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Seeds of divinity: from metaphysics to enlightenment in Ficino and Kant

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ABSTRACT

This essay traces the central role played by the notion of seeds and germs for understanding the complex metaphysics at work in both Ficino's reinterpretation of Greek philosophy for a Humanist audience, and in Kant's own efforts to describe the moral shaping of humankind that he took to be the heart of the Enlightenment project.

KEYWORDS

Marsilio Ficino; Immanuel Kant; education; generation; cognition

Vocabularies of life have long been employed by philosophers to explain all manner of cosmological, theological and epistemological events. This essay focuses on the eighteenth-century legacy of a particular set of discussions that was begun by the Neoplatonists, particularly Plotinus, and then importantly reinterpreted by Ficino. These accounts turned on metaphysical portraits of both being and soul, with a special role reserved for the *logoi spermatikoi* or rational seeds in each of these depictions.¹ Notions like these would come to play a central role in Leibniz's epistemology, and later contribute to the course taken by Wolff and the other German Rationalists leading up to Kant. For our purposes here, the legacy to be traced is in Kant's wide-ranging embrace of the language of seeds or "germs [*Keime*]" when developing his theories of intellectual and moral development. Like Ficino, Kant was focused on the role of education – particularly in the lives of future leaders – and of the task facing educators in their cultivation of character in both citizen and statesman alike. But in Kant's formulation it was mankind's special vocation as a whole to pursue perfection, a pursuit made possible insofar as each person contained a germ of the good. It is this claim that I wish to pursue to its first appearances in the Italian Renaissance.

1. Ancient theology

Throughout his works – his commentaries on and translations of the Hermetic corpus, Plato, Plotinus, Diogenes and others – Marsilio Ficino (1433–1499) synthesized and articulated what he took to be a set of divine truths that had been revealed by God to a set of "ancient theologians" whose teachings had progressively unfolded across history. These ancient theologians may not have been aware of their role in God's plan – for acting as vessels and intermediaries, their task was simply to deliver divine truth insofar as it was revealed to them – but their work contained God's revelation nonetheless, and

it was left to the work of later interpreters like Ficino to demonstrate the continuity of these divine thoughts. Ficino captured this point in his description of Hermes Trismegistus:

Among philosophers he first turned from physical and mathematical topics to contemplation of things divine, and he was the first to discuss with great wisdom the majesty of God, the order of demons, and the transformations of souls. Thus, he was called the first author of theology, and Orpheus followed him, taking second place in the ancient theology. After Aglaophemus, Pythagoras came next in theological succession, having been initiated into the rites of Orpheus, and he was followed by Philolaus, teacher of our divine Plato. In this way, from a wondrous line of six theologians emerged a single system of ancient theology, harmonious in every part.²

Ficino would later add Zoroaster to the head of this list, asserting his connection to the three kings who visited the infant Jesus.³ Indeed, there remains interpretive debate regarding the precise points of contact between these ancient theologians and Judeo-Christian doctrines. In Ficino's texts there is evidence to suggest that his views regarding this either changed or were fitted to specific purposes. In texts explicitly dedicated to religious matters, Ficino suggests that God's message was transmitted to a specific ancient theologian via Moses in Egypt or through the Hebrew Scriptures – to Hermes or later Zoroaster – and that this teaching regarding monotheism or the immortality of the soul, for example, was then continued in a unilinear fashion to subsequent ancient theologians. In other writings, however, such as those dedicated to the explication of Plato or other pagan authors, Ficino seems to have believed that there were a number of avenues for such divine teachings to have been conveyed. As Moshe Idel describes it,

[t]he multilinear version of *prisca theologia* assumes the possibility of more than one source of valid religious knowledge and more than one line of transmission. Though the contents of this knowledge are identical in the two or more lines of transmission, their literary or terminological expressions differ from one case to another.⁴

In this account, the properly trained expositor will be working with a variety of religious and philosophical traditions in order to expose the unity of the truths conveyed by them.

There was, of course, potentially much at stake in these differences. The Neoplatonists were writing during a period when there was still widespread belief in mystical religions, astrology and magic. The church Fathers, living in communities with all manner of pagan worshippers, were concerned to demonstrate to potential converts either the general compatibility of many Neoplatonist tenets with Christianity or to insist on the historical precedence of Christian doctrinal beliefs ahead of their pagan exposition. Renaissance Italy, by contrast, did not contain pagan worshippers – but for the orthodox there was still an inherent danger in any attempt at a whole-scale effort to rehabilitate Neoplatonism. Thus after reminding us of the manner in which elements of magic were deeply interwoven into the works of Proclus and other Neoplatonists, D. P. Walker writes:

Seen through such a screen, Platonism could not possibly be, for Renaissance thinkers, a secular, religiously neutral, innocuously natural philosophy, as, in the large areas of logic and natural science, Aristotelianism could claim to be. It taught a theology and a theurgy; it was either a rival religion to Christianity, or the two must somehow be fused together.⁵

In a unilinear approach to the problem of fusion, the point of transmission was generally assigned to Moses. The multilinear strategy was both more difficult and politically

risky, since it asserted the importance of pagan authors for discovering religious truths – truths which were central to Christian religious doctrine.

