APPRAISAL

The Journal of the British Personalist Forum

In This Issue
     Death and the Daimon!

Plus

A Double Dose of Polanyian Emergence

Thomism & Phenomenological Realism on Justice, Religion, & Happiness

Collapsing the Wave Function with Quantum Persons

Appraisal

Published twice a year in March and October.
Four issues per volume.

Editorial Policy:
- *Appraisal* seeks to develop and promote constructive ways of thinking, from within personalist perspectives, in philosophy and other intellectual disciplines.
- *Appraisal* believes that philosophy should not be a narrow, academic and technical specialism, but should address itself to the general public and to the intellectual and practical issues of the present.
- From time to time *Appraisal* will include *Re-Appraisals*, articles or collections of articles upon 20th C. thinkers whose work deserves to be more widely known.
- *Appraisal* takes a particular, but by no means exclusive, interest in the works of Austin Farrer, John Macmurray, and Michael Polanyi.

Format:
- The maximum length of articles is 10,000 words, although longer articles can be split into 2 parts for publication in successive issues.
- All contributions should be in good, clear English, without jargon, and with end-notes and frequent sub-headings (at approximately every 700 words).
- Please see inside rear cover regarding references to the works of Michael Polanyi.
- **Please ask for the Style Sheet or save or print it from our web site:**

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Indexing:
Appraisal is indexed in *The British Humanities Index* and *The Philosophers' Index.*

Reciprocal Arrangements:
Appraisal exchanges copies with *Polanyiana,* the journal of the Michael Polanyi Liberal Philosophical Society (Hungary), *Tradition and Discovery*, the journal of the Polanyi Society (USA), *Revista Portuguesa de Filosofia*, and *La Revue Roumaine de Philosophie*, and would welcome similar exchanges with other journals.

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The Journal of the British Personalist Forum

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www.britishpersonalistforum.org.uk.

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EDITORIAL

Salutations one and all. Welcome to the New Year and welcome to what ought to be the Autumn 2016 issue. In an effort to regain a toe-hold for truth in this supposedly post-factual world, however, we shall call this the Winter 2017 issue of *Appraisal*. Our temporal experiments of the last issue are complete and we return to the Northern Hemisphere, unquestionably one of the two greatest hemispheres in the world. That's right, my fellow hyperboreans, we made it to the podium; now it's time to urinate in a cup.

Readers may recall that in the last issue I passed some remark on how busy 2016 has been. 'Busy', it now appears, is not the word; 'bizarre' seems closer to the mark. Like a roller coaster with a big stretch of track missing, history has taken a rather surprising turn. Not that everyone will be surprised. My old Head of Department once said that she thought the political and economic conditions in the West were developing along lines alarmingly similar to those which characterised the early years of the last century. Given that she is a political historian by trade, I'm inclined to give her view some credence. Nevertheless, even if there has been wide-spread economic instability and a lurch to the right, I'm sure it will all be all right this time. It's not as if we in the West would make the mistake of demonising a particular ethnic group and using them as a scapegoat for deeper social and political problems, or get swept up in the politics of fear and isolation while ignoring the erosion of basic human rights. Obviously, we wouldn't do that again.

Oh dear.

If the pale rider (i.e. Death, not Clint Eastwood) *is* on his way, at least we will no longer have to juggle the pterodactyl of ptruth now that we are, apparently, living in a 'post-factual' world.

In fact, I found the moralistic bleating about this in the press and what is laughingly called *social* media fractionally more surprising than all the other sewage we have had to wade through this year. My surprise is not entirely due to the staggering hypocrisy and lack of self-awareness that it reveals; more simply, it is because the relegation of truth and reasoned argument to a place of, at best, secondary importance, has long been a feature of Western philosophical discourse. As with all the other most interesting areas of human existence, facts and reasoned argument (whatever we mean by such enigmatic expressions) seem to have little effect on what people believe or how they act. I do not exclude myself from this; for example, I do not believe that there is anything metaphysical materialists could say, no evidence they could produce, no argument they could put forward, which would make me change my mind about how flatly incomprehensible materialism is. That assumption, I hold *a priori* for, I should add, what I believe to be good reasons. I have to admit, however, those reasons are post-factual, even if the truth is not. Equally, I do not suppose that there is anything I could say that would convince the fervent materialist of the error of his or her ways; anything at all, up to and including the fact that a universe constituted entirely by physical processes is a universe without meaning and, consequently, a universe without books written by materialists. It does not matter how large the word 'cosmic' is written on the cover, no book was ever written by physical forces colliding.

In making such claims about how resistant people are to facts and argument, I also admit that I speak from personal experience. This leads me, a little sadly, to agree with Hume's claim that it is emotion, not reason, which governs our beliefs and our actions. That is not entirely fair or accurate, however. As any Macmurrian will quickly point out, should we need them to do so, the reason/emotion dichotomy is a false one. Reason does not stand alone unless we make a prior commitment to let it do so, to rely, for example, on utilitarian cost/benefit calculations of the good. We have to *care* about the method if we are to bet our lives upon it. Equally, of course, some of our emotional reactions are perfectly rational while others are not. Right now, for instance, when it is frostier than a cartoon tiger punching a snowman in the face, the temperature is a more intelligible concern than deadly snakes. The zookeeper who unwisely accepts an invitation to dinner in the pythonarium is likely to have a different perspective. Similarly, if the reptilian co-author of a book called *Direct Democracy*, which, in part, calls for the British National Health Service to be dismantled, is put in charge of that Health Service, surprise at said reptile's pursuit of his publicly stated agenda would not be altogether rational.

Indeed, it does rather seem as though the End of Days is upon us. And lo! In addition to all the other strange and terrifying events of the past twelve months, one stranger and more terrifying still has come to pass: namely, the publication of yet another issue of *Appraisal*, another issue published within six months of it being due, an issue published within nine months of the last one! The dead shall rise and the seas shall be as blood. Is this the final sign of the coming apocalypse? Was that our plan all along? Given the ruthless efficiency and professionalism of your editor and the blank-eyed, monk-robes who dedicate their time, perhaps even their souls, to correcting his spelling, it must be a safe bet.

Before the last trump sounds, then, we invite you to enjoy a most excellent selection of articles. We have, for your entertainment and edification, Ferenc Mújdricza's fascinating discussion of the Socratic death instinct, which seems especially appropriate. In addition, we bring you a brace of explorations of emergence from Daniel Paksi and Jon Fennell; although, all things considered, it is, perhaps time to give up on the idea of evolution; it is clearly not happening for our species. Bringing up the rear, John Hofbauer addresses himself to matters of justice, religion, and happiness. Read about them now before they are gone forever.

And the very happiest of Happy New Years to one and all!

Simon Smith
Haslemere

SOCRATES' DAIMON 'IN THE MIRROR OF DEATH'

Ferenc Mújdricza

Abstract: In contrast to Kierkegaard's view, I consider Socrates' irony to be a strategy ('The Feint of Socrates'), a scheme designed to veil, to repress, his positive, oracular intuition to protect his philosophical self, to avoid being labelled as an oracle, and to accomplish the greatest inner and external freedom possible. The fusion of the ironic philosopher with the intuitive oracle manifested itself when he revealed it in the face of death, which he did through the collectivist law-worshipping sentences of *Crito* and the vision-like passages on death in *Phaedo*.

Key Words: Daimon, death, Feint of Socrates, irony, Kierkegaard, oracle, Socrates.

1. Introduction

The Socratic-Platonic death-concept, as an attitude toward death, basically determined Western culture's grounds for thinking about and viewing death. However, Socrates' approach to death – demonstrated by drinking the cup of poison – meant not only inspiration, but also either an admired and glorified example, or a mental barrier that the thinkers of later ages found difficult to overcome; at least, those of post-Socratic antiquity and early Christianity. In this article, I shall discuss the topic of the oracle and the daimon of the Socratic irony – the very topic that Hegel brought up and was further elaborated by Kierkegaard as a reaction to Hegel – and its relationship with Socrates' view on death.

The contemporary Hungarian philosopher, Dezső Csejtei, found Hans Urs von Balthasar's periodisation appropriate to categorise the Western philosophy of death, with a slight correction, according to which Western thought on death can be divided into four great thanatological periods: the *Mythical-Magical*; the *Metaphysical*; the *Scientific-Aufklärist* (the latter existing partly parallel with the Metaphysical); and the *Existential Period*.1 This periodisation designates the arrival of the Metaphysical Period to Socrates.

The mere fact that Socratic ideas completed the process by which death became 'the greatest *mercy* possible',2 instead of the frightening image of the Homeric hopeless, dark shadowland, would not yet call for the designation of a new thanatological period. The Pre-Socratic philosophers' role is indisputable in this process, such as Heraclitus' probing. By the time of Heraclitus, death was not merely a tragic event for the individual, but the gift of eternal existence for those brave warriors slain in battle.3 The Orphic, Pythagorean, and Empedoclean doctrine of the transmigration (reincarnation) of souls included even the possibility of ascension to the divine spheres. Therefore, Socrates and Plato did not create

their radical opposition to the Homeric approach *ex nihilo*. They fit in a distinctly recognisable process of philosophical progression, even though not necessarily consisting of interconnected elements. According to Dezső Csejtei, we should emphasise two major factors that allow us to regard Plato's philosophy as a turning point. On the one hand, his 'death programme' is remarkably elaborated compared to the earlier thanatologies; and on the other hand, 'this philosophical death programme happens not to be just a marginal *part* of his philosophy but rather the axis of it.4

2. Exceeding Irony: Socrates' Daimon

Hegel and Kierkegaard (the latter partially reflecting on the former) delineate Socrates' irony as his abstract, divine daimon (*daimonion*). Hegel describes Socratic irony, on the one hand, as a manner of speaking to people, while on the other hand, as a means that leads people to the true good and to the universal Idea through thought.5 Kierkegaard depicts this daimon as a sort of instinctive-intuitive, verbally inexpressible inner voice that is, however, incomplete: not an action-motivating and orientating form of divination but instead a negative one, an inspiration that is merely warning, prohibitive, halt demanding.6 According to Kierkegaard, this very character of his daimon was the reason for Socrates' critical disposition – 'for this in turn caused him to relate himself negatively to actuality, or in the Greek sense, to the state'7 – and his evolving quasi-individualism. It is clearly visible from the passage where Kierkegaard refers to Hegel, suggesting that, by following this warning daimon, Socrates was heading towards individualisation. This voice:

> …Never concerned itself with the substantial interests of the life of the state, never expressed itself concerning these, but merely occupied itself with Socrates' and at most his friend's wholly private and particular affairs. (...) Socrates (...) posited the individual as capable of decision in opposition to fatherland and customary morality, and thus made himself an oracle in the Greek sense.8

Therefore, Kierkegaard insists that Socrates' daimon acts as a counterpoint to the dominant collectivist norms of his time, to the laws sanctioned by the gods, and to the state's paramount supremacy:9 'The standpoint of Socrates is subjectivity, inwardness,'10 '[i]n place of the respect forcefully yet mysteriously binding the individual to the reins of the state, there now appeared the decisiveness and certainty of subjectivi-

ty itself'.11 Although laws determined the universal questions, in particular events, both in state-related and in private cases, the *oracle* assisted decision-making. Since the oracles were in contact with the gods – whom the Greeks considered the sources of law – it is apparent that the will behind the decisions was that of the transcendent divine authorities even in these particular events. The relations to the gods, the oracles, and the laws are equally external – but Socrates put his own daimon in the place of the oracle.12 Kierkegaard states that '[t]his daimonic lies in the transition from the oracle's external relation to the individual to the full inwardness of freedom,'13 consequently, Kierkegaard admits that it cannot be complete in absence of the positive, active, orientating side of the daimon.

