the mind seeks what comfort it can find in the truth of categories in which these things can be positioned through a process of analogy, and from which inferences can then be drawn. Steven Pinker in *How the Mind Works* calls this patterning impulse 'pattern-associator neural networks'. That is to say, the brain conveniently makes mental boxes as comparative reference points for all incoming stimuli. They are useful because some of the world's stimuli fit the boxes nicely. As he says, 'real science is famous for transcending fuzzy feelings of similarity and getting at underlying laws', and yet he is the first to admit that even modern science carries with it a number of fuzzy boxes. Intuitive theory is a way of handling the discrepancies between data and boxes. The question of *materia medica* and efficient causation is one compelling area of fuzziness. It is a site for the demonstration of the messiness of reality, alien to the mind grounded in the manufacturing of systems. Theriaca, by its very existence, turns natural philosophers into whistlers in the dark. Ficino, given his categorizing habits, was prepared, in the case of theriaca, to ease his cognitive stress by drawing upon a whole system of Neoplatonic analogies by which things are related to things by reducing them to symbols of themselves within boxes. Clearly what is known is not hard-wired in the brain, but the ways of knowing more than likely are. What we are seeing in Ficino's performance is evidence of the latter: when the would-be scientific mind is confronted by threateningly intransigent data, that state of mind we call suspense (as a threshold emotion seeking resolution) will force the cerebral cortex to seek comfort in the reassurances of myth; hence theriaca and the stars.

---

**CONCEPTS OF SEEDS AND NATURE IN THE WORK OF MARSILIO FICINO**

Hiro Hirai*
(translated by Valery Rees)

1. Introduction

Marsilio Ficino of Florence (1433–99), the eminent translator of and commentator on Plato and Plotinus, was himself a Platonic philosopher who exercised an immense influence on western thought of the sixteenth century and later. As recent studies by M. J. B. Allen have shown, the Florentine was following the Neoplatonists, most notably Plotinus and Proclus, in his interpretation of the work of Plato. The studies of B. P. Copenhaver have demonstrated that the same is true for his occult doctrines. As far as his metaphysics and cosmology are concerned, in comparison to notions such as Ideas, 'reasons' and forms, it seems that his concept of seeds has not yet been systematically explored. However, while Kristeller's ground-breaking study

---

*I should like to thank Professor Robert Halleux (University of Liège) and Professor Bernard Joly (University of Lille 3) for their comments on early versions of this article, Professor Michael J. B. Allen (UCLA) for his comments and help towards the realization of it in the present volume, and Valery Rees (School of Economic Science, London) for her comments and for the English translation.


of Ficino's philosophy, which is focused mainly on his metaphysics, barely treats of it. F. A. Yates's analysis of De vita coelitus comparanda clearly shows the presence of the concept of seeds in Ficino, as does a chapter in M. C. Horowitz's recent Seeds of Virtue and Knowledge. One might suppose that Ficino's revival of the doctrine of logoi spermatikoi dates from the time of his translation of Plotinus. In fact Ficino used several terms to designate the 'seminal principles' in his philosophical works: terms such as 'seeds of things' (semina rerum), 'seeds of forms' (semina formarum), 'seminal reasons' or 'seminal reason-principles' (rationes seminales), 'seminary of the world' (seminarium mundi) and 'seminal reason of the world' (ratio seminaria mundi). This multiplication of terms derived from 'seed' is unparalleled in his Latin predecessors after St Augustine. Given the paucity of work devoted to this topic, we cannot attempt an exhaustive evaluation here. But to sketch the broad outlines, we shall examine some of his key philosophical texts: the commentary on Plato's Symposium, one of his most popular writings; the commentary on Plato's Timaeus, important for its cosmology and its philosophy of nature; the Platonic Theology on the immortality of souls, his major work; the De vita coelitus comparanda (Book III of De vita libri tres), which was a highly influential compendium of magical medicine; and finally the commentary on the Enneads of Plotinus, one of his later works.

2. The Commentary on Plato's Symposium

In the commentary on Plato's Symposium, otherwise called De amore, Ficino touches on the problem of Platonic cosmogony. According to his modern biographer, Raymond Marcel, he composed the work between November 1468 and July 1469, then revised it from 1469 until (at the latest) 1482 and finally published it with his translations of Plato in Florence in 1484. The commentary was widely read and very influential among humanists and men of letters in the sixteenth century, particularly for its doctrine of Platonic love. Taking his works as a whole, this book may be said to mark the first stage of Ficino's career.

In his discussion of cosmogony, Ficino explicitly invokes the concept of seeds:

From this it is clearly apparent to us why the theologians place the Good in the centre and Beauty on the circumference. It is plain that, on the one hand, the Good that is in all things is God Himself, through whom all things are good, and that Beauty is the ray of God, spreading through those four circles that somehow rotate about him. Such a ray forms in those four circles all the species of all things that we are accustomed to call 'Ideas' when they are in angelic Mind, 'reasons' when they are in the soul, 'seeds' when they are in nature, and 'forms' when they are in matter. That is why four expressions of beauty are manifested in the four circles, the splendour of Ideas in the first circle, that of reasons in the second, that of seeds in the third, and that of forms in the last.

We can readily understand these four circles in the light of three of the hypostases (divine Mind, Soul and Body). In effect, the first

---


2. The Latin term seminarium, which means 'seedbed', has a modern equivalent 'seminary' that no longer corresponds to the original sense. But I respect the terminology of Ficino in using 'seminary' instead of 'seedbed'. As for the term ratio, I use both 'reason' and 'reason-principle' interchangeably.

6. The original version of the present article is to be found in my doctoral thesis, Le concept de semence dans les théories de la matrice à la Renaissance: de Marsile Ficin à Pierre Gassendi, Université de Lille III, 1999, pp. 23–41. This thesis, for which I was awarded the prix des jeunes historiens of the Académie Internationale d'Histoire des Sciences, will be published in the Académie's Collection of Studies series by Brepols.