With that said, it bears remembering that Christianity itself emerged and developed within a Greek world. There were, moreover, widely acknowledged points of contact between Christianity and Plato's theories regarding the Good as the highest point of metaphysical unity and his account of the immortality of the soul. Of the many Neoplatonist commentators on Plato it is clearly to Plotinus, therefore, that Ficino owes the greatest intellectual debt. For it was Plotinus who had developed the richest set of commentaries on and indeed extensions of the core insights contained in Plato's work, especially in regard to the discussions of being and soul found in the *Timaeus* and the *Parmenides*. Although Ficino's complete translation of the *Enneads* appeared only in 1492, the many references to Plotinus's writings that can be found throughout Ficino's earlier texts and commentaries demonstrate the significance of Plotinus to Ficino's interpretation of Plato.

For our purposes here we can focus on the manner in which the soul for both Plotinus and Ficino serves as an active source of life in nature, contains the seeds of intellectual ideas and drives our native attunement to the good.⁶ Ficino employed the concept of seeds or "*logoi spermatikoi*" across a number of works: in the commentaries attached to his translations of both the *Symposium* (1484) and the *Timaeus* (1484), in the *Platonic Theology* (1482), in his commentary on Plotinus's *Enneads* (1492) and in connection to astral influences in the section on *De vita coelitus comparanda* in his *De vita libri tres* (1489). Ficino used a number of terms to describe these seminal principles – seeds of things, seeds of forms, seminal reasons, seminal reason-principles, seminary of the world and seminary reason of the world – offering his readers a profusion of terms not found in any other Latin writers at work after Augustine.

In both the structure of his hierarchy and his reliance on a theory of emanation to explain the production of lower orders of being, Ficino self-consciously adopted the lead set by the *Timaeus* and Plotinus's commentary on it. According to Ficino there are five levels or "hypostases" of being, with mediation between the levels accomplished via the role played by seeds in one form or another. Outside of being altogether is the highest level, God (Plotinus's One), which overflows or emanates into Mind (Plotinus's Intellect, which for Plotinus is akin to Plato's Demiurge). Mind contains the intelligible world of Ideas, which in its own fullness of being overflows into Soul (Plotinus's World Soul), which contains the "*rationes seminales*" or Reasons for things in the world. These seminal ideas flow in turn into Nature, which holds the incorporeal Seeds of the individual things in the world. At the bottom of the hierarchy there is finally matter, which grounds the elemental Forms. Within this hierarchy the Ideas, Reasons, Seeds and Forms are the species responsible for communication between adjacent levels of being, with the Seeds working as intermediaries, for example, between Soul and Nature. In each case (with the exception of matter, whose corporeal forms remain in shadows), the Ideas, Reasons and Seeds are realities capable of disclosing and thereby connecting the different levels of being to the Divine. As Ficino understood it, the rays emanating from God at the top of the hierarchy penetrate each layer of being. It is this divine penetration which furnishes the respective hypostases with their contents, and fertilizes Nature with its Seeds. Nature, as he saw it, is an *incorporeal* power of generation, responsible for fertilizing matter with the seeds of Form and the generative force for formation. Thus Ficino explains:

All these points signify that present everywhere through earth and water in an artful and vital nature are the spiritual and life-giving seeds of everything. These seeds can generate of themselves wherever bodily seeds are missing; they can rewarm seeds that have been left behind by animals; and from one withered grape pip, whose nature is single and lowly, they can bring forth the vine in all its variety, order, and value to man, namely with their varied, rational, and splendid powers. The same vital nature draws out from the depths of matter, where corporeal substances do not penetrate, the substantial forms of the elements. Moreover, it takes the elemental qualities, which of themselves can only burn or freeze or whatever, and adds to them the precious variety of colors and shapes and the vigor of life.⁷

This fertilization was not limited to the earth, however, since Ficino employed much the same language for describing the origin of ideas:

just as the life-giving part of the soul brings about change, generates, nourishes, and causes growth by means of inborn seeds, so the internal sense and the mind make all their judgments by means of innate formulae, and yet aroused by external objects.⁸

As Ficino developed the point, he moved to the language of gestation and birth, with the latter being presumably a result of God's penetrating ray:

For if the mind generates the intellectual form and in doing so receives it in itself without an intermediary, then it certainly gives birth to it on its own and gives birth without any intermediary at all. The conclusion to be drawn from all this is that the intellect forms itself. And since if it were entirely formless it could not form itself, then, prior to these forms or conceptions which it gives birth to in itself throughout its existence almost minute by minute, there must necessarily lie hidden within the recesses of the rational soul other forms that are natural to this soul.⁹

This point regarding the inborn nature of ideas and of the link between these ideas and their ultimate source in the divine would have a long legacy in seventeenth- and eighteenth-century Rationalism. Before turning to Leibniz as one representative of this, however, it must be recalled that for all of Ficino's discussion of metaphysics and ontology, the primary focus of his efforts to fuse Plato's teachings and Christian doctrine relied on Plato's account of the immortality of the soul. The importance of this could not be made clearer than in Ficino's choice for the opening chapter of the *Platonic Theology*, whose title was as much that as a declaration: "Were the soul not immortal, no creature would be more miserable than man".¹⁰ Throughout the ensuing text one is repeatedly given to understand that the embodied soul spends its sojourn on Earth in a state of readiness for its return to the Divine. Its desire for the Good in this way explains its openness to morality and its capacity for the work required to ascend the hierarchy in search of the Divine:

man alone never rests in his present habit of living; he alone is a pilgrim in these regions and cannot rest on the journey as long as he aspires to his celestial homeland, which all of us seek, although we proceed on sundry paths on account of the diversity of opinion and of judgment.¹¹