However, Kierkegaard does not speak about another feature of the transitionality of Socrates' daimon. I think it is in the question: How can the oracle be described as an individual? The oracle, who was related to the citizens as well as to the state externally, the oracle that *to himself* Socrates more or less became (according to Kierkegaard's statements mentioned above). Although neither Hegel nor Kierkegaard give us detailed discussion on the oracles' characteristics, it seems obvious that oracles possessed not only the negative inner voice, that intuition that Socrates himself also had, but the positive, too. This positive intuition revealed itself in their talent for providing orientation and helping the decision-making in personal and in state affairs.14 According to the tradition, through the Pythia, the best-known and maybe the most important oracle, spoke Apollo – who conveyed Zeus' will. Apollo was connected to the ideas of order and law. He represented the legal aspects of religion in the Classical period,15 which Plato attributed to 'the most important, the finest and the most fundamental pieces of legislation,' the religious laws and rites to Apollo.16 Plato also described the Pythia's delirium as similar to poetic inspiration the Muses bestowed and to Aphrodite's amorous ecstasies. How did the Pythia, selected from amongst the peasant women of Delphoi, reach this mental state? According to Eliade, who denies the theories of intoxicating substances or vapours, in fact, we know nothing about it.17

We can still assume that if Socrates' warning-type intuition had been a transition to full inner freedom, then real individuality was not represented by Socrates, but by the oracles. It follows from the above that Socrates' individualism was only a fragmentary, vague, incomplete take-off from culture's collectivist roots. The oracles accomplished the above-mentioned 'full inwardness' of freedom as they possessed the negative and the positive intuition as well. They had the divine inspiration in favour of not only themselves and their closest friends (like Socrates' intuition according to Kierkegaard) but of every member of the community and even the state. Hence, *abstract*

subjectivity turns into *objectivity concretised by its abstraction* through the completion of this subjectivity, by its total enclosure in its inward flow *in a particular personality*.18 This is what Socrates never had because his daimon, and by his daimon, his personality also, can be defined as transition, liminality between being a member of the community – in this regard it makes no difference whether he was an important or an unimportant member – and being an oracle. Hence, Socrates could not be a true *outsider* (the passages of *Crito* make this clear). That was possible, furthermore, obligatory, only for an actual, accomplished oracle.

Therefore, only the oracle, who acted as an external relation for the whole community, was *truly free* from the power of the collective spirit. But the oracles, who represented the complete, at that time *mystical-intuitive* individuality, were few in numbers, and became mere instruments in the hands of their community.19 So in this regard, Socrates might not be considered as an outstanding person of his age. That which still makes him special is the unique balance of the external and inward freedom that was made possible by his very 'half-sided oracleness.'20 By means of the abstract subjectivity created by his negative daimon that manifested itself in his irony as well, he separates from the collective, but since this daimon is 'just' negative, he does not become an oracle: an instrument, so to speak, a fortune-telling tool of the collective. Such extension of his inward freedom resulted in the enhancement of his external freedom and the partial separation from the rule of state and community. But this all happened without the accomplishment of the inward freedom and thereupon without the oracle-like enclosure in himself that implied in those times the total loss of external freedom; moreover, ceasing to exist as a human being by the degradation to an instrument. That is how Socrates could become such an individual who had the most freedom possible in his time.21

Beyond these, Kierkegaard explains that this negative inward daimonic talent made Socrates an 'ironic subject', who saw his whole reality with an infinite absolute negativity: irony; to whom his given reality became a void, imperfect world of forms. This ironic stance made that criticising freedom possible with which he approached his age: 'The ironist (...) has advanced beyond the reach of his age and opened a front against it (...), [w]ith irony the subject is negatively free.'22 Instead of the oracles' privilege: omniscience (knowing *omnis*), he was characterised by ignorance – knowing nothing and *knowing nothingness*, as Kierkegaard persuasively demonstrates. According to him, Socrates approached death in the same ironic way – he was ignorant of what death was or what was after death. Since death had no reality for him, he did not fear death23 – this is Kierkegaard's conclusion. Here we need to notice that this approach

was different from the Epicurean trickery to fake the absence of fear of death, because this is the fearlessness of the ignorant ('nothing-knowing') irony his negative daimon bestowed upon him.

It is not for me to judge to what extent Kierkegaard's concept of irony was correct. Reading Plato, we can definitely sense the ironic standpoint that Kierkegaard described, but sometimes it seems that Socrates *tells us something*, rather than just denying or destroying. Hegel's explication on the Socratic questioning method seems to verify this suspicion. According to Hegel, Socratic dialogues lack all rivaling points of view that are different from that of Socrates'. He guides his dialogue partners through his questions, 'they reply directly to the questions, which are so formed that they make the answer very easy, and exclude any originality in reply.'24 He firmly controls the dialogues through his questions, and this fact makes a different variant of explanation possible than that of Kierkegaard's one. From the negative, ignorant, daimonic-ironic starting point, Socrates sometimes reaches a positive endpoint, even if he returns to the base of irony every now and then. (Hegel describes it as 'the assisting into the world of the thought which is already contained in the consciousness of the individual.')25 But why is Socrates acting like this? It might be related to the above-mentioned reasons: in order to have the most freedom possible, to keep as much of his individuality and humanity as possible. Socrates does not want people to view him as an oracle, and especially he does not want people to feel obliged to label him as an oracle. It might have been 'The Feint of Socrates', as I call it. He constantly doubted his own (in certain cases very obvious and concrete) insights and wit to preserve and correct the sensitive balance of the external (in his relations to the society) and inward freedom. It still does not necessarily mean that Socrates had been an accomplished oracle in the Hegelian and Kierkegaardian sense. It just means that if he truly had positive, creative thoughts as well, then his irony was not only the consequence of a 'daimonic necessity' but a conscious veiling *strategy* to stay clear of the oracle label. Because Socrates was not solely and not even primarily a person with daimonic revelations, but principally a philosopher with exceptional reasoning talent.26 Had Socrates accepted the one-dimensional oracle label, he should not only have given up his individual freedom and consideration as a human being by the community, but his philosophical side might have also remained forever hidden. Therefore, irony and self-irony can be taken as means of self-protection, undertaken to protect his individual freedom (that was possibly the most complete that one could have in those ages), to protect his non-daimonic philosophic self, and of course his life as a member of the community from the threat of the collective, either putative or real but undoubtedly possible.

In the end, this threat overtook him in another form, as it is written in the *Apology*, because he refused to play either the role of the wise philosopher or that of the oracle. He says that human wisdom is of little worth, it is only God who is wise.27 Based on this, human wisdom can only be useful to unveil the lack of wisdom. Socrates' arrogance, since he confuted poets, craftsmen, statesmen, and orators, and did so unasked and unrelenting, necessarily aroused anger in them. In the beginning of his *Apology*, Socrates declares that he tells the truth,28 and he insists that what he says is just throughout the *Apology*. But had this truth meant ignorance (knowing nothing), the impossibility and worthlessness of human wisdom, as he tries to suggest, proper action would have been *non-action*. And he would not have 'performed' arrogant, destructing debates that lead to his accusation. Because if *human* truth meant nothing else than knowing nothing, all words and deeds would be meaningless, mistaken, and pointless in the end.

There was at least one thing that Socrates didn't count as mistaken or pointless – pointing out the unjust in others' words or deeds. But we cannot take this kind of agency as a negative agency, since it is meant to prove the void, empty nature of human wisdom compared to the divine wisdom in a positive, active, creative way (even if by ironic, negative means). Hence, irony is an *instrument*, not a necessary personality trait. Had Socrates reckoned himself as someone without wisdom, then only non-active contemplation, or at most, solitary meditation, would have remained for him the only possibility of human existence. But by declaring that human wisdom is of nothing or little worth compared to divine wisdom, he admits willy-nilly that he indeed possesses the *experience* of divine wisdom. Not necessarily the complete and practically 'usable' divine wisdom – but he had to have at least some kind of intuition of it, because in lack of such intuition, he couldn't have compared either himself, or the philosophers he confuted, to anything. Neither could he declare that he was telling the truth when he was speaking about the truth of confutation without that intuition. It follows that Socrates had to have a positive daimon as well, in any event, that although it might have been either a fragmentary and/or a hidden inner voice, served as a basis of using his irony in such an arrogant way that others took it as outrageous behaviour. Socrates marks this positive daimon as the absence of the negative in his *Apology*29 – he deduces that he is acting right from not getting the opposing Sign, from not hearing the retaining, interfering negative inner voice.

The absence of the negative verifies the correctness of the philosophy replacing the positive inner voice explicitly. He hid his positive daimon under the disguise of philosophy that completed his negative daimon not opposing his philosophy. This way he could avoid becoming an oracle. *Phaedo* exemplifies

that Socrates had the positive inner voice as well throughout his life that inspired creative actions, but he claims that he resisted its voice until the period between the death sentence and his death. The same dream had visited him often in his life – although he doesn't call this dream daimon – and it said to make and practise art (it is well-known that in Ancient *Hellas*, arts were activities believed to have been inspired by the Muses). He didn't take these words literally before the trial, and he assumed that he should do the very thing that he was already doing, practising the art of philosophy. But in the last period before his death he gave in to this inner voice: he wrote a hymn to Apollo – the god said to be in direct contact with the Delphic oracle – and put the tales of Aesop into verse.30

This often-appearing, urgent voice of his dreams is far away from the ironic, negative, warning, but never action- or creativity-inspiring daimon that Kierkegaard analysed and that influenced Socrates to doubt so many things. And if we kept in mind Plato's above-mentioned metaphor suggesting Pythia's ecstasy analogous to the poetic inspiration that the Muses bestowed upon the poets, our suspicion grows. Although the fact that Socrates allows himself to do poetic activities in the face of death obviously does not necessarily mean the presence of 'oracleness', the lyrical invocation of Apollo is still not enough evidence (even though it is hard to take it as mere coincidence). But then in *Phaedrus*, we can watch 'The Feint of Socrates' in action: according to Socrates, he had the familiar divine sign which always held him back from doing something; in this case, it forbade him crossing a river. However, this inner voice he heard did not only forbid the crossing, since the complete 'revelation' was this: he was not allowed to leave the spot *until* he made an atonement of some kind. That is, the inner voice described as a negative, interfering, retaining, holding back, now gave an advice on the magical solution of the situation.31 But Socrates cunningly accentuates the negative aspect of the daimonic suggestion and stresses this, and only this, aspect. He notes the positive, inspiring, action-provoking side almost incidentally, degrading his 'seer talent' with it too, that, by the way, that he admits here to have (although he says it is 'not a very good one').

3. A Divided Soul

According to Hegel, Socrates was the first individual who discovered the infinitely subjective freedom of the thinking consciousness – Hegel calls it 'the Socratic principle'.32 On the grounds of this principle, Socrates opposed the laws – considered to be the will of gods – that determined the collective, the society of the city-state, and 'asks if this is actually law in itself?'33 The consciousness that turned back within itself does not automatically accept the 'ready-made' (social) reality and laws any longer, but requires to understand, demands the subjective wit that looks beneath the surface. However, this is a dangerous shift for the state and for the entirety of the community: Socrates invalidates the immediate, ready-made contents. The individual must create a morality justified by its own thought. But such undermines the common rules, the collective morals, and turns them from absolute to relative, from unavoidable to something that has to be questioned (but not necessarily rejected!), and analysed. According to Hegel, it lets us understand Socrates' tragic fate.34 Hegel's summary explains that since 'the principle of the Greek world could not yet bear the principle of subjective reflection,'35 '[t]he Athenian people were thus, not only justified, but also bound to react against it according to their law, for they regarded this principle as a crime.'36 Socrates' fate was hence determined inevitably by his own principle. But for Hegel, the regret Athenians later felt over Socrates' condemnation proves that this principle had been already integrated into the spirit of the Athenian society as well, and thereupon, the Athenian spirit divided against itself.37

The fact that Socrates partially turns back to the collective principle in *Crito* – suggesting the superiority of the city and the community, showing an absolute respect towards the laws for themselves, just because *they are* the laws – seems to oppose this Hegelian standpoint concerning the Socratic principle, because it is not the laws themselves, but the people who commit injustice. Respecting the laws of this world, even if they were imperfect, guarantees the 'benignity' of their 'brothers', their perfect ideas: the laws of the other world (with Socrates' words: 'The Place of the Dead'), and hence the smooth integration into the society of the other world. Although he could save his life by breaking the law, he does not do that – it seems that he admits the superiority of the people's will and the laws *from an external source* over the subjective consciousness in this world and in the other.38

The reason is obvious why this fact does not confute Hegel's above-mentioned passages: because Socrates was facing here on 'death row' the *real* threat of perishing for the first time – with his own impeding death and with the threat he in himself meant for the Athenian state and society with his former actions. Albeit Hegel himself does not make a single reference to *Crito*, we can assume that this dialogue inspired his thoughts concerning the rightfulness of condemning Socrates. The Socrates of the *Crito* is not the same as the earlier Socrates. His self-reflection is becoming completed here by the experience of the threatening reality of death, and his overly self-interested subjectivity changes into some sort of collective-self-reflective objectivity. He recognises the socially harmful effects of the moral decision of the subjective consciousness and the pos-

sible action derived from that, no matter how right they seem to be; therefore, he does not do what could be absolutely justified from his own perspective: he does not escape from his execution. In the end, Socrates submits himself to the laws and – through the laws – to the power of the people that proves that, after all, not any single individual but rather the collective as a whole; the Athenian society, if you like, is the most important value for him. Therefore, Hegel's Socrates-analysis seems to be correct, but not on the whole, 'only' in regard to the *pre-Critonian* Socrates.

