anagôgê) 108-113, 117, 123-124	219, 221, 227			
Anaxagoras 169, 194-196	logical difference (diaphora logikê)			
Anaximander 113	226, 228			
Aubry 6-7, 40, 67-71	Ehnmark 136			
Aristotle 6-7, 9, 10, 14, 17, 24, 39-42, 52,	ekei (There/Intelligible World) 109,			
113, 116, 139, 157, 166, 168-171, 174-180,	114, 121, 236-237			
185-186, 192-195, 197-198, 204, 220-221	emanation 22, 37, 59, 78, 109, 135, 162			
Aristotelian (immanent) form 7,	embryology/biologicyl heredity 7, 9-11,			
17-18, 155-158, 178-180, 185-186	15, 27, 29, 35-39, 69-71, 79, 149,			
Armstrong 40, 45-54, 62-63, 83, 96, 99,	163, 165-170, 172-174, 176-180, 182, 185,			
108-110, 115-123, 126, 147, 149, 159-	190-191, 198, 215			
160, 175, 202-204, 209-210, 212-213,	family resemblance 9-11, 31, 36-37,			
224, 236-237	79, 164-167, 173-180, 188-189, 192-			
astrology 187, 193, 205-206	201, 211, 216, 220-221			
Autosôkratês (Socrates-Itself) 5, 34,	sex determination 9, 172-176, 184,			
45-46, 49, 63, 98-99, 114-122	189, 194-197, 204			
Autoanthropos (Man-Itself) 118	Emilsson 16, 17, 22, 28, 229			
Bréhier 83, 108, 110, 121, 153	Empedocles 169, 185-186, 194-196			
Brisson 28-29, 32, 83, 96, 108, 110, 115,	Epicurus 169			
117, 126-129, 146-150, 175, 202-205,	eternal 6, 18, 20, 46, 49, 57, 77, 98-100,			
209-210, 212-213, 224, 232, 236-237	104, 116-188, 121-123, 125-128, 130-131,			
Blumenthal 40, 45, 53-56, 61-62, 72, 99,	139, 146, 162, 229, 234			
105, 123, 141, 146, 150, 153, 161, 207	Eustochius 27			
cause/principle (archê) 9-10, 16-19,	Ferrari 8, 29, 40, 47, 62-65, 104, 118, 141			
39-40, 113, 148, 150, 166-178, 195-196,	Ficino p. 33, 96			
220, 235	First Principle (The One, The Good)			
Cilento 83, 115, 117-118, 126, 128, 147, 153	16, 22, 30, 37, 109, 111, 113-114, 139-			
Cherniss 47	142, 154, 222, 229			
Correspondence Premise 78, 81-82,	Forms			
158, 163, 216-218, 223, 225, 233, 235	universal Form (<i>idea</i>) 5-7, 13-14, 19,			
cosmic cycles 34, 40, 77-78, 101-103,	31-32, 37, 42, 45-47, 49, 61-66, 73,			
140-147, 154, 160-162, 213, 236-237	95-99, 103-106, 115, 135, 147-154,			
Craftsman Analogy 21, 36, 81, 124, 181,	171, 208, 243-244			
216-218, 225-226, 228, 230	of sensible individuals 5-8, 14, 34,			
D'Ancona Costa 40, 66-67, 97, 110, 114	37-38, 42, 45-73, 76, 96-154, 158-159			