Finally, it is worth emphasizing that Ficino's translations of and commentaries on Plato were important not only for their synthesis of Greek and Christian metaphysics and ontology but also for their emphasis on dialogue as a pedagogical tool. Dialogical activity was particularly suited to the Humanist tradition, for it placed emphasis on Socratic enquiry; it was open-ended, curious and persistent, a style-form in some ways contrasted with the

traditional *quaestio* method employed by the Scholastics.¹² Ficino followed Plato, moreover, in emphasizing the importance of education to the ruling class; he worked as an educator both directly and via letters, including letters to princes, kings, dukes, cardinals and the Pope. His letters exhorted their recipients to both live more philosophically and rule less despotically; as he told Prince Eberhard of Wurtemberg, “the ideal Prince would wield power with wisdom, rule with justice, display magnanimity with clemency, blend seriousness with affability, spread religion like Numa, and seek peace like Augustus”.¹³ Such missives from Ficino would typically arrive accompanied by copies of works selected by him to both support the points raised in his letters and continue the educational project. Thus to the Duke of Urbino, Ficino sent a copy of the *Statesman*, and to King Matthias of Hungary he sent a complete set of Plato’s works alongside copies of Plotinus, Proclus and Ficino’s own *Platonic Theology*.

2. Perennial philosophy

Like Ficino before him, G. W. Leibniz (1646–1716) too sought the patronage of royalty and the opportunities this afforded for shaping the intellectual development of the ruling elite. His first important patron was Sophie, the Duchess of Hannover, whose daughter Sophie Charlotte would go on to marry Frederick I, King of Prussia. At Leibniz’s urging the Prussian King founded the Berlin Academy of Sciences in 1700, electing Leibniz as president for life. The academy continued to be an important supporter of scholarly activities after Frederick’s death, and found renewed influence and power under the guidance of his grandson, King Frederick the Great, at the mid-century. Between Leibniz’s early establishment of the academy’s regular “prize essay” contests and the rapid publication and dissemination of academy notices and publications throughout the eighteenth century, the German-speaking countries were kept abreast of the latest scientific discussions regarding metaphysics, natural philosophy, mathematics and the like. Indeed, it was reported that at Frederick the Great’s court “there was not a single lady who had not declared herself for or against monads”.¹⁴

Leibniz is also credited for supporting a version of Ficino’s *prisca theologia*. The idea of a set of constant truths being revealed to thinkers across time was in fact commonly held by Renaissance Humanists, and it continued well into the seventeenth century in the Hermetic tradition of Van Helmont and Fludd, as well as in the philosophical tradition now described as Rationalism. In 1683 Leibniz wrote: “I think that God speaks to us, not merely in sacred and civil history, or even in natural history, but also internally, within our mind, through truths which abstract from matter and are eternal”.¹⁵ As Leibniz put the point some thirty years later in an oft-cited letter to Nicolas Remond,

[t]he truth is more widespread than one thinks, but is very often painted over, and very often also disguised, weakened, disfigured, corrupted by additions that damage it and render it less useful. By exposing these traces of the truth in the ancients, or (to speak more generally) in our predecessors, gold is extracted from mud, the diamond from its mine, and light from darkness; and this would amount to a certain perennial philosophy.¹⁶

Put in terms such as these, it is easy to see the continuity between Ficino and Leibniz on this point.

By the mid-seventeenth century a broad historical transition had occurred, such that Ficino's cosmological account of divine emanation, desire and fecundity as the proper metaphysical bases for understanding generation had given way to an increasing demand for mechanical explanations of all things natural. Rene Descartes supported this move when it came to plants and animals (including our human animal bodies) but made an exception when it came to the generation of ideas; while many ideas were said to be the result of our sensible experience and its potential for manipulation at the hands of imagination, there were also innate ideas – such as those concerning mathematics – which spoke for their universal truth. This characteristic was connected to their origin and led Descartes in his meditations on the matter to quickly decide that his idea of God was not only similarly innate but immediately pointed to God himself as its point of origin. While this certainly bears a striking resemblance – at least in its general features – to Plato's doctrine of recollection, in Descartes's case the line of influence was both Neoplatonist and Christian, and especially Augustinian.¹⁷

These two lines of thought were just as influential for Leibniz, who similarly advanced a theory of innate ideas or truths that could be discovered in the mind. Writing about the “most beautiful” Platonic doctrines with which he concurred, Leibniz was ready to elaborate, explaining:

The mathematical sciences, moreover, which deal with eternal truths rooted in the divine mind, prepare us for the knowledge of substances. [...] Furthermore, as Plotinus has rightly said, every mind contains a kind of intelligible world within itself; indeed, in my opinion it also represents this sensible world to itself. But there is an infinite difference between our intellect and the divine, for God sees all things adequately and at once, while very few things are known distinctly by us; the rest lie hidden confusedly, as it were, in the chaos of our perceptions. Yet the seeds of the things we learn are within us – the ideas and the eternal truth which arise from them.¹⁸