But this pre-Critonian Socrates acts as though believing that all his individualist moves benefit the community – at the very moment he recognises his mistake concerning the *actually possible* community, he throws all his former subjective convictions off and bows before the society. So it is not Socrates' *intentions* but rather his *effect* that Hegel reveals – the effect Socrates himself was not even aware of until the dialogue in the prison. Consequently, Socrates most likely did *not intend* to bestow on himself, that is, the subject, the right of decision; he *did not intend* to become moral in the Hegelian sense – he followed his inner intellectual inclinations or positive daimon in all of his actions, as an individual who was not completely self-reflective and self-aware. Hegel also argues that Socrates' *daimonion* (or as Hegel refers to it: his 'Genius') was not Socrates himself, nor his opinions and convictions – an oracle that was not external, but rather his personal, subjective oracle instead.39 Therefore, his inner daimon was not a perfectly ruled, real inward power, but instead a power which remained, for himself, *external in its inwardness*. Were our discussions above on 'The Feint of Socrates' correct, a complete subjective fulfilment would have been undesirable for him, since that way he would have become an oracle, thus an instrument in the imaginary 'eyes of the society' too, and he would have found himself closed within his inward freedom, completely deprived of his external freedom.

Socrates' daimon 'stands midway between the externality of the oracle and the pure inwardness of the mind'40 in Hegel's opinion too, and it is not yet 'the wisdom and free will' of Socrates. Hegel regards it as some sort of schizophrenic condition, a double of consciousness.41 The fact that Socrates declines the opportunity to escape (that could be completely justified from a subjective, individual point of view) just because in the shadow of death he recognises the possible effects of the decision of the arbitrary conviction, seems to verify this Hegelian assumption regarding the double of consciousness. The principle of Socrates described by Hegel might rather be the principle of Socrates' *negative daimon*. He rejects the fulfilment of this negative daimon because of the possible danger of becoming an oracle, thus its real orientation remains unconscious for himself too – in the end, at the moment of realisation, he himself also

denies this daimon on the grounds of his *consciously* collectivist conviction.

One of the conclusions of Matteo Cestari's *Phaedo*-analysis reveals a possible reason for this duality. Plato relates for us Socrates' last dialogue with his friends in the *Phaedo*. This text had a huge effect on the subsequent millennia's views of death.42 This is the dialogue where Socrates gives the most detailed explanation of his view on the afterlife and his well-known theory of reincarnation – using primarily Orphic, Pythagorean, and some oriental sources.43 According to Cestari, the Socratic-Platonic conception of truth is not only the enemy of the body, but of individuality as well. The reason for this is that it sees death only in its general, not in its personal or individual sense, because it longs for the realm of imperishable, but necessarily impersonal truth.44 Following this, the collectivism of Socrates is just a quasi-collectivism. It is not the appreciation of the community but rather the impersonal, anti-individualist character of his conception of truth that lies behind it. All in all, it seems correct that not Socrates' *tenets*, but his *personality* carries the development of the individual, yet he sacrifices his individuality by following the truth of the tenets before his death.

Following Hegel, we could consider it to be a schizophrenic condition, but we can also take it as the superficial manifestation deriving from the intention of covering up the positive daimon. It can be interpreted as the fusion of the philosopher and the daimon finally happening. At last Socrates lets himself become the philosopher-oracle who represents the idea of eternal truth. The detailed, vision-like passages on death and afterlife of the *Phaedo* and the collectivist, law-worshipping sentences of the *Crito* are the consequences of this fusion.

While we can still find some reasoning in the *Crito* concerning why we should submit ourselves to the power of the absolute laws of this and the other world, the view of death that *Phaedo* contains has many more revelation-like statements than logical arguments, let alone ignorant, 'nothing-knowing' irony that destroys every statement. Socrates seems to set not only the negative, but the positive intuition as well, finally free in the shadow of death. Until this time he only let the critical subjective and individualist side speak, the one that endangered the Athenian state and society in its entire existence. He did this because of the absence of the repressed positive daimon that he had to deny, for his own good, to avoid becoming an oracle. But he still could not escape his tragic fate that was caused by the immaturity of his society for his ideas. This is a tragic, forced, *truth-less* individualism, and not only because of the incompatibility with his own tenets, that propagated the impersonal and eternal truth according to Cestari. Because if Socrates had been acting following the positive side as well all the time, the Athenians would have taken him as an oracle and he would have been excluded

from the society despite of the fact that he always refrained himself from dim oracular statements. They would not have paid attention to his clear, logical thoughts had he accepted the role of the oracle. All in all, although he got stuck in the trap of tragic individualism, of the negativity that questions everything (that turned against the Athenian society and provoked its anger) through veiling his positive intuition and over-emphasising his ignorance, he could practise and teach his philosophy relatively free until his condemnation. Thus was it possible for Socratic philosophy to be preserved for posterity.

However, the relationship between Socratic irony and death contains more than the mere manifestations of the positive daimon. Socrates was a death-wishing philosopher in order to obtain the ideal knowledge who cast off fear of death.47 He took death as a goal of life, as a recovery from the disease of life.48 In spite of these tenets, we can assume that the death sentence unavoidably awakened the natural death anxiety that is a fundamental part of human psyche,49 although Socrates might not have become aware of it or he just did not admit it (perhaps because of his very tenets on the fear of death). The greatest terror among all, fear of death, evoked by the death sentence, dissipated the social threat and helped to (re)integrate his personality. Therefore, we can take the fact that he let the formerly repressed positive daimon emerge as a sublimation of the fear of death evoked by the death sentence. He did not let himself submerge in the ocean of anxiety but in spite of the threat of impending non-being, he acted courageously in the face of death not only by not cowardly escaping but by creating a death concept that had an enormous effect on the Western theories of death. That's why Socrates is the perfect Ancient example of what Tillich calls 'The Courage to Be,' the only proper position versus fear of death – 'the self-affirmation of being in spite of non-being.'50

The manifestations of this emerging positive daimon were the above-mentioned poetic activities and the oracular revelation on afterlife of the *Phaedo*, where he abandons his former, ignorant, 'nothing-knowing' standpoint. Death and fear of death had a creative effect on Socrates' life: the unavoidable end, set into concreteness from the uncertain future, debunks his positive daimon, makes 'The Feint of Socrates' groundless and unreasonable. Nevertheless, if we take Slavoj Žižek's thoughts on this subject into account, we can reach a deeper understanding concerning the Socratic irony. Socrates guides his partners with his ironic method of questioning, and pushes them to destroy their own positions themselves by making their abstract ideas concrete – or, to be more precise, the incorrect, inconsistent position destroys itself.51 Accordingly, the aim of Socratic irony is – paraphrasing the above quote from Hegel – '(actively) assisting the false convictions into the world,' and then passively acknowledging their necessary destruction caused by their fundamentally incorrect elements through getting them said out loud.

Self-destruction was 'pre-programmed' into these false convictions – the question arises whether we can even ascribe the negative, destructive attitude to Socrates himself? We can find only one reason in absence of this attitude to explain why he did not stay in the state of the above-mentioned non-action that was the only reasonable state were he really ignorant, if he really 'knew nothing.' That reason is his essential psychological orientation to search out and discover the Truth. Žižek describes the following strategy inverting de Maistre's statement: 'If we want to teach a truth, we should always begin with an error.'52 Thus, we can draw the conclusion that – using Žižek's words – 'the truth that articulates itself [in the words of Socrates' partners] is the truth about the failures, gaps, and inconsistencies.'53 In the light of these, it seems that Socrates spent almost his whole life and work as a philosopher with discovering the failures, and releasing the inherent self-destructing power of the 'truth of failures.' In order to do this, he used his irony as a necessary tool (the genius lies in its simplicity), like a miner uses his pickaxe. But why was the threatening reality of death the very event that broke this irony, and inspired him to positively unfold his truth like an oracle?54

To understand this, we must remind ourselves that, for Socrates, the true purpose of philosophy was to prepare for proper death. If he had missed out describing the way to attain good death and the conditions that await us in the afterlife as an articulation of the ultimate, one and only 'real' truth, his philosophy would have remained a half-sided, incomplete, negative philosophy. This way, however, he offered the guide that consisted of two main elements. The first can be found in the law-worshipping lines of the *Crito*. According to these lines, we can only be accepted into the divine order of the afterlife if we unconditionally submit ourselves to the laws of this world, laws that are inconsistent and imperfect because of their earthly nature. The second element is the detailed description of the *Phaedo* of death and what comes after it.

We cannot avoid mentioning that in his *Concluding Unscientific Postscript*, Kierkegaard himself also opposed what he wrote in *Concept of Irony*, to support our above critique on Kierkegaard's analysis regarding the Socratic irony. Following his argument, Socrates' subjectivity, experienced with an infinite passion, is the best proof of the uncertain immortality.55 Ignorance appears completely different in this context, because in this text Kierkegaard regards Socratic ignorance as 'the expression (...) of the fact that the eternal truth relates to an existing individual.'56 According to Kierkegaard, Socrates possessed this ignorance with utter inwardness – he

calls this inwardness 'the passion of the infinite.' He realises that, in contrast to objectivity, where something becomes true by its content, the determinative criterion of truth in the subjective is the way, the *how*. Therefore, the passion of the infinite, i.e. the finite inwardness, is truth itself, irrespective of its content. It follows that the less inward something is, the less true it is. Moreover, 'the passion of the infinite is precisely subjectivity, and in this way subjectivity is truth.'57

All we have here objectively is uncertainty, so to say; it is the only content. And yet by the most passionate inwardness, this objective uncertainty turns into truth, 'and truth is precisely this venture of choosing an objective uncertainty with the passion of the infinite.'58 Kierkegaard identifies the contradiction between the infinite passion of inwardness and objective uncertainty with faith.59

The ignorance of Socrates is no longer regarded as the void irony of absolute negativity but the objective uncertainty of the utterly inward ignorance. This inward ignorance – and thus irony too – turns into truth in its infinite subjectivity. In simpler terms: according to these, Socrates does not lack fear of death because he knows nothing about it and therefore it cannot be a threatening reality for him, but because the infinitely subjective, passionate experience of the uncertainty of contingent immortality turned immortality into truth. Hence, paradoxically, immortality becomes true (and thus real) through the deepest experience of the uncertainty of immortality. In any event, according to Kierkegaard's reading of Socrates, eternal essential truth is paradoxical only in its relation to someone existing, because all knowing is recollecting, according to the well-known Socratic proposition – consequently there *is* a non-paradoxical ultimate truth that we can recollect. However, Kierkegaard thinks that the fundamental difference between Plato and Socrates lay in the fact that while the former elaborated the proposition of recollecting and thus began to do a speculative philosophy forgetting to exist, the latter just came up with the proposition but he did not pursue it; he accentuated existing instead. The problem is that from speculation's point of view, there is no paradox, while paradox is truth itself for the existing. But speculation is not identifiable with the entire human existence because speculation too can only manifest itself subjected to the claims of existence. Kierkegaard regards the accentuation of the essentiality of existing against forgetting it and stepping on the speculative way as an extraordinary merit of Socrates.60

It follows that Matteo Cestari's above-quoted thoughts on the impersonal, anti-individualist tenets and death concept can be true in reference to Plato but not to Socrates. It might not be accidental that Socrates broke his uncertainty, ignorance, ironic standpoint concerning immortality and afterlife only at the palpable nearness of his certain death, when he already had the utter subjective experience of this nearness, as we can see it in the *Phaedo*. Neither the subjective, paradoxical, existence-focused, nor the speculative philosopher, speaks from this moment any more. What we can read in those passages is not the ventured faith of the uncertainty-choosing passion of the infinite but the words of the oracle speaking about eternal truth with firm belief, without any signs of uncertainty, scepticism, negativity, irony, or even speculation.