7. See M. J. B. Allen, 'Cosmogony and Love: The Role of Phaedrus in Ficino's
circle signifies the intelligible world, which contains the Ideas. The second is the soul (more particularly, the World-Soul) which comprises the reasons (or reason-principles) of things. The last corresponds to the body, that is to the body of the world, or the machina mundi, which holds the elemental forms. Between the soul and the body (or matter) Ficino introduces an intermediate stage. This is 'nature'. For him, it is to nature that the 'seeds of things' must be attributed. Beginning with the One or God in His transcendence, there are thus five hypostases in his system. Nevertheless, throughout his career, Ficino was hesitant with regard to the nature of this fourth stage, calling it sometimes 'quality', sometimes 'nature'. He explains the relationship of these notions as follows:

The forms of the body are in fact brought back to God through the seeds, the seeds by the reasons, the reasons by the Ideas and they are brought forth by God in this same order. Zoroaster says that there are three princes in this world, masters of the three orders. Plato calls them: God, Mind, Soul. Further, he establishes three orders in the divine species, that is to say Ideas, reasons and seeds. Consequently, the 'first', that is, the Ideas, 'rotate about the first', that is, about God because they were given by God to the mind and they lead back to God the mind to which they were given. In Ficino, Ideas, reasons, seeds and forms are all 'species'. The Ideas are the intermediary between God and the mind, and they allow communication between these two hypostases. In the same manner, the reasons have their existence between the mind and the soul, seeds between the soul and nature, and forms between nature and matter. We also observe that 'nature' is identified with the 'power of generation' (potentia generandi) and the seeds pass into it through the soul (per animam transiens in naturam). According to Ficino, the corporeal forms do not, however, disclose the divine. 'The Ideas, the reasons and the seeds are the realities, while the corporeal forms are rather the shadows of these real things.' Thus the shadows do not manifest the actual nature of divine things. For him, in comparison to the Good, which is pre-eminently God's being, beauty is an 'act', and is identified with the ray of emanation from the Good, which penetrates everything. This ray first penetrates the angelic mind, then the soul, nature and finally corporeal matter. On this, Ficino says, 'This ray embellishes the mind with the hierarchy of Ideas, it fills the soul with the series of reasons, it fertilizes nature with seeds, and it embellishes matter with forms.' For him, just as a single ray of the Sun gives light to the four elements, so does the ray of God illumine the four lower hypostases. Thus whoever contemplates beauty in these four circles sees in them the splendour of God. This ray contains the reason-principles of all things in the form of seeds. God, the architect of the world, can only touch the 'world machine' through His divine light. For Ficino, love, which creates and sustains all things, communicates to all beings the 'desire to multiply'. On account of that desire, divine spirits move the heavens and pour out their gifts upon the creatures. By its grace, the stars spread their light among the elements. Plants and animals 'desire' to pour out their seeds to beget their own kind. This desire, innate in all things, to propagate their own kind from within itself. It initiates the conception of a foetus. For Ficino thinks that if the seeds of all things proper to a body are sown in it from the beginning, the soul, which is superior to the body, should

---


14 Ibid., II.5 (ed. Marcel, p. 152).
15 Ibid., and VI.7 (ed. Marcel, p. 209).
16 Ibid., IV.5 (ed. Marcel, p. 173).
17 Ibid., III.2 (ed. Marcel, p. 161).
18 Ibid., VI.11 (ed. Marcel, p. 225).
be much richer and must possess from the beginning the seeds of all that is proper to it. For this reason, the human soul has in equal measure the reason-principles of morality, the arts and the sciences. If these reasons are well 'cultivated', they bear their fruits.\(^9\)

In our view of his theories, for Ficino the forms are enclosed in a sphere between the corporeal world and the incorporeal, that is to say between matter and nature. Nature is identified as the 'power of generation'. The seeds of nature, on the other hand, are assigned to a sphere located between the soul and nature. It would therefore be reasonable to suppose that Ficino's seeds are incorporeal. They issue from the reasons which reside in the soul and bind the Mind to the soul. The reasons of things are derived from Ideas which are within the divine Mind. Thus the seeds of things share the same divine source as the reasons and the Ideas which are above them, and the forms which are below them. These 'divine species' are carried by the divine light that emanates from a transcendent God.

3. The Commentary on Plato's Timaeus

Ficino also published the first version of his commentary on Plato's *Timaeus* in the Latin Plato of 1484.\(^{20}\) This treatise is one of his earliest commentaries on the dialogues of Plato. As M. J. B. Allen has shown, although Ficino knew the ancient commentaries of Chalcidius and the School of Chartres on this dialogue, especially that of William of Conches, he preferred to follow Plotinus and Proclus in expounding its main topic. The essential theme of this dialogue is 'nature' (*physis*). We should recall that Proclus explains this notion at the beginning of his commentary on the *Timaeus*. In his opinion, Plato refused to give the name of 'nature' to matter, to form embodied in matter, to body or to natural qualities; at the same time he hesitated to call it 'soul'. He explains Plato's views on *physis* thus:

\[\text{[Plato] has provided us with the most accurate theory of nature by placing the essence of nature between these two, I mean, between the soul and the corporeal properties, since it is, on the one hand, lower than the soul, by virtue of the fact that it is split up within the body and does not return to itself; but it is on the other hand, higher than what comes after it, by virtue of the fact that it contains the *logoi* of all beings and it begets them all and gives them life.}\(^{21}\)