The possibility for discovering these eternal truths turned on the notion that both idea and mind share a divine origin; indeed it was on the basis of the mind's origin that the “perennial philosophy” could be recognized in the first place. As Leibniz understood it, the human mind or soul is not simply seeded with ideas; the soul is also, as in the case of Ficino, attuned and ready to recognize marks of divinity as a result of its origin:

What makes the exercise of the faculty easy and natural so far as these truths are concerned is a special affinity which the human mind has with them; and that is what makes us call them innate. So it is not a bare faculty, consisting in a mere possibility of understanding those truths: it is rather a disposition, an aptitude, a preformation, which determines our soul and brings it about that they are derivable from it.¹⁹

3. From seeds of divinity to ideas of reason

Although Immanuel Kant (1724–1804) would reject this specific formulation for reasons we will see momentarily, what should become clear, nonetheless, are the significant points of contact between Neoplatonism – as reformulated by writers like Ficino and Leibniz – and Kant's philosophical writings. With that said, Kant published his first essay in 1747 – a lengthy analysis and critique of Leibniz's account of living forces – and his final *Lectures on Anthropology* in 1798, and these are dates worth remembering so far as they bookend an enormous transformation wrought by the

mid-century emergence of natural history as a science with genealogical aims. Debates in the life sciences regarding generation, inheritance and the like captured the imagination of an increasingly literate public – one that was hungry for science education. Kant too would be caught up in the momentum of debates that would have a significant impact on his developing philosophy; thus, while the focus in what follows is on the themes already laid out, some significant adjustments due to historical considerations need to be made.

This immediately becomes clear when we take up the question of ancient theology or, as Leibniz had it, perennial philosophy. In the wake of Buffon's *Natural History* volumes – the first three of which were published together in 1749 – it became virtually impossible for later thinkers to approach plants and animals as static, machine-like entities. After Buffon, species lines were increasingly understood as dynamic entities developing across time such that they have genuine histories, which include migrations, adaptations and change. This interpretation was readily transferrable to other sorts of histories – in 1755 Winckelmann traced the history of Western art to its Greek roots and Rousseau provided readers with a natural history of inequality – and Kant, like his contemporaries, was just as interested in this new way of understanding history as a genealogical exercise. Kant's first foray into this was his publication (also in 1755) *Universal Natural History and Theory of the Heavens*, a text leading to Kant's being credited, alongside Laplace, for having first expounded upon a nebular hypothesis for the formation of the planets. Unlike ancient theology's conveyance of permanent, divine truths, therefore, Kant took the most important concepts to have undergone long-running historical development. This means that although the various appearances of an idea might seem wholly disconnected in time, they are nonetheless expressions of the same idea. Like a seed which contains the whole plant in advance of its unfolding, Kant understood the history of certain concepts as beginning with a seed or germ that contains the whole or final form from the outset. As he described it in one of his most important formulations, Kant explained:

Systems seem to be formed in the manner of lowly organisms, through a *generatio aequivoca* from the mere confluence of assembled concepts, at first imperfect, and only gradually attaining to completeness, although they have one and all had their schema, as the original germ, in the sheer self-development of reason. Hence, not only is each system articulated in accordance with an idea, but they are one and all organically united in a system of human knowledge, as members of one whole, and so as admitting of an architectonic of all human knowledge.²⁰

In this passage Kant focused on an underlying unity within the history of independent attempts to produce a systematic theory of knowledge. As he framed it, each had been “organically united” by virtue of their common origin in the germ of reason, even as they were differentiated as part of reason's own path of self-development. Seen from this perspective, the history of reason provided its investigators with a genuine natural history, for each of its varieties could be traced in their entirety to their point of origin, a common descent that had been easy to overlook given the enormous modifications taking place in the history of the species as a whole.

This approach to the historical unfolding of concepts would be repeated by Kant on numerous occasions. He believed it to be true of philosophy, arguing:

Since, considered objectively, there can be only one human reason, there cannot be many philosophies; in other words, there can be only one true system of philosophy from principles, in however many different and even conflicting ways one has philosophized about one and the same proposition.²¹

Only by paying attention to that fact, according to Kant, would it be possible to demonstrate the “unity of the true principle which unifies the whole of philosophy into one system”.²² And in *Religion within the Bounds of Reason Alone* Kant underscored the historical unity within the self-development of religion, since

we must have a principle of unity if we are to count as modifications of one and the same church the succession of different forms of faith which replace one another [...] for this purpose, therefore, we can deal only with the history of the church which from the beginning bore with it the germ and the principles of the objective unity of the true and *universal* religious faith to which it is gradually being brought nearer.²³