Socrates' seemingly subjective view on the afterlife contains no uncertainty, so it cannot be regarded as subjective – but neither is it objective due to its unverifiable nature. It is paradoxical so that it is non-paradoxical: faith without risk – *conviction*. So it is neither subjective nor objective. But it neither is a sort of transition of these, and not at all subjective and objective at the same time, given that both are to grasp reality and the truth of reality. It is something *different*, something *out of* reality instead but it still stems from, and is intended for, reality: oracle, positive daimon. Although Kierkegaard tries to identify Socratic paradoxical faith with similarly and consciously paradoxical Christian faith in the *Unscientific Postscript*,61 his concept cannot (although it is not even intended to) deal with the convictional nature of the *Phaedo*.

4. Socratic-Platonic Philosophy (of Death): an Ending Transition

So, in the end, Socrates submits himself to the collective at the moment of the accomplishment of his freedom following his inner conviction, the positive daimon. He did it because Athens was not only the city where he was born and belonged to but his 'self-imposed community' as well.62 The collective unity, the existence as a member of the community seems to have surmounted individual moral separation with the approach of death. Hence the philosophy of Socrates (and Plato) is an endpoint and a transition at the same time. On the one hand, it ends, so to say, seals the transformation of the Mythical-Magical, Homeric death concept that began with the Pre-Socratic philosophers. On the other hand, standing on the grounds of collective consciousness, partially ascending but not really taking off and finally – in the face of death – returning to it, Socrates constitutes a transition into the real, compromise-free individuality of the ages to come. He does it as a 'moral virtuoso,' but the ideal unit for him is still the city ruled by the perfect laws – he treats the city as an Idea. Real individualism comes into the scene with Christianity, where the rule of laws over the individuals is replaced by the straight and mediator-free relation to the Transcendent – so its purest form appears with Reformation, when the individual stands totally and solely in front of God.63 According to Douglas J. Davies, the essence of the individual death-experience of the Reformation, so to say, the personal nature of death

lies in the fact that 'each person was to "journey beyond".'[64]

According to Dezső Csejtei, the crucial moment of the Socratic-Platonic view on death – similar to the biblical Creation Story – is that it interprets death from the direction of knowledge. Since body hinders perfect cognition, a philosopher has to seek independence from the body in his life. Therefore he brings forward the final secession from the body that happens with death. This death-awaiting, death-preparing attitude dissolves the momentary nature of death, and makes it transition-like. Death becomes a moment that is a part of life.[65] In Socratic-Platonic philosophy, death is not something terrible 'but, in contrast, it is the greatest *mercy* possible that can ever happen to someone, since one can only obtain certain and definite knowledge through that.'[66] So, fear of death is a consequence of ignorance, but the philosopher who goes forward to it in his life, expects it with delight because he is aware of the immortality of his soul and the reward that awaits him in the afterlife.[67] However, Socrates' direct, essential statements on death are, according to the above, not philosophical but daimonic – so he belongs to the Mythical-Magical Period focusing solely on his death concept. But since philosophy and myth are merged in his person, we can consider him as the first real transition towards Christianity, or if you like – using a mathematical metaphor – as the most accentuated 'inflection point' possible.

The other line of Metaphysical Tradition was worked out by Christianity.[68] We cannot discuss that in this study, but we think it is important to mention a fundamental difference between the death concept of the antiquity and Christianity. According to Csejtei, '*Christian death concept is the most complete existing meganarrative that humanity ever devised.*'[69] In accordance with one of its most important similarities to the death concept of antiquity, '[b]y Christian faith, death (...) is not the end but the gate of eternal life.'[70] This view rhymes with the Socratic-Platonic views, but with Cicero's and Seneca's views too.[71] What makes the big difference then? It lies in that '[o]ne must enter (...) this gate (...) – that is, one does not have to suffer, but live through death. That is how death can become (using Karl Rahner's expression) a deed of man.'[72] Consequently, death is not only a passive transition in Christianity any more, for what we can prepare ourselves in our lives through various ways, mainly by living a virtuous life and acquiring wisdom, but it also presupposes the direct action of the individual.

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Bibliography

Csejtei Dezső: *Filozófiai metszetek a halálról. A halál metamorfózisai a 19-20. századi élet- és egzisztenciálfilozófiákban*. Budapest: Pallas Stúdió – Attraktor, 2002.

Cestari, Matteo: '*Each Death is Unique'. Beyond Epistemic Transfiguration in Thanatology*. Manuscript, 2013. Viewed on: 14. 10. 2014. https://www.academia.edu/1928487/_Each_Death_is_Unique_._Beyond_Epistemic_Transfiguration_in_Thanatology

Davies, Douglas James: *A Brief History of Death*. Oxford: Blackwell Publishing, 2005.

Eliade, Mircea: *Vallási hiedelmek és eszmék története*. Budapest, Osiris Kiadó. 2006.

Falus Róbert: *Kritón*. Commentary. In: Platón összes művei. Vol I. Budapest: Európa Könyvkiadó. 1984. 1137-1138.

Hegel, Georg Wilhelm Friedrich: *Elements of the Philosophy of Right*. Cambridge: Cambridge University Press, 2003.
Lectures on the History of Philosophy. Vol. 1. London: Kegan Paul, Trench, Trübner & Co., 1892.

Kierkegaard, Søren: *Concluding Unscientific Postscript to the Philosophical Crumbs*. New York: Cambridge University Press, 2009.
The Concept of Irony with Constant Reference to Socrates. Bloomington & London: Indiana University Press, 1965.

Kirk, Geoffrey Stephen and Raven, John Earle: *The Presocratic Philosophers. A Critical History with a Selection of Texts*. Cambridge: Cambridge University Press, 1957.

Németh György: *Phaidón*. Commentary. In: Platón összes művei. Vol. I. Budapest: Európa Könyvkiadó, 1984. pp. 1152-1155.

Plato: *Apology. The Dialogues of Plato. Vol. 1*. Translated by: R. E. Allen. New Haven and London: Yale University Press, 1984. pp. 79-104.
Crito. The Dialogues of Plato. Vol. 1. Translated by: R. E. Allen. New Haven and London: Yale University Press, 1984. pp. 117-130.
Phaedo. Translated by: David Gallop. New York: Oxford University Press, 1975.
Phaedrus. Plato's Phaedrus. Translated by: R. Hackforth. Cambridge: Cambridge University Press, 1952. pp. 21-166.
The Republic. Translated by: Tom Griffith. Cambridge: Cambridge University Press, 2000.

Tillich, Paul. *The Courage to Be*. New Haven & London: Yale University Press. 1952.

Tróbert Anett Mária: Lelkigondozói távlatok: a halálon innen és túl – a keresztény reménység. *Kharón* 2010/2. pp. 15-22.

Žižek, Slavoj: *Less Than Nothing. Hegel and the Shadow of Dialectical Materialism*. New York: Verso. 2012.

Notes

1. Csejtei 2002: 16.
2. Ibid, 17-18. (Italics are in the original Hungarian text.)
3. Kirk – Raven 1957: 209-210.
4. Csejtei 2002: 16. (Italics are in the original Hungarian text.)
5. Hegel 1892: 402. and Hegel 2003: 180.
6. Kierkegaard 1965: 187-188.
7. Ibid, 188.
8. Ibid, 188-189.
9. Ibid, 190.
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid.
14. This study does not aim to investigate to what extent the oracles possessed talent or sensibility for recognising immanent and transcendent essences of reality, and whether such activities were possible at all.
15. Eliade 2006: 215.
16. *The Republic* 427b-c.
17. Eliade 2006: 215-216.
18. Kierkegaard 1965: 192.
19. It is a fact supporting the above statement that '…[i]n the beginning, consultations took place once a year (on the god's anniversary), then once a month, and, finally, several times a month, except during the winter, when Apollo was away.' (Eliade 2006: 215.)
20. *Oracleness*, a word I coined to mean a personality trait, is a general (or 'catch-all') term to represent the typical characteristics of an oracle in just one word.
21. In the light of these, the very individualism in direct and permanent contact with the divine truth completed later by Protestant Christianity can be regarded as *everyone turning into oracles*. The accomplishment of inward freedom was not restrained but promoted, and moreover, expected by one's community. Hence, although external freedom decreased in this case as well due to the dominance of inward freedom, there is a huge difference compared to antiquity: the danger of degradation to an instrument, and hence of the loss of humanness, ended.
22. Kierkegaard 1965: 278-279.
23. Ibid, 287-288.
24. Hegel 1892: 402.
25. Ibid.
26. Ibid, 424-425.
27. *Apology* 23a.
28. *Apology* 17c.
29. *Apology* 40b-c
30. *Phaedo* 60d-61b
31. *Phaedrus* 242c
32. Hegel 1892: 407.
33. Ibid, 408.
34. Ibid, 408-410.
35. Ibid, 444.
36. Ibid.
37. Ibid, 445-446.
38. *Crito* 51a-54d.
39. Hegel 1892: 422.
40. Ibid, 425.
41. Ibid.
42. Csejtei 2002: 17.
43. Eliade 2006: 419.
44. Cestari 2013: 13.
45. Csejtei 2002: 17.
46. Eliade 2006: 419.
47. *Phaedo* 64a
48. Németh 1984: 1155.
49. See for example Tillich 1952.
50. Tillich 1952: 172.
51. Žižek 2012: 512-513.
52. Ibid, 519.
53. Ibid, 516.
54. And, by the way, a listener or reader with an ironic viewpoint might well discover a number of failures, ambiguities, and inconsistencies in these revelations, just as Socrates did so many times before in his partners' statements.
55. Kierkegaard 2009: 169-170.
56. Ibid, 170.
57. Ibid, 171.
58. Ibid.
59. Ibid, 171-172.
60. Ibid, 172-174.
61. Ibid, 176-185.
62. Falus 1984: 1137-1138.
63. From this point of view, the currently so prevalent 'materialist individualism' that lacks the orientation towards the Transcendent, appears to be pathologic since it can lead to unstable sociological as well as personal psychological states, because this materialist individualism has seceded from its foundation, root, and purpose. The individual stands in the middle of nothingness. It has no orientation, and at the same time it is orientated to nothing(ness), that – in the lack of effective anxiety-dissolving mechanisms – increases the levels of intrapersonal and social anxieties.
64. Davies 2005: 10.
65. Csejtei 2002: 17.
66. Ibid, 17-18. (Italics in the original Hungarian text.)
67. Ibid, 18.
68. Ibid, 19.
69. Ibid. (Italics in the original Hungarian text.)
70. Tróbert 2010: 20.
71. Neither can we discuss their related tenets here.
72. Tróbert 2010: 20.

MEDIUM EMERGENCE
PART ONE: THE PERSONALIST THEORY OF EMERGENCE

Daniel Paksi

Abstract: Although the the concept of emergence is quite popular today, its original meaning – a proper medium ontological conviction between dualism and materialist monism – has faded. An epistemological, weak understanding of emergence has arisen and the possibility of ontological emergence is called into question. With a detailed examination of the notion of reduction, I will argue that reduction and emergence are not rivals and that weak and strong emergences are the two Janus faces of one proper medium emergence.

1. Preface: The Original Meaning of Emergence

The concept of emergence has become quite popular. Countless papers and authors speak about some kind of emergence and try to deal with the problems that arise. The notion of emergence can be found in almost every field of science, from informatics via biology to physics. However, these notions seem to be quite different across disciplines.