In fact, for him, the soul is separate from the body, whereas nature is immersed in the body and is inseparable. The soul spreads the light of life over nature. Thus he says, 'Nature comes last of all among the causes that produce the corporeal and the sensible world here below; she marks the boundary of the scheme of incorporeal essences, and is filled with *logoi* and *dynamis* by means of which she directs encosmic beings... and guides the whole world with her powers.'\(^{22}\) Moreover, Proclus believes that Plato's nature sustains the harmony of the heavens, and, by this means, governs the sublunary world and weaves together all the individual beings with the whole. Thus nature pervades all without any obstacle, and gives life to all things with her 'breath' (*pneuma*). For Proclus, even the most inanimate beings share in a sort of soul or life and remain in the world eternally, since they are preserved by the causes belonging to the species that nature keeps within herself.\(^{23}\)

After this exposition of Proclus, Ficino defines nature, the subject of the *Timaeus*. He finds within nature the causes of the species that she holds within herself in the form of seeds. He speaks of this in the following terms:

The subject of the book, then, is to be universal nature itself, that is to say, a seminal, life-giving power, infused through the whole world, subject to the World-Soul, presiding over matter and giving birth to things in the same order as the soul itself conceives them, while it is both receiving the divine Mind and desiring the Good.\(^{24}\)

\[^{9}\text{Ibid., VI.12 (ed. Marcel, p. 226).}\]
\[^{22}\text{Ibid., pp. 37–38.}\]
\[^{23}\text{Ibid., p. 38.}\]
\[^{24}\text{'Sic ergo huius libri subiectum ipsa universa natura, id est, seminaria quaedam & vivifica virtus toti intusa mundo, animo quidem mundaneae subdita, materiae vero praesidens eodemque ordine singula pariens, quo & anima ipsa concepti, tam divi­
nam susciens mentem, quam appetens borum.' In *Timaeum commentarium*, ch. I, *Opera omnia*, p. 1438. On the idea of 'nature' in Ficino, see P. O. Kristeller, *The Philosophy of Marsilio Ficino*, pp. 67–70.}\]
Here the position of nature is held to be between the soul and matter, as had already been shown in the commentary on the Symposium. What is important is that Ficino characterizes nature as life-giving, 'seminal' (seminalis), and diffused throughout the whole universe. He is surely speaking of a 'universal seedbed' (panspermia).

The purpose of Ficino's exposition is to show that the Christian doctrine of the book of Genesis can be reconciled with the Platonic or Pythagorean doctrine of the Timaeus. He affirms that the intelligible world exists between the corporeal world and the exemplar (the divine Idea) of the Good. He then establishes six stages of emanation from the One, leading to the generation of multiplicity in terrestrial things, and he takes the Sun as an example. As the six stages of the Sun, he enumerates: 1) the substance of the Sun; 2) the brilliance (lux) of its substance; 3) the light (lumen) which emanates from it; 4) its splendour (splendor); 5) its heat (calor); and 6) generation (generationem). For the universe, his list is, first, the divine One, then in second place the Good. The third stage is the divine Mind emanating like the light from the brilliance. This contains within itself the multi-form Ideas issuing from a double store, from the brilliance and from the supreme Idea of the One; and it forms the archetypal universe. Ficino's argument continues:

After this archetypal world, in the fourth stage, follows the soul of the corporeal world. The rational world is generated from the intelligible world as splendour is generated by light. And as splendour is mingled with movement, the soul, coming from the unmoving Ideas, reaches and pervades the reasons where it conforms to a moving order. The fifth stage follows this, that is, the very nature of things. Now the 'seminal world' results from the rational world of the soul, just as heat follows splendour. In the sixth stage, this corporeal world is established, being the last thing to be drawn from the 'seminal [world]', just as generation is the last to be drawn from heat.

In this scheme of things, nature is placed in the fifth stage. Here nature is called the 'seminal world' (mundus seminalis), mirroring the supposition that the divine Mind is the 'intellectual' or 'intelligible world' and that the World-Soul is the 'rational world'. If the Soul is seen as the splendour of the Sun that emanates from the Mind (as light), then nature corresponds to heat. We observe that generation requires heat because it is strongly bound to a biological and embryological interpretation in Ficino, especially to the notion of fecundity. Thus, from the same perspective, nature, where so much generation takes place, is quite naturally conceived of as 'very fecund'. This fecundity is spread throughout nature by way of the 'seeds of forms' which come from the reason-principles in the World-Soul.

Ficino then explains the number of elements in the universe. He says that there are four: for metaphysicians these are essence, being, power and action; for mathematicians, point, line, plane and volume; and for natural philosophers, nature's 'seminal power', natural multiplication, nature form and arrangement (composition). Ficino parallels 'essence' with both the geometric point and the 'seminal power', 'being' with the line and multiplication, 'power' with the plane and form, and finally 'action' with volume and arrangement. Thus we find that his concept of seeds also reflects the idea of the Pythagorean 'primordial seminal point', which would confirm an idea suggested in his treatise on the Fatal Number. Then he explains the four elements from the point of view of Pythagorean and Platonic geometry and music theory. He tries to supersede Aristotle's theory on the substance of the heavens (which has no place for the four elements), declaring:

No one can deny that these elements exist, at least beneath the Moon. Some natural philosophers will deny that they exist in the heavens. But I would ask them to listen to the metaphysicians proving that the elements are in the Artificer of the universe himself as Ideas, and thence in the World-Soul as reasons, and in nature as seeds. So they are in the heavens as powers and in the subluminary world as forms.