soul-Forms 46-48, 61-73, 97-98, 108, identical 118-122 individuals/twins 7, 11, 15, 33, 35-38, Form-Intellects 46-48, 54, 61-73, 41-42, 57, 80-81, 97, 102, 113, 155, 157, 158, 164-167, 212-213, 215-234 97-98, 110, 117, 119, 127 form (eidos) 7, 16-21, 49, 52-53, 59, 61, cosmic cycles 34, 36, 40, 59, 80-81, 66, 95-97, 202, 207, 209-210, 216, 144-145, 147, 155, 161 (see also cosmic cycles and Stoic) 223-224, 232 Fries 120 indiscernibles/indistinguishable (aparallakta; adiaphora) 152, 216, Galen 166, 168-171, 176, 179-180, 185-186, 191, 204 218, 221-222, 225-228 individual (kathekaston) 5-11, 13-15, Gallienus 95 geographical and climatic factors 18-19, 33-43, 67-71, 97, 103-138, 153 (topoi and chôra) 79-80, 107-108, individuality 5-9, 13-15, 36-37, 42, 53-58, 166, 182, 202-206, 217 63, 70, 98-99, 103, 107, 122-124, 155, 197 Gerson 14, 48, 62-63, 72, 83, 96, 99, individuation 5-8, 17, 42, 45-47, 66-72, 109-110, 114, 116-120, 121, 126-127, 112-113, 224, 227 129, 147, 149, 175, 202-205, 209-210, Inge 8, 123, 153 Intellect (Nous) 212-213, 224, 232, 236-237 Graeser 40, 47-48, 58-59, 72 universal 5, 13-14, 16, 18, 21-22, 30-32, Guidelli 83, 110 46, 50-51, 57, 62-65, 69, 82, 96, 109, Henry and Schwyzer (H.-S.) 83-84, 87, 111-112, 117, 119, 125-126, 130, 135, 95, 105, 203-204 154, 184, 222, 235-237 Hadot 124 individual 13-15, 45-46, 61-65, 112, Harder 28, 48, 50-51, 72, 83, 96, 110, 115, 125-126 117-118, 120-121, 126-129, 147, 149, 153, Kalligas 11, 17-19, 23, 31, 46, 48, 58, 175, 202-204, 209-210, 212-213, 224, 62-64, 67, 84, 99, 103-104, 108, 112, 118-119, 122-124, 131, 146, 232, 236-237 150, Heinemann 27, 40, 45, 47-48, 50-51 160-161, 182, 191, 202 Helleman-Elgersma 48, 62 Lewis 226 hêmeis (true self) 23, 58, 60-65, 68-69, Liddell & Scott (LSJ) 84, 113, 155, 207 124-125, 183, 187 Lo Presti 170-171 Hesiod 107, 144 logos/logoi (rational forming Hippocrates 166, 168-169, 185-186, 195 principles) 7-11, 13-26, 31-43, 47-48, Hutchinson 23, 46, 124-125, 187, 229 66-73, 77-82, 96-97, 99, 101-102, 107-Hylomorphism 7, 37 108, 123, 130-134, 136-137, 146-154, Reproductive Hylomorphism 39, 158-162, 163-168, 176, 180-181, 184, 169-170, 178-179, 197 188-190, 192-194, 198-203, 207-208, Igal 105, 203-204 210-213, 215-219, 227-237 image (eidôlon) 7, 16, 21-23, 60, 131-132,