I believe that the most notable reason for this mottled situation is that the original meaning of emergence has faded. We are left feeling that there is a true need for the concept of emergence, but we seek back roads and rear entrances instead of the real, foundational meaning. Of course, there are valid reasons for this fading, including two main ones: first, the fast rise and *fall* of the British Emergentists (see McLaughlin 1992); second, the strong *materialist conviction* and *methods* of scientists and philosophers. The latter leads to an understanding of emergence that is "metaphysically innocent" and entirely "consistent with materialism" (Bedau 1997).

The first emergentist is often considered to be John Stuart Mill, but the term in fact stems from George Henry Lewes (1975). After the fast fall of the British Emergentists (Samuel Alexander (1920), Lloyd Morgan (1923) and C. D. Broad (1925)), there was a long silence and few weak and distant voices, most notable those of Michael Polanyi (1962; 1969) and Roger W. Sperry (1969, 1980, 1986).

Today, the concept of emergence has returned, and it seems to carry two main and differing meanings. First is the old *ontological* or strong meaning. This meaning asserts that there are multileveled objects, higher levels of which ontologically *exist* and are not material. Second is the new *epistemological* or weak meaning. This meaning asserts that the higher levels ontologically *do not exist*; they are only comprehensive phenomena of matter.

The first, ontological meaning is of course the one that was proposed by the British Emergentists. It is important to note that this was a kind of cosmological theory of emergence that started *on the level of chemistry* or even of matter on space and time (Alexander 1920); thus every higher level was ontologically emergent, and there was no place for epistemological emergence. More exactly, every higher level was also epistemologically emergent—the clear distinction of these terms came after the British Emergentists—and therefore it was not a simply contrary to current epistemological ideas of emergence, but was truly a much stronger version of the concept. This is one of the main reasons why such a concept was highly problematic. According to "Alexander's dictum" (Kim 1992), the higher levels have to be causally effective, otherwise they cannot be ontologically real; but many philosophers think that this leads to overdetermination, downward causation and the breaking of the causal closure (Kim 1998; 2000; 2002). Thus higher levels either are ontologically not real just are epistemological descriptions, or they are real—but necessarily tied to dualism.

The second, epistemological meaning, however, is also highly problematic. Although according to Mark A. Bedau it is "consistent with materialism," still "[w]eak emergence is not just in our minds […] Rather, weak emergence is an objective phenomenon that exists in nature" (Bedau 2008a: 457). What does it mean for an epistemological higher level to "exist in nature" and "not just in the mind"? Epistemological levels do not exist, ontological levels do. Heat is a comprehensive phenomenon of matter: we can experience it, we can feel it, but it does not exist. The particles exist, and heat is only the average kinetic energy of those particles. Also, what does it mean for weak emergence to be an "objective phenomenon"—or is it not the fundamental physical entities that are objective (e.g. particles)? It seems that although Bedau wants to be "metaphysically innocent," he slips quietly into the territory of ontological emergence: "But weak emergence is still rich enough for an ontology of objective macro-level structures" (Bedau 2008b: 183).

Another problem arises if we accept that epistemologically emergent comprehensive phenomena of matter is really only "in the mind." Then it seems that it is not "metaphysically wicked" ontological emergence—but notice that it

presupposes the existence of a mind/person that experiences the comprehensive emergent phenomena. Of course, the existence of the person does not imply dualism, only the ontological emergence of the persons…

Perhaps these short trains of thought have clearly emphasized the serious problems with the notion of emergence. I believe that Bedau's struggle with metaphysical innocence and emergence in nature is not accidental. Epistemological and ontological emergence *cannot be separated entirely*. If someone starts to flirt just "innocently" with the concept of emergence, she will soon be burned with the flame of the original ontological meaning of emergence.

Nevertheless, this does not mean that we must return to the philosophy of the British Emergentists, as the full inseparability of ontological and epistemological emergences does not mean that these terms are as the British Emergentists treated them. The ambitious tower of British Emergentism collapsed for ever; however, it was *not* because of the original ontological meaning of emergence, but because of the reduction of chemical objects to quantum mechanics (see McLaughlin 1992). While their peculiar theory of The British Emergentists was clearly wrong this does not mean that their original intention was wrong, namely, that it is possible to conceive a proper *medium* ontological conviction *between* dualism and materialist monism. In fact, that is the true, original meaning of emergence. That there are no eternal souls or substantial minds as the dualists believe in or there are not only quarks and electrons as the materialists imagine for whom the person is only an empty word but there are real persons emerged from inanimate matter during the long course of evolution.

After the fall of British Emergentism Michael Polanyi grounded his theory of tacit and personal knowledge on this original meaning of emergence. "I shall meet this situation by re-establishing within the logic of achievement, the conception of emergence first postulated by Lloyd Morgan and Samuel Alexander." (Polanyi 1962: 382) And then he fiercely criticized materialism and neo-Darwinism which is the materialist theory of evolution. Polanyi clearly recognized that epistemological and ontological emergence—with his words conceptual and existential emergences—cannot be separated entirely. 1962: 390-397) However, he did not deal with the problem in details and he did not have an adequate conceptual framework to do so.

In this Part One I will investigate the original meaning of emergence and its consequences. I will not investigate particular theories in detail neither the British Emergentists' nor Polanyi's, because it is my firm conviction that that would misdirect the focus I wish to place on this original meaning. I will investigate strong and weak emergences, but not to contrast them, because I think they are not rivals, but rather the different Janus faces of the *same* notion. Epistemological emergence on its own is not emergence at all; it is *materialism*, the nowadays popular materialist theory of emergence. Thus I believe there is no strong emergence and there is no weak emergence, *only one medium emergence between dualism and materialist monism with two faces*.

In the second section I will ask a question: how can we know that an object is material or emergent? This will lead us to the problem of reduction. In the third section the examination of reduction will help to shed light on the original meaning of emergence, and I will show that, in a sense, reduction is not the rival of emergence at all. Then in the forth section, I will define the ontological reduction of natural sciences, explore the two Janus faces of emergence. The end of the paper will be a short conclusion and I hope this investigation on the original meaning of emergence will provide an adequate conceptual framework to better understand Polanyi's ontological position and arguments against materialism and neo-Darwinism.

In the later Part Two I will show that Polanyi's ontological position is exactly the same as I understand under medium emergence: this is the true personalist theory of emergence. Then I will redefine his main anti-materialist argument in this new framework which standing alone is quite weak even in the eye of the Polanyian tradition. I hope, however, that in this way it would be clear that materialism is plainly self-contradictory.

2. From Emergence to Reduction

According to the original meaning of emergence, there are higher levels that ontologically exist. But what does this mean? To understand, we must first understand the ontological consequences of reduction.

Dualism asserts that there are *two different kinds of reality*, *two* fundamental *substances*, generally matter and mind, which are *equal*; their relation is *symmetrical*.

Materialist monism asserts that there is *one kind of reality*, *one* fundamental *substance*: matter.

Emergentism asserts that there are *two different kind of reality*, but only *one* is fundamental *substance*, matter. The other is not fundamental, it is *emergent*. Thus theirs relation is *asymmetrical*. The emergent reality is not self-sufficient, but it necessarily exists *on* the fundamental material substance. It follows that emergent objects are necessarily multileveled and consist of at least one fundamental and one emergent level of reality.

The question is, how can we know that an object is material or emergent, or perhaps has dual substantial nature according to a vital force? In nature we see trees, houses, machines, frogs, people and many other objects. *We cannot see the kinds of reality themselves*—we cannot see matter, that is, quarks and electrons, etc., and we cannot see the emergent levels

separately. We cannot see the mind itself.

Of course, a materialist would say at once that houses, trees, machines, people, etc. are composed of matter, so to see them is like seeing matter. Perhaps, but it is true necessarily only in the case if and only if we *a priori* accept materialism—only then do we start to see things. However, objects as houses, trees, frogs, machines and people are very *different* phenomena contrast with quarks and electrons. Maybe they are ontologically equal, but certainly *it has yet to be revealed*. So far, *no one* has shown that houses, trees, frogs, machines and people are composed of only matter. We can easily believe it, but *only* in the case of the chemical level was it ever revealed that these objects are ontologically equal to the fundamental level of matter. The hydrogen atom and covalent bond, etc. were reduced to the material level, and not houses, trees, frogs, machines and people.

However, this successful reduction of the chemical level was the reason of the fall of the British Emergentists, whose peculiar theory was build upon the conviction that the typical instance of emergence is the emergence of the chemical level. This successful reduction was also the reason that the original meaning of emergence has faded and that we can easily believe in the successful reduction of higher levels, trees, frogs, people, etc. But a while successful reduction has *never* in fact come, and emergence is once again at issue.

The answer, then, to our question of how we can know for certain that an object is material is *the successful reduction* of the higher level(s) of that object. At the same time, the goal of reduction is not necessarily the fundamental material level. It is possible to reduce between two higher levels and go no further, or even to reduce higher levels to a non-material substance, for example human notions and acts to mind. However, in practice these possibilities do not appear, because the notion of reduction is tightly connected to materialism.

There are two main reasons for this. First, materialists have to reduce the higher levels to show that materialism is true. Second, if someone is a reductionist, why would she stop at a higher level? In principle, what can stop reductions of levels? The answer is the fundamental level of material substance. This is the level that per definitionem is the last one. In principle, every other level can be reduced. But, as we have seen, the end of reduction can be another fundamental level, too. Even so, dualists fight the notion of reduction, because in practice the question is not the possibility of reduction of higher levels to the mind, but the reduction of the mind and qualias to matter, according to the viewpoint of materialism and the tight connection of reductionism to materialism.

The notion of reduction, however, is *not* materialist. Moreover, it cannot be materialist because it is not an ontological conviction, it is only an *epistemological tool*, useful, for instance, to show the truth or untruth of materialism, or to show that dualism is wrong, and there are no minds, qualias, social levels, etc. But no one uses this latter method, so perhaps a kind of "social Cartesianism" is true? (see Collins 2010).

Thus, reduction is an *epistemological tool* while materialism (and, of course, emergentism and dualism) is an *ontological conviction*. It is for this reason I use the term materialism and not the now-popular "physicalism," which suggests that materialism is like and inseparable from physics. But again, physics is an epistemological tool and not an ontological conviction; they are not in the same category. If emergentism is true, physics operates without problems with higher-level emergent objects; as a matter of fact, physics originally dealt only with emergent objects for centuries, as the presupposed fundamental material level of quarks and electrons was discovered only in the first half of the 20th century. Physics is *fundamental* for an emergentist, for example, to answer the biophysical cause of sickle-cell anemia in the ontologically emergent human body. René Descartes, the father of dualism, also used mechanical physics without any trouble; moreover, he was one of the first who worked out a purely mechanical physics, long before Isaac Newton. Moreover, in recent years some eminent physicists argue that physics and emergence cannot be separated, for example, Robert B. Laughlin (2005) or Lee Smolin (2013).

Multiple fields provide examples of reduction. In philosophy, the two classic, normative examples are Ernest Nagel's and Jaegwon Kim's models (Nagel 1962; Kim 1999). However, there are many others, and we can find different reduction methods in several scientific fields, such as biology, mathematics, or even technology and informatics, considering Bedau's reduction by "simulation" (Bedau 1997). However, I will not deal with these different methods here, because for this paper it is the *consequences* of reduction and not the exact methods that are of interest. It is the consequences of successful reduction of the chemical level to quantum mechanics, and not the concrete method and quantum mechanics itself that makes the fall of the British Emergentists. No one is interested in specific quantum mechanical equations.

Moreover, if we define reduction by a concrete method, for example, by Kim's functional reduction model, many other reduction methods would fall necessarily outside the definition. It is a materialist notion to think that there is one true method of reduction with the goal, of course, of fundamental material substance. But why would the same method necessarily work for a reduction between two higher levels and between a lower level and the fundamental level? Or, even more, that the same method would

work for a dualist reduction of human notions and acts to the mind and for the reduction of the chemical level to matter? I do not believe that human notions and social levels can be reduced to the mind, because I am not a dualist; but if I am wrong, and dualism stands, I am pretty sure that the reduction of human notions and social levels to the mind would be something highly different from the reduction of the chemical level to matter.