---

25 In Timaeum commentarium, ch. 10, Opera omnia, p. 1442.
26 Ibid.
27 'Post archetypum hunc mundum quarto gradu sequuntur corporis mundi anima: Mundus iam rationalis ex intellectuali mundo progenitus, quasi splendor ex lumine. Et sicut splendor iam mori permississet, sic anima immobilitatum idearum rationes mobili quodam pacto attingit atque percursit. Quinque hunc sequedo gradus, ipsa videantur corporum mundi. Mundus ante mundum providens, quasi color splendore resultans. Sexto tandem mundus hic corporum collocetur, ex seminario ita proxime ductus, sicut rerum generatio ex calore.' Ibid.
28 Ibid., ch. 21, Opera omnia, p. 1447.
29 Ibid., ch. 22, Opera omnia, p. 1447.
30 See M. J. B. Allen, Nuptial Arithmetic, pp. 48 and 54.
31 'Esse utique elementa haec: sub luna, nem corrigir. Esse vero in coelo, physici nondum negantur. Sed isti audient metaphysicos precibus, probant, elementa sunt in idea suas esse in ipso mundi opificie: esse inde in anima mundi et rationes suas, esse in natura per semina. Ergo in coelo per virtutes: sub coelo per formas.' In Timaeum commentarium, ch. 24, Opera omnia, p. 1448.
Ficino is here maintaining five orders of divine species (ideas, reasons, seeds, powers and forms) in the five substances under God, (Mind, Soul, Nature, Heaven and Matter).

By contrast, in the appendix to the commentary on the *Timaeus* Ficino seems to prefer to use the term ‘seminal reasons’ (rationes seminales) rather than ‘seeds’ (semina) or ‘seminary’ (seminarium). He argues that the four elements are not the ‘principles’, both because matter and form are prior to them and because the four causes (divine, efficient, ‘exemplary’ and final) as well as the seminal reasons are prior to all of them. For Ficino, many different sorts of seminal reasons are divinely implanted within the four elements. By these, the diverse forms of things are engendered in all the elements and their various combinations, with the movement of the heavens assisting these reasons.

4. The Platonic Theology

Soon after the commentary on the *Symposium*, Ficino composed the *Platonic Theology on the immortality of souls* (1469–74), which was published in Florence in 1482. In this major philosophical work he naturally stresses the third hypostasis, for it is about the soul. But we can also find there further treatment of the topic of nature and her seeds.

First, Ficino explains that the work of the soul is to provide ‘vital movement’ and that of the mind is to organize ‘by forms’. In his view, the mind surpasses the soul to the degree that the order of forms extends further than life. Then he introduces the concept of seeds as ‘rudiments of forms’ (formarum inchoationes):

But because beyond the order of forms is the universe’s formless prime matter—where certain seeds of forms lie hidden and ferment, if I may put it like that—the office of mind, which is bounded by forms, does not embrace these formless seeds. Yet matter is in a way good because it desires form, which is higher than itself. It can receive form and thus contribute to the realization of a beautiful universe. For the same reason, the seeds of forms in matter are good because they are the ‘rudiments’ of the forms. Ficino then explains the function of the seeds:

all the parts of the universe contribute so harmoniously to its singular beauty that one cannot subtract or add anything...But in fact, because all the parts of the universe, which have issued from fixed seeds and are endowed with distinct shapes, attain beautifully and easily, by a direct path, and in a fitting time and order, the aims which have been allotted to them, the result is that they are all moved in the same manner as what is moved by the skill and counsel of man.

We may therefore understand that specific seeds bring into manifestation all the parts of the beautiful and harmonious universe according to laws that are already established.

In discussing the World-Soul, Ficino returns to this problem. For him, generation is the principle of nutrition and growth. No being can be nourished or grow without the generation of certain parts. He tries to establish the idea that where nourishment and growth follow generation, there is life and a soul. Speaking of the existence of the soul in earth and in water, he introduces the concept of seeds:

We see the earth begetting a multitude of trees and animals, thanks to specific seeds, nourishing them and making them grow. We see

---

32 Ibid., appendix, ch. 33, *Opera omnia*, p. 1474.
33 Ibid., appendix, ch. 45, *Opera omnia*, p. 1475.
34 The text used here is Ficino, *Théologie platonicienne de l’immortalité des âmes*, ed. and tr. by R. Marcel, 3 vols, Paris, 1964–70.
From this Ficino allows growth of stones like that of plants and animals. However, he finds no visible seeds to compare with those of plants or animals. Yet we must not think that specific beings are born only from definite seeds nor that a distant and universal cause fosters seeds that have been abandoned. They possess various rational powers that give birth to a multitude of varied, well-ordered and valued individuals. Nature, ever industrious and full of vitality, encloses these invisible seeds which have the power to extract 'substantial forms' of the elements from the depths of matter. By this process, Ficino links the Thomist doctrine of 'substantial form' to his theory of seeds. We notice that these seeds are superior to the elemental forms of things. They arrange things in such a way as to utilize Aristotle's qualities of the elements to bring about properties such as colour and shape. Ficino's seeds are thus able to make Aristotelian physics subordinate. These spiritual seeds are also found within the corporeal ones.

Further on, in a section of recapitulation, Ficino deploys a remarkable argument on the relationship between seeds and nature. He says that the seed of a living being has within itself the reason-principles of the being and as a consequence, that being is then brought forth 'rationally'. Within the corporeal seed, which is uniform and almost formless, these rational principles are only found 'in potential'. Even if we make a division of the corporeal seed of a living being, each portion will carry the whole fruit:

This shows that the 'seminal force' (vim seminariam) latent within the seed and which resides the principle of this movement and generation is in a way incorporeal. But the 'seminal power' (virtus seminaria) that we call 'nature' must hold within itself multiple reasons of a living being. For the same, in so far as it is the same, cannot engender directly such great diversity... But are the 'seminal forces' (cursa seminariae) the principal and causative factors in the seeds of living beings? Not at all. Indeed, it is not a species that contains forth one of these 'seminal powers' but rather an individual of the species, and each of them draws its origin from something else in the same species. We must therefore go back to Universal Nature which includes the universal reasons of all species. Yes, to Nature, mother of all that exists on the earth, especially as corporeal seeds are often wanting for plants and animals that appear here and there spontaneously. Their production therefore requires incorporeal seeds.