139, 141-142, 151, 156, 158-160, 185,

201, 228

combination 8, 11, 13-14, 18-20, 25number 33-34, 36, 41-42, 45, 55, 77-78, 26, 34-43, 69-70, 73, 77-82, 101-102, 81-82, 97-98, 101-103, 105-106, 131-134, 123, 130-134, 148-152, 156-162, 165-138-141, 146-155, 161-162, 163-166, 169, 168, 176, 180-182, 189-190, 198-201, 173, 189, 192, 211, 216-221, 226, 233, 212-213, 215-219, 221-237 235- 236 dominance of logoi (epikratêsis) Numenius 185 O'Meara 14, 47-48, 50, 58-60, 72, 104, 10-11, 35-36, 39-40, 79-80, 164-167, 174, 188-195, 198-205, 207-213, 215 117, 119 mixtures 35, 39, 69, 79, 157, 159, 164offspring/children/embryos 7, 9-10, 20, 168, 174-180, 183, 185, 193-194, 200, 23, 33, 35, 38-39, 69, 79-82, 107, 113, 211, 215 163-206, 211, 216, 218-221, 235 Long and Sedley 41, 155, 226 organism/organ 11, 18-19, 47, 164, 171, Longinus 185 183-186, 190-191 MacKenna 84, 118 Ousager 48 Mamo 14, 45, 48, 53-58, 72, 99, 105, 119, parent 9-10, 13, 27, 33, 35, 39-40, 73, 79, 113, 163-168, 173-201, 205-206, 211, 123 matter (hylê) 7, 11, 16-19, 21-24, 35, 37, 215, 220, 237 Parmenides 104, 169, 204 39-43, 52-54, 60-61, 70, 79-80, 96, Peck 178, 185-186 102, 107-109, 111-114, 128-129, 140-141, 148, 150-157, 164, 166, 169-172, 174, Petit 47-48, 58-59, 143 177-179, 182, 186, 192-193, 198, 202phenotype 11, 35, 40, 79-80, 164, 166, 204, 207-213, 215, 224-227, 231-232 176, 188, 190, 202, 2006-207, 210-211, embryonic matter 35, 79, 170, 177-215 Philippus Villiers Pistorius 123 179, 192-193, 198, 204, 208, 211 ugliness (aischos) 35, 40, 79-80, 96, Plato 7-8, 24, 50-52, 60, 96, 104, 106, 108, 166, 173, 202-203, 207-208, 113, 116, 122, 137-139, 141-145, 151-152, 225 154, 156-157, 161, 169, 171, 185-186, 222, Mendel 10-11, 190-191 226 model (paradeigma) 61, 78-79, 101-102, Plotinus' treatises 27-32, 31-32, 45, 57, 104, 146-154, 158-159, 167, 212 66-68, 83, 95-97, 103 Müller, Hermannus Fridericus 121 рпеита 178 nature 15, 20, 22, 36, 40, 71, 81, 104, 174-Porphyry 7, 27-32, 35, 40, 57, 60, 67-68, 175, 208, 216-221, 228-235 90-92, 95-97, 152, 157-158, 167, 174, **Neoplatonic Premise** 8, 77, 98-99, 109, 177, 187 Preus 173, 204-205 129-131 Nikulin 40, 47-48, 66-67, 72, 141 principium individuationis 7, 112-113, Noble 183 215

```
undescended souls 5, 14, 31, 45-46,
properties 5-11, 13, 15, 17-19, 25-26, 32,
   33-35, 39-43, 48, 53, 59-60, 63, 66-73,
                                                   58, 62-65, 71-72, 118, 125
                                                 soul-sisters 135, 187-189
   101-102, 115, 123, 130-131, 137, 148-158,
                                              Stamatellos 125
   163-164, 166-168, 176, 180-181, 184,
   188, 197-200, 202, 205-208, 211, 215,
                                              Stern-Gillet 47-48, 58-61, 72
                                              Stoic 8, 22, 24, 40-43, 51-53, 59, 112, 141-
   221, 223-226, 231-232
   bundle theory 70, 156-157
                                                 145, 154-155, 157, 160-161, 179, 226-227,
Pythagoras/Pythagoreans 8, 143, 169
                                                 234
random 41, 70, 73, 184, 218, 225, 233, 235
                                                 cosmic cycles 141-145, 160-161, 233
Receptacle (chôra) 108, 166, 171, 202-206
                                                 peculiar properties (idiôs poion)
Reesor 154
                                                   40-43, 52-53, 154-155, 226
                                                 seminal forming principles (logoi
Remes 6, 15, 19, 31, 46-48, 58, 66-73, 130,
   158-159, 183-184, 225-226
                                                   spermatikoi) 24, 42
Rich 8, 123
                                              Tornau 47-48, 62, 65, 72, 108-109, 112, 119
Rist 14, 40, 45-48, 50-57, 62, 72, 99-103,
                                              Trouillard 48, 50-52, 55, 72
                                              transmigration of souls
   105-106, 117, 122-123, 146, 150
Schwyzer 28, 83-84, see also Henry and
                                                 (metempsychosis) 7-11, 14, 20, 36,
   Schwyzer
                                                 38-39, 56-58, 62-63, 71-73, 77, 98-101,
seed/semen 20-22, 24-25, 79-80, 82,
                                                 122-131, 136-137, 150-151, 163, 185, 193,
   139, 169-177, 185-186, 190, 195, 197,
   208, 217-219, 235-236
                                              uniqueness 5, 7, 14-15, 35-38, 40-43, 61,
   female seed/semen 5-6, 169-177, 195
                                                 119, 133-134, 148-150, 155-158, 167-168,
   One-Seed Theory 169-177
                                                 176, 180, 216-218,
                                                                          223, 231
   Two-Seed Theory 169-177, 195
                                              unlimitedness/infinity (apeiria) 34, 36,
Sikkema 47-48, 58-61
                                                 61, 77-78, 82, 79-80, 98, 101,103, 138-
Sleeman (Lexicon Plotinianum) 13, 84,
                                                 141, 146, 154, 162, 216-218, 225, 235-237
                                              Vassilopoulou 6, 48, 67-73, 153
   96, 109, 111, 113-114, 118, 140, 142, 151,
   155, 222, 230
                                              Volkova 48
                                              Vorwerk 54, 84, 106-107, 111
Smith 83, 123
Sorabji 48, 66-67, 112, 115, 131, 139, 152,
                                              White 142
   155-157, 171
                                              Wilberding 7, 9-10, 35, 39-40, 46, 48,
soul 7-11, 13-14, 16-17, 19-23, 25, 34-43,
                                                 71-72, 83-84, 107, 139, 169, 171-174,
   45-47, 56-58, 61-65, 67, 79, 82, 98-101,
                                                 177-180, 182, 184-188, 222
                                              woman/female 10, 39-40, 138, 163, 167-
   103, 109-154, 160-162, 163, 168, 173,
   178-190, 193-194, 198-199, 208, 211,
                                                 179, 181, 185-186, 192-201, 204-205,
   217-219, 227-230, 233-237
                                                 209, 220-221
   World Soul 23, 25, 36, 39, 42, 135-136,
                                             womb 170, 185-187, 194-195, 202, 204-
      145, 161-162, 175, 179-185, 187-189,
                                                 205, 219, 221
                                              Zethus 27
      192-194, 198, 206, 211, 218, 221, 229,
                                              Zucchi 6, 8, 42-43
      233-234
```

rational soul part 23, 111, 182-189