So, for the ontological consequences of reduction, to answer our question of whether an object is material or not, it is entirely inessential which particular reduction method we use. What is essential is the *success* of the reduction, as in the case of the reduction of the chemical level to quantum mechanics. Of course, this does not mean that the success is independent from the particular method—the proper method is the precondition of success—but the ontological consequences still lie in the outcomes of the success and not in the particular method, which is "only" an epistemological condition. To understand the original meaning of emergence, we must first understand the ontological consequences of reduction.

Thus I do not look here for the proper epistemological tools; I believe *scientists* are responsible for this, as it was done by the reduction of chemical levels, and I presuppose that if a reduction is possible, a scientist will find the proper epistemological tool at the end. The question for me is the ontological consequence, the task I as a philosopher am responsible for, the question of whether every object is material, whether every object can be reduced to matter—even trees, frogs and people.

Unfortunately, these two different sides of reduction are often blurred; that is, the investigation of the ontological consequences on the one hand and the investigation of the particular epistemological tools on the other. Moreover, the debate typically follows materialist intentions and interpretations around the peculiar possibility of reducing important higher-level objects, e.g. qualia, mind, etc., or it takes place in a priori materialist frameworks, as in biology. Thus the question of ontological consequences does not truly arise. For example, the classic Paul Oppenheim and Hilary Putnam paper deals with the possibility of reductions of different higher levels in an a priori materialist framework, so the particular reduction methods are either successful or not, they cannot have any ontological consequences. Trees, machines, frogs and people can be or cannot be reduced—it does not matter, reduction has no real importance or meaning (Oppenheim and Putnam, 1958; see a critique of this deficiency e.g. in Reuger and McGivern, 2010).

Our use of language reflects this duality and also can hide the two different sides. We often say that we reduced an object or say that we reduced a higher-level description of an object (to a lower-level description of the same). The former reflects the ontological consequences, no matter how we have successfully shown that the true nature of the object is material. The latter reflects the epistemological tools, by which peculiar method we have connected the higher and lower-level descriptions of the object. In the following, I will clearly separate these two sides to understand the original meaning of emergence.

3. From Reduction to Emergence
Now, the question is: what is reduction? On one side, what is the ontological consequence of a successful reduction? On the other, what we are doing when we use the epistemological tool of reduction?

The answer to the latter is the following: *we create an asymmetrical epistemological connection between two descriptions* that refer to different objects, for example:

crystal   ←   **description1** (chemistry)

                  ↓   **reduction method**

quarks, etc. ←   **description2** (quantum mechanics)

Thus, the reduction has three conditions.

First, it presupposes at least *two different objects*. One of them is high-level, the other one is low-level (at the end, to answer our question, it is the fundamental material substance).

Second, it presupposes *two descriptions*. One of them refers to the higher-level object, the other to the lower-level one.

Third, it presupposes the *reduction method* itself, and we have to perform this successfully.

So, then, reduction has *two* sides or faces, just like emergence. One of them, that of the objects, is the *ontological* side. The other, that of the descriptions and reduction method, is the *epistemological* one.

It is important to note that the descriptions and the reduction method are *human (personal) knowledge*, and as such they are not only meaningful epistemic references to the objects, but they are *ontological objects* themselves. (In my figures, boldface type means ontological objects.) Consequently, the possibility of reducing them as objects must also be questioned. To think that human knowledge as an object does not have ontological nature but only epistemic meaning is the *a priori* presumption of materialism, that is, the blind believe in materialism before the act that they would be reduced and materialism would be confirmed.

It is a typical mistake in the case of the fist condition of reduction to speak about only two levels and not about two different ontological objects, for example to speak about the higher level of the whole and the lower of the parts as was done by Oppenheim and Putnam (1958). Of course, the source of the mistake is that one of the objects is high-level and the

other one is low-level. But to speak about only the two levels of a part-whole relationship and not about a high-level and another, different low-level object a priori presupposes that there is only one object, that is, there cannot be ontological consequences for reduction; it is again the a priori presupposition of materialism before the act of successful reduction.

$$\text{whole} \leftarrow \textbf{description1}$$
$$\diagup \qquad \qquad \downarrow \quad \textbf{reduction method}$$
$$\textbf{object} - \textbf{parts} \leftarrow \textbf{description2}$$
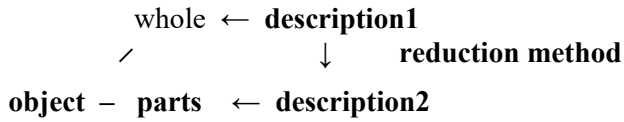
It is a similar mistake to speak about only different types of properties, usually high-level and low-level properties, and to call the only one real ontological objet e.g. relational base or something similar, which casts a shadow on its ontological meaning.

$$\text{property type1} \leftarrow \textbf{description1}$$
$$\diagup \qquad \qquad \downarrow \quad \textbf{reduction method}$$
$$\textbf{relational} - \text{property} \leftarrow \textbf{description2}$$
$$\textbf{base} \qquad \text{type2}$$
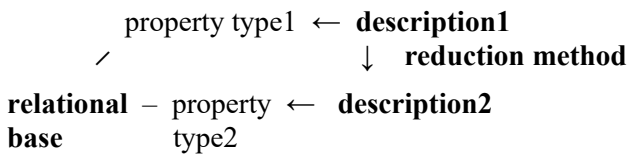
This camouflage can be deepened by identifying the relational base with the aggregation of lower-level properties, thus making the higher-level properties only necessary consequences of specific arrangements of lower-level properties. Reduction, then, is simply a necessity; the remaining question is only that of the proper reduction method. If it cannot be found, though, never mind; there would be no ontological consequences, anyway.

However, in fact, before the successful reduction it is not grounded that heat is only a comprehensive phenomenon of matter and not the consequence of an enigmatic "fire-object" or another substance, e.g. some kind of form. From Francis Bacon via Galileo Galilei to James Clerk Maxwell and Ludwig Boltzmann, several excellent scientists worked very hard to establish that heat is only a comprehensive phenomenon of matter—should there be no real stake, importance or meaning in theirs works?

So, then, what is reduction, and what is the ontological consequence of a successful reduction? The answer is the following: *there is only one object, namely the low-level one*.

$$\textbf{description1}$$
$$\downarrow \quad \textbf{reduction method}$$
$$\textbf{object2} \leftarrow \textbf{description2}$$
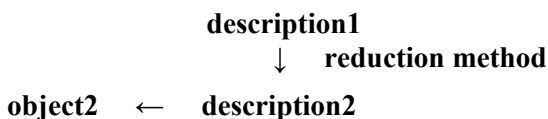
If reduction is successful, it creates an *asymmetrical epistemological connection* between the two descriptions and reveals that in truth the object of the references of the two descriptions is just *the same*.

However, this does not mean that the two descriptions equally and in the same way refer to the one existing object, and it also does not mean that the presupposed two objects are identical—not in the least. Since reduction is per definitionem *asymmetric*, it reveals us that on its own the reference of the

higher-level description is simply void, and has no meaning; there is no fire-object or other immaterial substance. But reduction per definitionem reveals too that via and only via the reduction method, the higher-level description refers to the same object as the lower-level one refers to; that is, heat is only the average kinetic energy of particles, referring only to the lower level object(s) and to nothing else. After successful reduction, the higher-level description *only via* the reduction method and *via* the lower-level description keeps its reference and real meaning but via that it *keeps*.

Therefore we can*not* say that by successful reduction, the higher-level object will be identical with the lower-level one; but unfortunately we often do say that. The phrase "we reduced an object" suggests this and it is highly misleading. In truth, *we did not reduce the higher-level object, but only the higher-level description*. The higher-level object was simply *eliminated*. In Nagel's words, reduction is only the "logical relation between certain statements" (Nagel 1962). There is no heat as an independent object. It is only a description—of natural human experiences—that via a successful reduction method refers to the average kinetic energy of the really-existing particles. The former is the *ontological consequence*; the latter is the *epistemic structure* of a successful reduction.

So, by a successful reduction only one object remains, which, in accordance with the asymmetric relationship, is the lower-level one, at the end the material substance. This and nothing else could confirm materialism, as it has done in the case of heat or the chemical levels. But there is plenty of work yet for materialists with such objects as trees, frogs, persons, etc. Without this ontological relevance, this work cannot be done, and materialism remains an attractive or repulsive presumption. Many materialists still do not bother themselves with the ontological consequences of reduction.

It is important to note that the fact that there remains only one object on the ontological side does *not* mean that the two descriptions can be identified on the epistemological side. The two descriptions *still* contain different conceptions, laws, etc. as well as the reduction method itself, which connects them. Thus, on the epistemological side, we have to still speak about more and different epistemological tools, that is, about different human (personal) knowledge. In this sense, heat still exists as a higher-level, physical (thermodynamical) concept and as natural human experience.

So, to sum up, successful reduction is an ontological statement, namely the statement that only *one object exists*: the lower-level one.

Now, the question is: what is the ontological consequence of a *failed*, unsuccessful reduction?

The answer is the following: the ontological consequence of a failed, unsuccessful reduction is an ontological statement, namely, that *two objects exist*.

On the epistemological side of a reduction, the gap between the two descriptions *remains. Only a successful reduction can bridge that*; and without this bridge and the "bridge laws" of a successful reduction method, the two descriptions *remain equal, both of them keeping* their original reference and meaning. This is a kind of epistemological dualism. (The situation of the other, ontological side will be discussed in the next section.)

$$\text{object1} \quad \leftarrow \quad \text{description1}$$
$$\text{object2} \quad \leftarrow \quad \text{description2}$$

Contrary to this, the structure of a successful reduction, as we have seen, is this:

$$\text{description1}$$
$$\downarrow \quad \textbf{reduction method}$$
$$\text{object2} \quad \leftarrow \quad \text{description2}$$

Now, my conclusion is the following: *this asymmetric relationship on the epistemological side corresponds to the notion of emergence*. With the essential difference, of course, that this is not emergence between ontological levels but "only" emergence between epistemic descriptions. Therefore, *this is a kind of epistemological emergence*.

It also follows that reduction and emergence are not each other's enemies but, on the contrary, *they presuppose each other*. A successful reduction *reveals* the emergent relationship, and this hidden relationship *makes possible* the successful, revealing reduction.

This can be counterintuitive if (but only if) we do not clearly distinguish ontological emergence from epistemological, as the British Emergentists or materialists were inclined to do. Then it is obviously not emergence, because on the ontological side there is only one object, one level that in accordance with meaning cannot be emergent to itself.

For the sake of completeness, epistemological materialism would be this:

$$\text{object2} \quad \leftarrow \quad \text{description2}$$

Here there are no real higher-level descriptions. However, this is not the situation we have to deal with; clearly there *are* higher level descriptions. Therefore, we have to deal with epistemological emergence and ontological materialism, which are just *the same*.

Mark A. Bedau says that epistemological emergence is "consistent with materialism," but at the same time, "[w]eak emergence is not just in our minds. […] Rather, weak emergence is an objective phenomenon that exists in nature" (Bedau 2008a: 457). Now we can understand this paradox.

To say it is "consistent with materialism" means that on the ontological side, there is *only one* (material) object, which is the case only after a successful reduction. Otherwise, there are two different objects, and then the situation cannot be consistent with materialism.

At the same time, there are *two* different *descriptions* on the epistemological side, the necessary preconditions of any reduction, but now connected *asymmetrically by* a successful reduction. Without this successful reduction there is no connection at all, just two different, equal descriptions with their own independent references and meanings, that is, epistemological dualism.

Nevertheless these descriptions are "only" human knowledge, so are these only in our minds? *No*, because the reduced higher-level description, as we have seen, has not lost its reference and meaning, *it has only been channelled in the reduction method* to refer to the one real object. We reduced but did *not* eliminate the higher-level description; it has still meaning and relevance for us. We eliminated only the higher-level object. The higher-level description tells us something about the one real object that cannot be done only by the lower level description. *This* is the reason "[w]eak emergence is not just in our minds. […] Rather, weak emergence […] exists in nature." Exactly as electrons and quarks are not just in our minds.