---


38 'Haec omnia significant adesse ubique per terram et aquam in natura quadam artificiosa vitae spiritualis et vivifica semina omnium, quae ipsa per se gignant ubicumque semina corporalima desunt, semina rursum dederit ab animalibus faveant, sique ex putrido vinaceo semine, cuius et una et vilis natura est, variam ordinatam artificiosa vitalique spiritualia et vivifica semina omnium, quae ipsa per se gignant ubicumque semina corporalima desunt, semina rursus derelicta ab animalibus foveant, pretiosamque generent vitem, viribus videlicet suis variis, rationalibus, pretiosissimis ducit varietatem vitaeque vigorem.' Ibid. (ed. Marcel, I, pp. 147-48).

39 Ibid., VI.10 (ed. Marcel, I, p. 249). For the connection of the concept of seeds with the Thomist doctrine of 'substantial forms' in Ficino, see below.

40 'Hinc patet vim seminariam in semine ipso latentem esse quodammodo incorporeum in qua sit huius motus generationisque principium. Oportet autem multiplices anamnesis rationes multiplices seminariae inesse virtutem quam vocamus naturam, idem enim, prout idem est, diversitatem tantam proxime generare non posset. Sed numquid seminariae vires in seminibus animantium summae causae sunt? Nequaquam. Non enim ab ulla illarum fit species ipsa, sed quidam potius particularia sub specie, et quaelibet illarum ab alio sub eadem specie ducti originem, Ideo ad universalem naturam confeditum est, in qua universales sint suarum
For Ficino, the 'seminal power', identified with nature that contains within herself the reason-principles of what will be born, is only the formative principle of the individual, not of the species. All the species and their entire reasons need a more universal source. This is 'Universal Nature'. Ficino says that the natures of the four elements are related directly to the nature of the moon which contains the reasons of all the elements. The nature of the moon is related to that of the sphere above, and so on, so that all particular natures are related to Universal Nature. This latter contains the reasons of all natural things, as well as those of the particular natures. These reasons are the 'exemplary' and the efficient causes. And they make Universal Nature direct and lead all the particular natures to the goals determined by fixed laws. What is important here is that Ficino identifies nature with the 'seminal power'. It is incorporeal, often enclosed within the corporeal seed, and contains the principle of movement and generation. And the total sum of these 'seminal powers', which are the particular natures, is Universal Mother Nature. We may note that the relationship between the particular natures and Universal Nature perhaps parallels the connection that exists between individual souls and the World-Soul.

Finally, Ficino reaches his own synthesis, as follows: The highest and most fecund divine life generates as her 'lineage' (called by Orpheus Pallas) this whole machine of the world, before giving birth to it externally. This 'lineage', necessarily very close to God, is the 'universal seed of the world' (universale semen mundi) and contains the particular seeds of all the parts to be begotten externally within this world. These seeds harmonize with one another through their essence so that God is simple, and they differ from each other through their reason-principles so that the diversity of individuals may be realized in the world. Thus we observe that the Son of God is conceived here as the 'universal seed of the world'.
According to Ficino, when a magus suitably applies to an individual many things, dispersed in the world but conforming to the same Idea, he can easily draw down a gift from the Idea through the seminal reasons. However, he does not attract divinities wholly separated from matter but attracts gifts derived from the World-Soul or the stars. Each species of natural objects corresponds to its reason-principle derived from the World-Soul. The magus must also know the right moment for this operation because the World-Soul grants its gifts to a particular species at a specific time. He then receives not only the influence of the rays of the star and the demon but also that of the World-Soul. For the reason-principle of any star or demon flourishes in the World-Soul, by way of the seminal reason.

Ficino then explains the relationship between the heavenly constellations and the seminal reasons in forming sublunary things. For him, the World-Soul generates their forms and specific powers by the appropriate reason-principles with the help of the stars and the celestial forms. The properties peculiar to individuals are produced through the seminal reasons:

When, therefore, the Soul gives birth to the specific forms and the powers pertaining to the species of things below, she makes them through their respective reasons with the aid of the stars and the celestial forms. But she produces the endowments peculiar to individuals... likewise through the seminal reasons...

Following this, Ficino uses analogy to compare the World-Soul, which is active everywhere through the body of the world, with the centre of the macrocosm, the Sun, and the centre of the microcosm, the heart. By way of this analogy, he develops an important theory of the universal 'Spirit of the world' ('spiritus mundi'). In addition he identifies it with the alchemical 'quintessence' ('quinta essentia'). He says that just as the power of the human body is distributed to the limbs by physiological spirits, that of the World-Soul is carried abroad by its 'quintessence' which is active everywhere in the body of the world as spirits. This 'quintessence' of the world is contained in

---

45 'Quando igitur anima gignit speciales inferiorum formas viresque, eas per rationes offici proprias sub stellarum formarumque coelestium adminiculam, Singulares vero individuum dones... exhibit per seminales similiter rationes...', ibid. (ed. Kaske & Clark, p. 247; Opera omnia, p. 332).
48 'Accedit ad haec quod anima mundi totidem saltem rationes rerum seminales divinitus habet, quot ideae sunt in mente divina, quibus ipsa rationibus totidem fabricat species in materia. Unde unaquaeque species per propriam rationem seminalem propriae respondet ideae, facileque potest per hanc speciem aliqua alimentum caelestis capere, quam quodipsam per hanc speciem est effecta. Ideaque si quando a propria forma degeneret, potest hoc medio sibi proximo formari rursus per id medium inde facile reformari.' De vita, III.1 (ed. Kaske & Clark, p. 243; Opera omnia, p. 531).
all natural things, but in varying amounts. Thus those things which contain more spiritus have more of the power of the World-Soul. The magus who best knows how to extract this essence from things, or to use those things which contain this essence, especially in its pure state, can draw down propitiously the heavenly gifts. This is really what Ficino’s natural and astrological magic consists of. He considers that this essence is to be found in things which shine, which smell sweet or which have heat and moisture in their ‘subtle substance’ (e.g., gold, wine, gemstones). As food is converted to life within man by the human spirits, these things that abound in spiritus help to make us more akin to the spiritus of the world.