Although this focus on teleological development seems to place Kant most firmly within an Aristotelian tradition, we can still find important resonances of Platonist philosophy. As Kant has just told us, the end of the history of reason, that is, reason’s idea of itself as a fully developed whole, was originally present within reason – present as an “original germ in the sheer self-development of reason”, a germ that both set the goal for reason’s completion and somehow also grounded the possibility of its actual achievement. Kant’s understanding of this germ – that is, its nature or ontological status – was clearly that of something metaphysical versus natural. What is more, it was something that Kant took to be generated by reason itself. Kant was as vigorous in his rejection of the innate ideas proposed by Descartes and Leibniz as he was in rejecting sense experience as the Empiricist’s alternative. The middle course chosen by Kant regarding the generation of ideas thus follows most closely the kind of thinking proposed by the Neoplatonists when describing the manner in which intellect performs. To cite Ficino again on this point: “if the mind generates the intellectual form and in doing so receives it in itself without an intermediary, then it certainly gives birth to it on its own and gives birth without any intermediary at all”. In Kant’s language, these concepts are self-generated or “originally acquired” through the activity of reason in its theoretical or practical labor. It was for this reason that Kant eventually borrowed the model of epigenetic generation from the life sciences when describing his approach not just to the generation of ideas but indeed to reason itself.²⁴ That is, by locating an epigenetic beginning, Kant sought to identify an origin that was neither supernatural nor empirical but spontaneous. For it was only in the vein of something that could be metaphysically conceived as *self-born* that reason could be subsequently referred to as “pure spontaneity” or “transcendentally free”. Only the model of epigenesis, according to Kant, allows the openness of reason’s possibilities to be maintained while describing a human being as a being with “an aptitude for purposes generally” but “in a way that leaves that being free”.²⁵

But while Kant might have been clear regarding the autochthonous nature of reason, he was less clear when it came to the use of germs in his other writings. The first thing to note is a difference between his discussions regarding morality and those at work in natural history. In the former case Kant was at pains to avoid the appearance of innate ideas or divine seeds, and thus he took them to denote a set of capacities, potentialities, susceptibilities, vulnerabilities and receptivities – all his terms – grounding our attunement to

morality. Thus Kant's references to germs for reason, for goodness, for enlightenment, and so on essentially describe the manner in which these moral capacities make us susceptible, receptive or vulnerable to the moral law, in much the same manner that "moral feeling" or an internal "moral vital force" were taken by him to similarly exist as a set of virtual aesthetic preconditions for moral training. Thus in the *Metaphysics of Morals* Kant describes a "vital moral force" capable of exciting moral feeling as a nonpathological response to the mind's representation of the moral law:

No human being is entirely without moral feeling, for were he entirely lacking in receptivity to it he would be morally dead; and if (to speak in medical terms) the moral vital force could no longer excite this feeling, then humanity would dissolve (by chemical laws, as it were) into mere animality and be mixed irremediably with the mass of other natural beings.²⁶

This susceptibility or "receptivity" is original to us, and its function is to orient the mind toward the moral law without thereby compromising its freedom. The ability to be quickened by the moral force in this manner is thus indeed native to the human being, according to Kant, but not in the sense of its having been implanted; moral feeling is simply "inscrutable", he argues, and rather than speculating further regarding its origins, our responsibility lies instead with its "cultivation [*cultiviren*]".²⁷

Like Ficino, Kant valued education and understood a proper education to be key in the cultivation of a moral citizenry. Describing the task of educators in his lectures on pedagogy, Kant explained: "Many germs lie within humanity, and now it is our business to develop the natural predispositions proportionally and to unfold [*auswickeln*] humanity from its germs and to make it happen that the human being reaches his vocation [*Bestimmung*]"²⁸ In these lectures Kant especially endorsed the value of experimental schools²⁹ and he himself actively supported J. Basedow's experimental school in Dessau, "The Philanthropinum", in a series of pamphlets and letters written during the late 1770s. These short essays are remarkable for their language so far as Kant explicitly likened the school to a plant, a creature that like any species was determined to survive through the dispersal of its seeds but whose germ required protection and care while still young.³⁰ Like any other natural organism the school-cum-plant fell under the general offices of "Nature herself", and Kant took it to thereby face a set of particular demands regarding its place in the economy of nature. Its first task as an organism concerns the preservation of itself as a species through either propagation or the dispersal of its seeds. Kant described this self-preservation through reproduction in terms of both the founding of additional schools and the formation (*Bildung*) of well-instructed teachers.³¹ Here Kant played on the idea of cultivation, moving between images of the school as a site of organic generation – as itself a "nursery [*Pflanzenschule*]" capable of producing teachers as its particular cultivars – and as an actual plant capable of its own organic generation, thus functioning as "a seed which, by means of careful cultivation, can give rise in a short time to a multitude of well-instructed teachers who will soon cover an entire country with good schools".³²

The second task that nature had given to the school concerned its role in the support and cultivation of mankind, nature's most favored phyletic line. Regarding this task, Kant turned again to the idea of cultivation. The soil or ground upon which Basedow's methods were to take effect, according to Kant, had been prepared by nature in advance, given that it lies within man as his natural predisposition to such cultivation. The school's cultivation of natural predispositions and the ability of children to thereby become cultivated members

of society were what it meant to talk of the preservation and advancement of the human species for Kant: “For”, Kant explained, “that which is merely the development of the natural predispositions lying in humanity shares this feature with universal mother nature: that she does not allow her seeds to run out, but rather multiplies herself and preserves her species”.³³ By promoting the development of humankind in this manner, Basedow’s was an institute that was therefore as “fitting to the purposes of nature” as it was to the purposes of society.³⁴ The school was capable of “the greatest possible, most permanent and universal good”, serving as a site “where the seed [*Same*] of the good itself can be cultivated and sustained, in order that in the course of time it may disseminate and perpetuate itself”.³⁵ In light of this, Kant urged his readers to “cultivate with care this still tender germ [*Keim*]” of a school, in the hope that it might achieve “complete growth” and have “its fruits soon spread to all countries and to the most remote descendants”.³⁶