However, this does not mean ontological existence for higher levels, contrary to Bedau's interpretation, there is no any kind of "ontology of objective macro-level structures" (Bedau 2008b: 183). On the ontological side there is only *one* object, one material level, which cannot be emergent to itself. This means that there is only one object but *two asymmetrically connected descriptions refer to it* and tell us something meaningful and different. So, in this sense and only in this sense that the epistemologically emergent descriptions can tell us something about the one and only ontological object, epistemological emergence is not just in our minds but exists in nature.

Heat, as we have seen, is a higher-level physical concept and natural human experience on the epistemological side. But it has reference and original meaning, and this is the reason we can say that a material object has a comprehensive phenomenon. It is as true as saying every particle of a material object has a well-defined kinetic energy or mass by its fundamental description. Without our natural experience and scientific observations of heat, without the higher-level concepts, laws, etc. and the proper reduction methods, the fundamental description cannot say anything about heat or other, similar comprehensive phenomena or any other order of matter (Polanyi 1959: 48-49). Therefore, according to its fundamental description, heat is a novel and in an epistemological sense autonomous emergent human natural experience and higher-level knowledge. Fortunately, however, physics deals perfectly with emergent phenomena. If we do not accept that heat is a reduced but still epistemologically emergent phenomenon that could lead even to the questioning of the successful

reduction of heat; see this arguing here: Needham 2009.

It seems to me that Bedau wants to defend weak emergence from reduction, contrasting "standard" reduction to simulation, but it cannot be done and there is no need. Reduced higher-level comprehensive phenomena of matter (or of a simulated logical world) is really very interesting—just ask chemists. Weak emergence on its own is a materialist notion, and to make a distinction in an ontologically materialist framework between emergent and reduced higher-level descriptions of phenomena is highly problematic. It leads to a reduction-emergence dichotomy, to rivalry on the epistemological side, calling one kind of reduced descriptions emergent and another kind of *also* reduced descriptions non-emergent. It can be even worse to call non-reduced descriptions emergent. In this way we call higher-level descriptions epistemologically emergent even when they have no epistemic connection to material descriptions, and such higher-level descriptions that *have* that clear epistemic connection to the material level, we do not call emergent. The foundation of this epistemic reduction-emergence rivalry is the *a priori* materialist ontological conviction at the other side, which ignores the ontological consequences and concentrates only on the concrete reduction methods. However, for emergence the actual reduction method does not matter; what is important is the success or the failure of the reduction.

So, to sum up again, we can say that *epistemological emergentism* asserts that *there are two (or more) different kinds of epistemic levels*. However, there is *only one fundamental* description: fundamental physics, e.g. quantum mechanics or string theory. The other(s) is *emergent*. Thus theirs relation is *asymmetrical*. The emergent level(s) is not self-sufficient, but necessarily *relies on* the fundamental level.

This solution, although consistent, still can suggest that emergence as reduction is not an ontological conviction; moreover, it is not the opposite of reduction but rather they together lead us to materialism. Nevertheless, this has been only one Janus face of emergence. The other one lies where Bedau, as a materialist, does not go. Remember the three conditions of reduction named at the beginning of this section: the objects on the ontological side, the descriptions on the epistemological side and the reduction method. These latter factors, as we have seen, are not just epistemological tools as we have interpreted them here, but they as human knowledge are ontologically existing objects too. The mind/person is a *necessary precondition* for epistemological emergence.

4. The Two Janus Faces of Emergence
We have seen in the previous section that the ontological consequence of a failed, unsuccessful reduction is an ontological statement, namely, that two objects exist.

object1	←	**description1**
object2	←	**description2**
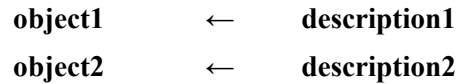
This might suggest that then we must accept dualism. But that is not the case at all, because the two objects can be connected by an emergent relation.

Ontological emergentism asserts that there are at least two different kind of reality, but contrary to dualism, only one is fundamental substance. The other(s) is/are emergent. This means that the other kind of reality is not independent, eternal or created, but evolved from matter and although it exists, it cannot exist without its material fundament. That is, more precisely, there are no two independent objects, just one multileveled one that consists of one fundamental and at least one emergent level(s) of reality. Contrary to heat, this higher-level description has its own independent reference and meaning.

object, higher level	←	**description1**
↑		
object, lower level	←	**description2**
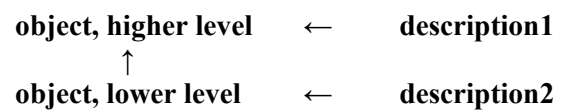
Nevertheless, we have seen in the previous section that at the epistemological side reduction and emergence presuppose each other; otherwise, we have to speak about dualism. Here the situation is the same, but not in the same sense; this is not the epistemological side. Epistemological emergence and reduction exclude ontological emergence because they means that the object is material and has only one fundamental level.

Therefore I assert that *ontological emergence and ontological reduction presuppose each other as well as epistemological emergence and epistemological reduction do*. Here, a successful reduction also reveals the emergent relationship, and this hidden relationship makes possible the successful, revealing reduction, for otherwise we have to speak about dualism. That is, an emergentist has to be a (kind of ontological) reductionist otherwise he would not be an emergentist at all. To my knowledge the first person who recognized this was Michael Polanyi (1962: 394).

The situation is the following: emergent levels do not exist from the beginning. Once only matter existed; emergent levels evolve from matter. Why it is surprising, then, that they can be traced back? It is not. It is surprising to call this process reduction. Because the concept of reduction is strongly connected to materialism. But materialism is an ontological conviction and reduction is "only" an epistemological tool. They are not in the same category. Materialism presupposes one kind of reality on the ontological side; therefore it allows only epistemological reduction on the epistemological side. This epistemological reduction corresponds to materialism; and ontological reduction to emergentism. (Thus, and it is important to note, my understanding of ontological reduction is not in the least the same as

several other author using the term nowadays, e.g. Moulines, 2006 or McIntyre, 2007.)

It follows that materialism has to deny the possibility of ontological reduction, and so it does. But emergentism has to resist the influential dogmas of materialism and *has to call* ontological reduction as it is: ontological reduction—and then there remains nothing "mysterious" or "magical" in ontological emergence.

Earlier, I called this kind of reduction *diachronic reduction* because of its necessary *evolutionary* na-

No reduction	Ontological reduction	Epistemological reduction
Dualism	Emergence	Materialism

ture (Paksi 2011), but not in the same sense as several other authors, e.g. Reuger (2000).

It follows that there is indeed a severe conflict between emergence and reduction. However, this conflict is not between epistemological emergence and epistemological reduction, as we are inclined to think according to materialism, and not between ontological emergence and reduction, but *between the reduction and emergence concepts of the different sides*. Epistemological reduction excludes ontological emergence just as ontological reduction excludes epistemological emergence.

Now, the question is: what is the essential difference between epistemological and ontological reduction?

First, the reference and meaning of the higher-level description has been channeled in the reduction method only partially, and *partially it keeps its reference and meaning*. There is a higher level(s) at the ontological side, therefore a higher-level description(s) has to keep its own reference and meaning. But at the same time, there are important *lower-level conditions* for emergent levels, without which there is no emergence at all—and this partially reduces the reference

object, higher level ← description1

process of emergence ↑   ←   ↓ reduction method

beginnings ↑ → object, lower level ← description2
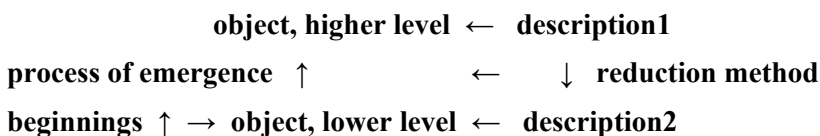
and meaning of the higher-level description(s), as we have seen in the case of heat, with the essential difference that here the reduction is not complete.

Second, the reduction cannot be completed because on the ontological side there exist not just ontological levels but also the *process of emergence itself* (the up arrow of the figure), by which the higher level(s) has evolved. Thus ontological reduction cannot deal synchronically with a higher-level description and the lower-level one at the same time. Emergent levels do not and cannot evolve from their actual material foundations (as heat is the actual comprehensive phenomenon of its fundamental material conditions) but from the material conditions of the beginnings. Therefore, ontological reduction *has*

to deal not just synchronically with actual material conditions, but *diachronically with the long evolution of the emergent object and its all, different material conditions of the whole process*. This is not an easy task and means *the involving of description(s) of the evolutionary process of emergence from the present to the beginnings into the reduction method*.

Third, successful ontological reduction asserts that the higher level(s) *did not exist at the beginning* of the process of emergence but *at the end it does*. This corresponds to ontological reduction's diachronic nature, which is missing from epistemological reduction.

Fourth, emergent evolution by definition of ontological emergence *cannot be formalized exactly* (This is contrary to Nagel's first condition for reduction (Nagel, 1962)). It is *indefinable* and leads to *novelty*. Emergent objects are *individual*; they cannot be described as exactly as heat and particles. Naturally, they can be similar (as a frog is similar to another frog), they can be and have to be categorized, but they cannot be identical, because all of them have individual experiences, skills and (personal) knowledge. (Polanyi 1962) Accordingly, they all are connected to one another at different emergent levels that determine theirs behaviour, relations and existence; because in fact there are no independent, different processes of emergent evolutions, there is just one single but highly diversified emergent evolution on Earth.

Therefore, ontological reduction is not an exact science and cannot be—it is "only" *natural science*. Ontological reduction is, rather, more an *exhaustive description* than a formalized reduction method. It has to deal with different levels of billions of years of an emergent evolutionary process, and each of these levels has its own actual "material" conditions and the emergent principles according to which they will be successful and live or fail and die. And even before all of this, the different emergent levels must be identified. In the end, though, every emergent being and level can be traced back to one fundamental level, to the primordial material substance and its comprehensive features in the beginning. *This is the real reason we do not believe in dualism and vitalism or creationism* and not at the least the successful epistemological reduction of the chemical level.

So in fact there are *several* examples of ontological reduction—several weak examples. They are weak because natural scientists want to reduce the higher levels of life according to the concepts and conviction of materialism, meaning the use of epistemological reduction methods and concepts of materialism to explain everything by (and only by) material conditions. Even those who want to break with mate-

rialism have typically only materialist epistemic tools to do it, because all contemporary science stands on firm materialist grounds. Nevertheless, this seems to have started slowly to change. As in practice, the reduction (called explanation) of life has always used evolutionary descriptions and models that are diachronic in nature, determine higher levels, understand their principle, and describe theirs workings, success and failure, etc.—just open, for example, *The Origin of Species by Means of Natural Selection*. One of the best examples of ontological reduction is Lynn Margulis' explanation of the origin of eukaryotic cells (Margulis 1970), and one of my favorite attempts at ontologically reducing the human mind is Merlin Donald's *Origin of the Modern Mind* (1991). Only the "official" interpretations say that there is nothing more that materialism and the "right method" of science allow but epistemological reduction has *never* showed that. If epistemological reduction would fail also in the future, and materialism would go on denying ontological reduction, this would only strengthen dualism and anti-scientific creationism. However, materialists have to deny ontological reduction and try to reach epistemological reduction. Fortunately biologists resist this—but nevertheless do not dare to think that they are not materialist. Still, I believe it would be very useful to interpret and create these models, descriptions and explanations on their own natural grounds and to call the existing practice of fractional ontological reduction to ontological reduction and build it up—to use emergent interpretations, suppose and seek real emergent principles and handle material conditions in their rightful places. If materialism wrong this could really inspire biology and, I believe, social sciences on evolutionary grounds.

At first glance, epistemological emergentism as an independent and "metaphysically innocent" theory seems to be richer because it assumes higher-level, comprehensive, epistemologically emergent phenomena; but, as we have seen, without the existence of human knowledge, which is the precondition of any higher level, comprehensive phenomena, it is only controversial materialism. *Epistemological emergence has to be one Janus faces of emergence. The other is ontological emergence. Together they are the one proper medium ontological conviction between dualism and materialist monism.*

Now we see that the ontological reduction of higher levels can reveal that a higher-level object has neither dual substantial nor vital nature. Disbelief in dualism and vitalism comes not because of the successful epistemological reduction of the chemical level or heat *but because of successful evolutionary explanations, that is, ontological reductions of life*. Charles Darwin shook dualism and creationism, not Bacon, Maxwell or quantum mechanics.