Ficino states that the world has life through all its parts, as is evident through the generation and movement manifested throughout. The universe is the most perfect animal. Then he returns to the spiritus mundi as follows:

Therefore, between the tangible and partly transient body of the world and its very soul, whose nature is very far from its body, there exists everywhere a spiritus, just as there is between the soul and body in us, assuming that life everywhere is always communicated by a soul to a grosser body. For such a spiritus is necessarily required as a medium by which the divine Soul may both be present to the grosser body and bestow life throughout it. Therefore the aid of a more excellent body—a body not a body, as it were—is needed. We know that just as all living things, plants as well as animals, live and generate through a spirit like this, so among the elements, those which are most full of spiritus generate very quickly and move perpetually as if alive.

But, he continues, ‘if the elements and living beings generate something like themselves by means of their spiritus, why do they not generate minerals and metals, which are intermediate between the

---

12 *De vita*, III.1 (ed. Kaske & Clark, p. 247; *Opera omnia*, p. 532).
14 *Igitur inter mundi corpus tractabile et ex parte caducum atque partem eiusmodi corporis etiam corpus aether, quod igitur inter corpora et anima semper aether et corpus, si modo ubique vita est communicata semper quidem vivere atque generare, atque inter elementa, quod eiusmodi corpus, vel ordinem, vel evolvit, vel evolvit, vel evolvit, vel evolvit.
16 *De vita*, III.3 (ed. Kaske & Clark, p. 257; *Opera omnia*, p. 535).
Soul. The stars and the demons residing in this spiritus owe their existence to it. Further, the spiritus of the world may be absorbed in man by his own human spirit which is similar in nature, most notably in the case where the human spirit has been rendered more akin to it (cognition) by ‘art’, that is to say if it attains ‘the highest heavenly degree’. He who knows this art is the Ficinian magus. He can win advantages from the World-Soul, from the stars and even from the demons by contact with the spiritus absorbed in his body, since the stars and demons exist in it.

Finally, in the last chapter of the third book, Ficino sums up his discussion. Explicitly following Plotinus, he avers that the seminal reasons are within the World-Soul:

Plotinus follows him [Hermes] and thinks that everything can be easily accomplished by the intermediation of the World-Soul, since the World-Soul generates and moves the forms of natural things through certain seminal reasons divinely implanted in her. These reasons he even calls gods, since they are never cut off from the Ideas of the supreme Mind. He thinks, therefore, that through such seminal reasons the World-Soul can easily apply herself to materials since she has formed them to begin with through these same seminal reasons, when a magus or a priest brings to bear at the right time rightly grouped forms of things—forms which properly aim towards one reason or another, as the lodestone toward iron. Sometimes it can happen that you bring seminal reasons to bear on forms, higher gifts too may descend, since reasons in the World-Soul are conjoined to the intellectual forms in her and through these to the Ideas of the divine Mind.

Having finished the entire translation of the 54 treatises of the Enneads of Plotinus between 1484 and January 1486, Ficino immediately began to write a commentary on the work. After a long interval, and having taken out the part which became the De vita coelitus comparanda, he finished the commentary in 1490, and published it with the translation of the Enneads in Florence in 1492. In the commentary Ficino made full application of Plotinian ‘seminal principles’ (logoi spermatikoi) to his cosmology. Unfortunately there are few studies of this field on which to base our discussion. Moreover, the vast scale of the work and the lack of a critical edition render the task all the more difficult. In these circumstances we shall limit ourselves to focusing briefly on some important features in Ficino’s development of the concept of seeds.

According to Ficino, Plotinus shows that all things generated and moved by nature are directed by the ‘seminal reasons’ of Universal Nature, and notably more by the particular reasons and seeds than by the less differentiated reason-principles themselves. Ficino asserts, by analogy with the animal world, that all the bodies produced in the world are formed by the spiritus as well as by the seminal reasons in the vegetative power of the World-Soul. Before the forms of things exist in the world, they must be born from this generative power acting through the seminal reasons. By these reason-principles, the Soul forms things ‘naturally’, that is to say, ‘the Soul produces the seminal reasons in nature and through these reasons nature reproduces the forms in matter’. The seminal reasons by their inexhaustible potency multiply the seeds of nature and then natural things. He also adds that the irrational part of the World-Soul holds the seeds as if they were the last traces of Ideas. And the ‘seminal reason of the world’ (ratio seminaria mundi) is itself, so to speak, the ‘Word’...
of the divine Mind through which matter receives its worldly embellishment. We note here that the seeds are made by the seminal reasons and are therefore not ontologically identical with the seminal reasons.