As in the Humanist tradition of Renaissance Italy, Basedow’s school prioritized the Socratic method. Here Kant was again complimentary, since he thought, for example, that while the mechanical recitation of the catechism might be useful when approaching what he called “historical faith”, in the case of “universal religion” the Socratic method was necessary:

In the culture of reason we must proceed according to the Socratic method. Socrates, who called himself the midwife of his hearers’ knowledge, gives examples in his dialogues, which Plato has in a manner preserved for us, of the way in which, even in the case of grown-up people, ideas may be drawn forth from their own individual reason. [...] The mechanical method of catechising is also useful in some sciences; for instance, in the explanation of revealed religion. In universal religion, on the other hand, we must employ the Socratic method.³⁷

One of the virtues of Basedow’s school, as Kant saw it, was that it was open to a variety of students, for Kant’s main concern regarding the education of princes was their privileged isolation from the cultivating effects of examination and debate: “It is a common error in the education of princes”, he tells us, “that because they are destined to become rulers, no one really opposes them in their youth”.³⁸ To remedy this, Kant thought that it was the joint task of the intellectual classes to engage in the public use of reason, on the one hand, and the job of the rulers to give them the right to publish their works without fear of censure: “For enlightenment of this kind”, Kant argued, “all that is needed is *freedom*. And the freedom in question is the most innocuous form of all – freedom to make *public use* of one’s reason in all matters”.³⁹ Without this sort of check on their power, the prince, according to Kant, would grow “crooked” and directionless:

A tree which stands in a field alone grows crooked and spreads wide its branches; while a tree which stands in the middle of a forest, with the pressure of other trees around, grows tall and straight, seeking air and sunshine from above. It is the same with rulers. In any case it is always better that they should be educated by some one among their subjects, rather than by one of themselves. We can therefore only expect progress to be brought about by rulers if their education has been of a higher kind than that of their subjects.⁴⁰

As we have seen thus far, Kant made frequent recourse to the language of seeds or germs when discussing our native capacity for moral improvement and the significant role played by education when it comes to cultivating this openness to the good. But in

addition to his writings on metaphysics and morality, he also sought to offer his own contributions to contemporary natural historical debates. In this case Kant was most interested in discussions regarding the geographic distribution of mankind, and its subsequent differentiation into distinctive races, cultures, religions, etc. In these works Kant again relied on the language of germs and dispositions, but while he took these to be non-physical in a manner akin to the germs for enlightenment and reason, in these writings he had to allow for their being *physically* affected by their environment, since that was the causal force driving variation. That is to say, whereas culture, moral training by way of examples, Socratic discourse and so on could work on cultivating our native capacities or germs for the moral improvement of the species, this was different in kind than the effects of sun and food in generating permanent physiological differences within the human phylum.⁴¹

In Kant's course announcement for his Physical Geography lectures in 1775 he explained human variation on the basis of germs, arguing:

The human being was destined for all climates and for every soil; consequently, various germs and natural predispositions had to lie ready in him to be on occasion either unfolded or restrained, so that he would become suited to his place in the world and over the course of the generations would appear to be, as it were, native to and made for that place.⁴²

The fact that these germs are physically affected by their environment raises a question for us regarding their ontological status and dispositions, since it is easy to imagine them as real, physical things – things which in fact are functioning as the mechanical means of Nature's global distribution of the species. But while one can hardly refrain from thinking about DNA and genetic inheritance when reading Kant's physiological account of race, the germs seem to be functioning in the fashion of emergent qualities, as properties which can be realized given the right environmental conditions but which will otherwise exist only as a set of possibilities. Indeed as Kant tried to get at what he meant by these germs in a review of Herder's own efforts to produce a natural history of mankind in 1785, Kant said of his own position:

if the cause organizing itself *from within* were limited by its nature only perhaps to a certain number and degree of differences in the formation of a creature [. . .] then one could call this natural vocation of the forming nature also "germs" or "original predispositions" without thereby regarding the former as primordially implanted machines and buds that unfold themselves only when occasioned as in the system of evolution, but merely as limitations, not further explicable, of a self-forming faculty, which latter we can just as little explain or make comprehensible.⁴³

Finally, while I do not have the space here, at the end of this essay, to develop Kant's discussion of moral character, I do want to at least mention his account, since the "germ for character" – Kant also uses natural disposition – lies at something of a crossroads in Kant's writing. In the 1770s, character was identified with temperament and was thus said to be a physical quality, one susceptible to moral training but ultimately predetermined from birth.⁴⁴ These discussions took place in Kant's lectures on anthropology and were indexed at times to discussions of the character of a people or a race. Kant explained there, for example, that the "savage Indian or Greenlander" had "the same germs as a civilized human being, only they are not yet developed".⁴⁵ By 1781, however, Kant was suggesting that in cases where no advancement has occurred in a people over time, one must assume that there is a certain natural disposition within them that cannot be

overcome, and that “[t]he Hindus, the Persians, the Chinese, the Turks, and in general all Oriental peoples belong to this group”.⁴⁶ And by 1790, Kant was ready to say that although the point of the human species’ natural dispositions is to lead it to the formation of a civil society (and ultimately, thereby, a moral kingdom of ends), neither the African nor the American Indian would ever be capable of creating such a society themselves.

After 1791, however, Kant removed all discussion of racial difference from his anthropology lectures and introduced a theological theory of conversion, a “revolution of the heart”, as he put it – one that allows humans to overcome genealogy and race altogether in their embracing of the moral law.⁴⁷ I mention this only briefly, and in closing, because what this move shows, I think, is Kant’s deep commitment, in the end, to the fact of divinity within the human and the possibility open to all for this seed to take root, to flourish and indeed to open hearts to wisdom both universal and divine.

Notes

1. *Rationes seminales* (from the Greek λόγοι σπερματικοί or *logoi spermatikoi*) has been translated variously as germinal or causal principles, primordial reasons, original factors, seminal reasons, archetypes (*semina rerum*), virtues, reason-principles and seed-like principles. It suggests a theological theory of the origin of the species such that God created the world of creatures in seed form with certain potentialities, which then developed or unfolded accordingly over time (what appears to be change in nature is thus simply the realization of preexisting potentialities). In the life sciences the idea of *rationes seminales* was later also used as an explanation for cases of both apparent spontaneous generation and observed parthenogenic reproduction.
2. From Ficino’s preface to his Latin translation of the *Hermetic Corpus*; see Copenhaver and Schmitt, *Renaissance Philosophy*, 147.
3. “In those things which pertain to theology the six great theologians of former times concur. Of whom the first is said to have been Zoroaster, head of the *magi*; the second is Hermes Trismegistus, originator of the priests of Egypt. Orpheus succeeded Hermes. Aglaophemus was initiated to the sacred things of Orpheus. Pythagoras succeeded Aglaophemus in theology. To Pythagoras succeeded Plato, who in his writings encompassed those men’s universal wisdom, added to it, and elucidated it”; see Schmitt, “Perennial Philosophy”, 508. On the addition of Zoroaster, see also Allen, *Synoptic Art*, 1–49.
4. Idel, “Prisca theologia in Ficino”, 141–42.
5. Walker, *Ancient Theology*, 12. For a parallel discussion of the role played by magic in Jewish thought during the Renaissance, see Idel, “Magical and Neoplatonic Interpretations”.
6. My discussion here is indebted to Hirai, “Concepts of Seeds and Nature”.
7. Ficino, *Platonic Theology*, I, 257.
8. *Ibid.*, III, 213. See also *ibid.*, III, 231: “As trees and living creatures and their parts grow from their own seeds, so too the branches of learning arise from innate origins, otherwise the mind would be more sterile than nature which produces its offspring from inborn seeds”.
9. *Ibid.*, III, 223.
10. *Ibid.*, I, 14.
11. *Ibid.*, IV, 273.
12. For more on this topic, see Celenza, “Revival of Platonic Philosophy”.
13. Cited in Rees, “Ficino’s Advice to Princes”, 339–40.
14. A lively account of this and other matters regarding relations between Frederick’s court and the Royal Academy can be found in Terrall, *The Man Who Flattened the Earth*, 258.
15. Leibniz, *Philosophical Papers and Letters*, I, 424.
16. Leibniz, *Philosophische Schriften*, III, 624–25.
17. A thorough treatment of this can be found in Menn, *Descartes and Augustine*.