For Ficino, since a whole animal, composed of diverse parts, multiplies from a tiny seed, the seminal reason in this seed does not lack strength. The seminal reason can remain in any portion of the bodily seed since it is free from matter and therefore from spatial dimension. This divine reason-principle, that brings everything forth, lacks nothing, for nature pervades and moves all. With regard to the seminal reason, Ficino puts forward four major features: 1) seminal reason is the efficient ‘principle’ of all things that are brought forth; 2) it includes in itself all these things; 3) all natural things that are born through seminal reason are made in the manner of a seal, according to their own efficient and exemplary power; 4) the entire arrangement and variability of things is prescribed within the seminal reason which expresses them outwardly as they have been imprinted inwardly, so that nothing escapes divine providence. At the heart of these arguments we note that there is an underlying analogy between the concept of seminal reasons and that of the vegetable kingdom:

Universal Nature contains within herself more seeds of things than Mind contains Ideas. The power of a seed is weak. One seed cannot contain, nor accomplish, what one Idea can have and do. Therefore the power of a single Idea is distributed among many seeds to compensate for their weakness by numbers. And matter is made into many forms under one seed. Even if visible corporeal seeds are not found everywhere throughout the mass of the world, there are assuredly innumerable invisible seeds and seminal reasons which are manifest to the senses through their operations. And nature has no choice but to make the forms determined by the seminal reasons. By these, acting as principles and rules, nature has complete determination over motion. The qualities springing up are naturally gathered into a confined space, and are led to a single production by balanced moderation. This production is multifor but respects uniform harmonious order.

Nature gives birth to living beings without visible seeds but with seminal reasons, and procreates the qualities of the elements through incorporeal seeds without the help of the elements. Whatever its power is, the seminal reason possesses it from the beginning. The reason ‘does not know what it is making’ but produces it without knowing. The world multiplies through the ‘seminal power’ of the World-Soul, just as any living being does from its own seed, which possesses such a power. The World-Soul acts with supreme power to the extent that its intellect forms its reason-principle and hence its nature. The reason-principle, which naturally runs in different directions, is made pregnant with the seeds of everything. Thus the rational form of the world is born from an intimate rational motion through the seminal reasons of things.

7. The sources for his concept of seeds

We hope to have shown the principal features of the Florentine metaphysician’s concept of seeds. On the one hand, he faithfully followed Plotinian doctrine of the logoi sperma tikoi using the term ‘rationes seminales’, notably in the De vita coelitus comparanda and the commentary on Plotinus, that is, in his mature thought. He discovered the theory of logoi spermatikoi in Plotinus and united it with Thomas

---

62 In Plotini librum De providencia, ch. 2, Opera omnia, p. 1687.
63 Ibid., ch. 3, Opera omnia, p. 1688.
64 Ibid., ch. 15, Opera omnia, p. 1695.
65 Videtur haec ipsa ratio non aliter propagare seipsam, quam plantae radix in stipitem atque ramos & reliqua ... Atque ipsa ratio seminaria mundi, vita quidem, sed divinorum universaliumque ultima, videtur sub ipsa videlicet diversitatis ideae seipsam in se per diversa articulatim contrariaque diffundere.' Ibid., ch. 16, Opera omnia, p. 1697.
66 ‘Natura plura continet in se rerum semina quam mens ideas. Quam enim naturae seminisque virus sit debilior, non potest in uno semine comprehendere, quia unum facere quaequecumque idea posse et potest que una. Ergo per plura semina distributur ideae unicae vigor virtutisque debilitas numero compensatur. Eadem ratione materia in plures percutitur sub unoque semine formas.' Ibid., ch. 17, Opera omnia, p. 1697.
67 In Plotini librum De natura et contemplatione et uno, Opera omnia, p. 1723.
68 Ibid., Opera omnia, p. 1724.
69 In Plotini librum primum De dubiis animae, Opera omnia, p. 1737.
Aquinas's doctrine of 'substantial form'. 30 For this reason, we can perhaps say that the Ficinian system subordinated Peripatetic physics (or hylomorphism) to Neoplatonic metaphysics. On the other hand, at the beginning of his career, Ficino already broached the concept of seeds in identifying nature with the 'seminal power' that germinates and generates. The total sum of particular natures is for him Universal Mother Nature, the 'seminary of the world', or the 'World-Seedbed'. It seems then that these two conceptions are not completely identical, although they are used in a way that is sometimes very close. 71 In any event, we can say that in the universe of Ficino there are, below the seminal reasons of the World-Soul, the multiple seeds of Universal Nature which determine the destiny of each being. What are the possible sources for his notion of seeds?

Ficino doubtless drew the notion of seeds principally from Neoplatonic writings. It is natural to suppose that he found the key in his chief guides to Platonism, Plotinus and Proclus. 72 Besides the Neoplatonists, can we find any indication in the dialogues of Plato himself? Plato speaks of seeds in the Timaeus, probably under Pythagorean influence. The subjects are the seed of the Athenian people (23C), the oracle of God the Sower (41C-D), the seed which is identified with the element of fire (56B), and in the panspermia made from primary triangles and identified with human marrow (75C). 73 Against such Presocratic notions, Aristotle set out refutations of his Metaphysics which is likewise a rich source for Presocratic concepts of cosmogenie seed. 74

Now Ficino established his version of the chain of ancient theologians based on the belief that a single truth was transmitted from the time of Moses and Hermes-Mercury Trismegistus until the time of Plato, and was finally revealed by Jesus Christ. This late Hellenistic vision, elaborated in the Renaissance, has been studied particularly by D. P. Walker. 75 This is the 'ancient theology' (prisca theologia). Among the ancient theologians, Ficino venerated especially Zoroaster, Hermes, Orpheus, Pythagoras and Plato. Even if the Chaldean Oracles wrongly attributed to Zoroaster do not speak of seeds, 76 we can find an allusion to the seeds that Nature guards within herself in the Orphic Hymn to Nature (Physios). 77 As for the Corpus Hermeticum, while it is true that in 1465 Ficino himself translated, prior to the dialogues of Plato, the first fourteen logos in which the image of a 'Creator Sower' is put forward, possibly under the influence of Stoicism, 78 nevertheless we scarcely see him calling on this mythical personage in support of his concept.