18. Leibniz, *Philosophical Papers and Letters*, II, 962. Leibniz's professor and mentor, Jakob Thomasius, was well versed in Neoplatonism, arguing for example that "[t]hings are in God as in a fount and first cause, i.e., most eminently; secondly, they are in Mind as Ideas and form; thirdly, they are in Soul as *rationes* placed in its essence; fourthly, they are in Nature as seeds. For nature is the seminal power effused in universal matter by the soul of the World. Fifth, they are in Matter, although as a shadow, through imitation and participation"; see Mercer, *Leibniz's Metaphysics*, 203.
19. Leibniz, *New Essays on Human Understanding*, 80.
20. Kant, *Critique of Pure Reason*, 655. The citations of Kant in this paper all correspond to the complete works of Immanuel Kant, as published in *Kants gesammelte Schriften*. Wherever possible the English translations in *The Cambridge Edition of the Works of Immanuel Kant in English Translation* are used. The exceptional citation practice is that used for Kant, *Critique of Pure Reason*, translated by Norman Kemp Smith (New York: Palgrave Macmillan, 2007), A835/B863 on p. 655; Kant, *Kants gesammelte Schriften* 3:863, 4:835.
21. Kant, "The Metaphysics of Morals", 366; Kant, *Kants gesammelte Schriften*, 6:207.
22. *Ibid.*
23. Kant, "Religion with the boundaries of mere reason", 154; Kant, *Kants gesammelte Schriften*, 6:125. This argument would be mirrored in the social and political sphere once Kant took up the history of civil constitutions in his essay *Perpetual Peace*, a history whose epochal determinations were unified throughout, as Kant saw it, by the unfolding of reason's concept of right (Kant, "Toward perpetual peace", 322–323; Kant, *Kants gesammelte Schriften*, 8:350) – a point that Kant repeated in terms of the "evolution of a constitution" in both the *Conflict of the Faculties* (Kant, "The conflict of the faculties", 303–304, cf. 306; Kant, *Kants gesammelte Schriften*, 7:87–88, cf. 7:91) and the *Metaphysics of Morals* (Kant, "The Metaphysics of Morals", 480; Kant, *Kants gesammelte Schriften*, 6:340).
24. I develop these claims at length in Mensch, *Kant's Organicism*. Briefly, however, it is worth noting that the history of the concept of epigenesis is both long and changing. Aristotle first described the process by which the male imparted the soul to the female during conception in a manner that led the process to be later described as epigenetic. In the 1650s Harvey considered the gradual differentiation of tissues – from blob to parts – during incubation to be epigenetic. In the eighteenth century epigenesis became identified as a counter to the theory of preexistence, since epigenetic production – however it was specifically conceived – still argued at base for a native, formative capacity on the part of organisms, whereas preexistence theories of generation solved the problem of even individual formation by way of appeal to God's original creative act. The main split within the epigenesist camp turned on the source of form. Buffon (and Kant, as far as his later endorsement of a "generic preformation" in biological organisms was concerned) argued that while God had initially established the "molds" for the distinct species lines – molds carried within the individuals and transmitted across generations – the actual fitting together of the molded parts occurred during embryogenesis. This sort of "mechanical epigenesis" was different from C. F. Wolff's emphasis on a *vis essentialis* or vegetative force at work within nature, and while Wolff advanced a vitalist approach to generation he could not account for the transmission or inheritance of forms in nature. Blumenbach's subsequent appeal to a *Bildungstrieb* or formative force within an organism was taken by many to solve Wolff's problem, despite being rejected by Wolff himself – who believed that force could not on principle contain form – and being despised by Goethe for its importation of teleology into nature (Goethe relied on an archetype for the inner form and the environment for the outer form). Epigenesis was oftentimes conceptually linked to parthenogenesis (and to a much lesser extent, spontaneous generation) insofar as it describes an event that is original to itself and is thus linked with terms like "self-born" and "self-fertilizing" – i.e. events that are spontaneous or productive without tincture from external content or force. It was in this latter vein that Kant identified reason as epigenetic, and he was explicit regarding the parthenogenesis or "self-birth [*Selbstgebärung*]" of reason (Kant, *Critique of Pure Reason*, 609–610; Kant, *Kants gesammelte Schriften* 3:793, 4:765. Cf. Kant, *Kants gesammelte Schriften*, 18:273–75). Regarding this as a specific "epigenesis" of reason, see Kant, *Kants gesammelte Schriften*, 17:554, 18:8, 18:12, 18:273–75; Kant, *Critique of Pure Reason*,

B167. With that said, it is important to recognize that while Kant held this to be true insofar as a *metaphysical* approach to the mind was concerned, he was neither interested in naturalizing the mind via his use of a biological model nor convinced that this biological model might in fact be correct when it came to actual biological organisms.

25. Kant, *Critique of Judgment*, 319; Kant, *Kants gesammelte Schriften* 5:431.
26. Kant, “The Metaphysics of Morals”, 529; Kant, *Kants gesammelte Schriften*, 6:400.
27. *Ibid.* Cf. Kant, “Toward perpetual peace”, 317–318; Kant, *Kants gesammelte Schriften*, 8:344.
28. Kant, “Lectures on Pedagogy”, 466; Kant, *Kants gesammelte Schriften*, 9:445.
29. *Ibid.*, 445–456; 9:451.
30. Kant, “Essays regarding the Philanthropinum”, 101; Kant, *Kants gesammelte Schriften*, 2:448.
31. *Ibid.*, 102; 2:449.
32. *Ibid.*, 102–103; 2:450.
33. *Ibid.*, 100; 2:447.
34. *Ibid.*
35. *Ibid.*, 104; 2:451.
36. *Ibid.*, 101; 2:448. For more on Basedow’s school, see Loudon, “Not a Slow Reform”.
37. Kant, “Lectures on Pedagogy”, 466; Kant, *Kants gesammelte Schriften*, 9:477.
38. Kant, “Lectures on Pedagogy”, 438; Kant, *Kants gesammelte Schriften*, 9:442.
39. Kant, “What is enlightenment?” 18; Kant, *Kants gesammelte Schriften*, 8:36.
40. Kant, “Lectures on Pedagogy”, 442–443; Kant, *Kants gesammelte Schriften*, 9:448.
41. Kant’s account is discussed more fully in Mensch, “From Crooked Wood to Moral Agent”.
42. Kant, “Of the different races of human beings”, 90; Kant, *Kants gesammelte Schriften*, 2:435.
43. Kant, “Review of J.G. Herder’s *Ideas for the Philosophy of the History of Humanity. Parts 1 and 2*”, 138–140; Kant, *Kants gesammelte Schriften*, 8:61–62. Kant’s response to Herder’s efforts to provide an alternative philosophical history of mankind is discussed in greater detail in Mensch, “Kant and the Skull Collectors”.
44. Manfred Kuehn discusses Kant’s account of character in connection with his lectures on both ethics and anthropology in a number of helpful essays, including in Kuehn, “Ethics and Anthropology”; Kuehn, “Kant on Education”.
45. Kant, “Anthropology Friedländer (1775–1776)”, 194; Kants, *gesammelte Schriften*, 25:651.
46. Kant, “Menschenkunde (1781–1782?)”, 315; Kants, *gesammelte Schriften*, 25:1181.
47. Kant, “Religion within the boundaries of mere reason”, 91–92; Kant, *Kants gesammelte Schriften*, 6:47.

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