As far as the Stoic doctrine of logos spermatoikos is concerned, he could have used important texts in Diogenes Laertius, Plutarch,
Seneca, Cicero and others. However, it is difficult for us to find clear evidence of Stoic involvement, except what was conveyed through the Neoplatonic texts. We can nevertheless add to this list the cosmogonic passage in the Metamorphoses of Ovid, I.5–9, and those lines of poetry so influential in Neoplatonic circles in late antiquity, Virgil, Aeneid, VI.724–31. As regards the Fathers of the Church, we know that St Augustine was one of Ficino’s favourite authors. He made significant use of his De civitate Dei which includes two passages on the doctrine of seminal reasons, but he seems not to have used the more important De Genesi ad litteram for his concept of seeds.79 In the Latin Picatrix, a magic treatise of Arabic origin and one of the sources of Ficino’s theory of spiritus mundi, I have not been able to find any special mention of seeds which would cast light on the problem.80

These texts are possible sources for Ficino’s concept of seeds. Yet we do not have any decisive evidence. In these circumstances his commentary on Plato’s Philebus may be viewed in a rather special light.81 Conceived as a dialogue on the theme of the Good, the highest principle in Plotinus, the Philebus was very important for the Neoplatonists, as also for Ficino. This commentary seems to have been composed earlier in his career, between July and the winter of 1469, that is, between the commentary on Plato’s Symposium and the Platonist Theology. As in other writings, Ficino speaks of the seeds of nature on several occasions. To avoid repetition we shall not reproduce them all here.82 But we find a remarkable passage at the beginning of the commentary, on the need for finality in natural change.

He says,


82 The principal ideas on ‘seeds’ are: the truth of the divine Mind and the correspondence with the seeds of things in its essence, 1.15 (Opera omnia, p. 1221; Allen, p. 169); in the Mind, the creator of all things, reside the species, seeds, powers, reasons and Ideas of all its works, I.17 (Opera omnia, p. 1223; Allen, p. 181); the seeds of forms are present in nature and the reasons of all the seeds of nature are in essence, I.18 (Opera omnia, p. 1224; Allen, p. 187); the idea in nature is like the seedbed in matter, I.20 (Opera omnia, p. 1226; Allen, p. 205); God determines matter through form, nature through seeds, the soul through reasons, the Mind through Ideas, I.36 (Opera omnia, p. 1250; Allen, p. 365); the Mind effects creation with matter through the Ideas while the soul achieves generation with matter through seeds and reasons, II.4 (Opera omnia, p. 1257; Allen, p. 417).

83 ‘Item corporis vis aut casu in opus incidit aut necessaria quádem intensione naturae. Non casu, quia in quacumque opera quodcumque corpus incurrere atque sua quaelibet a quibuslibet fecerit, neque certo res semine indigerent et illud Lucretii eveniret. Nam si de nihilo fierent ex omnibus rebus omne genus nasci posset; nihil semene egert, e mari primum homines, e terra possit oriri squamigerum genus et volucres erumpere coel. Et proficco quod casu sit raro contingi, nec unum taxatam modo sed varietat. Videmus autem propria quaedam a singulis, certo semen, instituto tempore, solito ordine modoque, digesta serie, iisdem mediis, eadem ratione et ut plurimum fieri. Ergo cum necessaria quádem intensione naturae corpora vis effectum producat, proprie illum intendit et quod intendit naturali instinctu conatus.’

The influence of Lucretius on Ficino has hitherto been mentioned in connection with his youth, but this other avenue has not been seriously explored, and our observations on the importance of Lucretius in the genesis of Ficino's ideas on the seeds of nature are only a first step. Future research will surely disclose other elements in this fundamental dimension of his thought. In any event, we can conclude that the concept of seeds in Ficino is an original synthesis of quite heterogeneous ideas from antiquity.


NARCISSUS, DIVINE GAZES AND BLOODY MIRRORS: THE CONCEPT OF MATTER IN FICINO

Sergius Kodera

Ad lucernae lumen ne te contemptiris.

Look not in a mirror by lamplight.

Pythagorean precept

In this paper, I want to combine two related interests of mine, an interest in gendered metaphors and in their use to describe the material aspect of the world, that is to say, how an ostensibly abstract philosophical discourse on the order of the world relates to ideas about the relationship between actual men and women in the early modern period. In that context, I also want to investigate the metaphor of the mirror, which is of crucial importance in a male discourse, the philosophy of Marsilio Ficino. In his Neoplatonic philosophy, the mirror becomes, I argue, the most important and highly ambiguous metaphor for the embodied world, and hence for the female and passive aspect of creation. I shall argue that it eventually becomes the crucial image of a particularly male fantasy of women. I shall focus on the fact that Ficino's philosophy centres around a fundamentally solipsistic vision of creation and creativity, in which the material world, by being tied to the ambiguous metaphor of the mirror, becomes associated with a particular and paradoxical condition of disembodied embodiment and consequently associated with the demonic. The myth of Narcissus has deep correspondences with this view.

1 The material presented here summarizes part of the research I carried out during my stay at the Warburg Institute in London in 1997 and 1998, which was made possible by a Frances Yates Fellowship and an Erwin Schroedinger postdoctoral grant from the Austrian Federal Government; I wish to thank both institutions for their generous support. Intellectually this essay is most indebted to Michael Allen's 1989 edition and commentary on Ficino's *Sophist* commentary as well as to Frontisi-Ducroux's 1997 study on the role of mirrors in ancient Greece and Rome. I wish to thank Valery Rees, Michael Allen, Georges Didi-Huberman and Tanya Pollard for their comments, corrections and draft-reading. In some aspects, the present paper continues the topics of a paper I published in 1999: 'The Stuff Dreams are Made of: Ficino's Magic Mirrors', *Accademia. Revue de la Societe Marsile Ficin*, 1 (1999), pp. 83-100, hence some of the material presented here overlaps with that publication.