Nonetheless, the ontological reduction of biological and cultural life is not complete, and by exact criteria it never will be because it is not exact science.

Therefore, the belief in dualism will remain with us for a long time, if not forever. As we demand exact criteria for completeness, we also see that such *materialist notions* as the denying of ontological reductions oddly enough *can really strengthen the belief in dualism*. The reason for this is the wrong materialism-dualism dichotomy, which can only be transcended by the original notion of emergentism.

5. Conclusion

At the beginning of the 20th century, British Emergentism rose and fell over a very short period of time, and the original meaning of emergence faded away. Today, the concept of emergence is here again, but it is severely influenced by materialist concepts and methods. A weak or epistemological understanding of emergence has arisen and the possibility of an ontological or strong emergence is questioned.

In this paper I have argued that, in contrast to materialist interpretations, reduction is not at all the opposite of emergence and that the ontological consequence of a successful standard, epistemological reduction of the exact sciences is the elimination of the higher-level object of the reduced description. At the same time, very few descriptions of higher-level objects have been reduced in this way so far; this is not the reason why we believe in materialism but the false materialism-dualism dichotomy, we do not want to choose the latter.

However, the fact that we cannot reduce everything in this way does not lead us back to dualism, because reduction is not the opposite of emergence, and there is an emergentist notion of reduction too, namely the ontological or diachronic reduction of natural sciences. Ontological reduction is not exact but rather natural science; it can trace back diachronically the emergent levels of life to the primordial material substance and its comprehensive, epistemologically emergent features at the beginning. There is no some kind of universal emergence as the British Emergentists had thought, just an Earth-centered one, which we call evolution. Thus, emergence necessarily has two faces: one epistemological, looking into the material world, and one ontological, which is the emergent levels of life and evolution itself. I believe this is the proper medium ontological conviction between dualism (or vitalism, creationism, etc.) and materialist monism.

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Bibliography
Alexander, Samuel. 1920. *Space Time and Deity*. London, MacMillan and Co.

Bedau, Mark A. 1997. 'Weak Emergence.' In: *Philosopical Perspectives 11*. 375-379.

2008a. 'Is Weak Emergence Just in the Mind?' In: *Minds and Machines* 18. 443-459.

2008b. 'Downward Causation and Autonomy in Weak Emergence.' In: *Emergence. Contemporary Readings in Philosophy and Science*, ed. Mark A. Bedau and Paul Humphreys. 155-188. London, Cambridge, MA: Bradford Book, MIT Press.

Broad, C. D. 1925. *The Mind and its Place in Nature*. New York, Routledge.

Collins, Harry. 2010. 'Tacit and Explicit Knowledge.' Chicago: The University of Chicago Press.

Donald, Merlin. 1991. *Origins of the Modern Mind: Three stages in the evolution of culture and cognition.* Boston: Harvard University Press.

Kim, Jaegwon 1992. 'Downward Causation' in Emergentism and Nonreductive Physicalism. In: *Emergence or reduction? Essays on the Prospects of Nonreductive Physicalism*, ed. Ansgar Beckermann, Hans Flohr and Jaegwon Kim. 119-138. Berlin: de Gruyter.

1998. *Mind in a Physical World: An Essay on the Mind-Body Problem and Mental Causation*. Cambridge, MA: MIT Press.

1999. 'Making Sense of Emergence.' *Philosophical Studies 95*. 3-36.

2002. 'Mental Causation and Consciousness': The Two Mind-Body Problem for the Physicalist. In: *Physicalism and Its Discontents*, eds. Carl Gilletés Barry Loewer. 271-283.

Laughlin, Robert B. 2005. *A Different Universe: Reinventing Physics from the Bottom Down*. New York: Basic Books.

Margulis, Lynn. 1970. *Origin of Eukaryotic Cells*. London: Yale University Press.

McIntyre, Lee. 2007. Emergence and Reduction in Chemistry: Ontological or Epistemological Concepts? Synthese, Vol. 155, No. 3, Topics in the Philosophy of Chemistry. 337-343.

McLaughlin, Brian P. 1992. 'The Rise and Fall of British Emergentism.' In: *Emergence or Reduction? Essays on the Prospects of Nonreductive Physicalism*, ed. Ansgar Beckermann, Hans Flohr and Jaegwon Kim. 49-93. Berlin, New York: Walter de Gruyter.

Morgan, C. Lloyd. 1923. *Emergent Evolution*. London, Williams and Norgate.

Moulines, Ulises. 2006. 'Ontology, Reduction, Emergence: A General Frame.' Synthese, Vol. 151, No. 3, New Perspectives on Reduction and Emergence in Physics,Biology and Psychology.

Nagel, Ernest. 1961. *The Structure of Science: Problems in the Logic of Scientific Explanation*. London: Routledge and Kegan Paul.

Needham, Paul. 2009. 'Reduction and Emergence: A Critique of Kim.' Philosophical Studies: An International Journal for Philosophy in the Analytic-Tradition, Vol. 146, No. 1. 93-116.

Oppenheim, Paul and Hilary Putnam. 1958. 'Unity of Science as a Working Hypothesis.' In: *Concepts, Theories, and the Mind-Body Problem. (Minnesota Studies in the Philosophy of Science*, vol. II), ed. H. Feigl et al. 3-36. Minneapolis: University of Minnesota Press.

Paksi Dániel. 2011. 'Emergence and Reduction in the Philosophy of Michael Polanyi.' Part II. *Appraisal*. Vol. 8. No. 4. 28-42.

Polanyi, Michael. 1959. *The Study of Man*. London: Routledge and Kegan Paul.

1962. *Personal Knowledge*. London, Routledge and Kegan Paul.

1969. 'Life's Irreducible Structure.' In Marjorie Grene ed. Michael Polanyi: *Knowing and Being: Essays*, New Brunswick, London, Transaction Publishers. 225-239. (It was originally published in Science**,** 160 (1968) 1308-12.)

Rueger, Alexander. 2000. 'Physical emergence, diachronic and synchronic.' In: *Synthese* 124. 297–322.

Rueger, Alexander and Paul McGivern. 2010. 'Hierarchies and levels of reality.' *Synthese*, vol. 176, no. 3, 379-397.

Smolin, Lee. 2013. *Time Reborn*. New York: Houghton Mifflin Harcourt.

Sperry, Roger.W. 1969. 'A Modified Concept of Consciousness.' *Psychologicsal Review* 76. 532-536.

1980. 'Mind-Brain Interaction: Mentalism, Yes; Dualism, No.' *Neuroscience* 5. 195-206.

1986. 'Macro- versus Micro-Determination.' *Philosophy of Science* 53. 265-275.

IS POLANYI'S EMERGENCE REDUCTIVE?

Jon M. Fennell

Abstract: Central to Michael Polanyi's account of man and nature is the concept of emergence. Whether emergence in fact exists is a vehemently debated question to which Polanyi forcefully answers in the affirmative. As recently emphasized by Thomas Nagel, a pressing issue raised by emergence is whether or not the unprecedented capacity or property can be understood in terms of more basic elements that existed before. If so, it is, to borrow from Nagel's lexicon, "reductive." At the heart of this inquiry, then, is the question whether Polanyi's emergence is reductive. In pursuing this matter we pierce to the core of Polanyi's enduring contribution both to epistemology and philosophical anthropology as well as evolutionary theory.

Key Words: Michael Polanyi, emergence, Thomas Nagel, reductionism, evolution

1. Introduction

Apparent even to casual readers of Michael Polanyi, but of particular interest to persons interested in evolutionary theory and philosophy of mind, is the central role played in his writings by the concept of emergence. *Personal Knowledge*, Polanyi's *magnum opus*, closes in a crescendo of ontological emergence. And the widely read *The Tacit Dimension*, despite supplanting its predecessor's preoccupation 'with the justification of our ultimate commitments' by a focus on 'the operations of tacit knowing',[1] retains the earlier passionate interest in evolutionary emergence and employs the term ('Emergence') as the title of its centre chapter. References to the emergent are to be found in Polanyi's less well known writings as well. It is evident, then, that emergence occupies a vital place in Polanyi's philosophic enterprise, early and late.

Emergence is also a prominent theme in a recent highly controversial book by Thomas Nagel.[2] In the context of an argument that only grudgingly concedes emergence, Nagel offers the stimulating distinction between 'reductive' and 'reductionist' theories. The latter refers to the view that everything in nature can be accounted for and understood in terms of the physical and material categories that define the disciplines of physics and chemistry. The former, in contrast, refers to the position that everything we encounter, even the strikingly novel, may be accounted for and understood in terms of more basic elements that existed before. All reductionist accounts are reductive, but a reductive account need not be reductionist.

Polanyi is manifestly antireductionist. Might, however, his position be reductive? If so, in what sense can he properly continue to embrace emergence? What would this entail? If not, what are the consequences of a non-reductive analysis? And, under either of these possibilities, what are some of the primary difficulties that attend Polanyi's account? The aim of what follows is to achieve a fuller and more penetrating understanding of Polanyi's thought by examining these important questions.

In pursuing these issues, we will proceed in the following manner. The first section of the essay will elucidate the role of emergence for Polanyi through a close reading of *The Tacit Dimension*. Then, in section two, the essay will illuminate Nagel's analysis of emergence. Within this discussion, two distinctions will be prominent: the reductive/reductionist pairing mentioned a moment ago, and the contrast between what Nagel calls the 'constitutive' and 'historical' questions pertaining to emergence. Utilizing these distinctions as our primary tools, the essay will then in section three return to Polanyi in an effort to clarify just where he stands. Finally, in the conclusion, we will address the questions listed in the paragraph above.

2. The Role of Emergence in The Tacit Dimension

The objective of this section is simply to provide a sketch of Polanyi's views on a topic which, if treated thoroughly, would prompt a lengthy study indeed.[3] Focusing principally on *The Tacit Dimension* (hereafter, *TD*) our task is to illuminate, to the degree necessary to determine whether Polanyi's account is reductive, his position regarding emergence.

Despite the use of the term as a chapter title, reference to emergence in *TD* is restricted to a small number of pages.[4] The word 'emerge' appears in the introductory comments of Chapter 1. There is no further reference to the concept, as either a verb or a noun, until late in Chapter 2 (44-50). In the beginning of Chapter 3 Polanyi again refers to emergence as he opens the lecture with a review of what had been established up to that point. The term does not reappear until the final section of *TD* where Polanyi elaborates upon the 'cosmic' dimension of his account (87-92). The discussions in Chapter 3 take for granted the sense of the term, and the rationale for it, which were established in Chapter 2. It is on those seven pages, then, that we will focus our immediate attention.

The discussion contained in these pages consists of eleven paragraphs.[5] Let us review their contents and draw from them what will be necessary for our later analysis. In the first of the paragraphs, Polanyi characterizes the initial appearance of life as an instance of emergence, and then situates this event and

the underlying relationship between the earlier life-less level and the new animate level within the hierarchical account of the world outlined earlier in *TD* and familiar to readers of *Personal Knowledge* (hereafter, *PK*). Just as the operational principle of a machine exploits, at their boundary condition, the raw materials that constitute its parts, while, in so doing, introducing the new possibility of success or failure, so too a living thing exploits and seizes upon the inanimate while introducing the new possibilities of flourishing vs. decay and survival vs. death. The emergence of life, then, is an instance of a new comprehensive entity that, although relying on the processes that preceded it, is impervious to a full and adequate understanding in terms of them. Polanyi concludes, 'Hence a principle not present in the inanimate must come into operation when it gives birth to living things' (44). Because it will prove of vital importance later, do note that, on this account, while the principle in question was 'not present in the inanimate' it must nevertheless in some sense have already existed in order to 'come into operation'. Just what is this sense?6

In the second of the eleven paragraphs, Polanyi emphasizes that a lower level is incapable of taking control of its own boundary conditions. Instead, 'a higher level can come into existence only through a process not manifest in the lower level, a process which thus qualifies as an emergence' (45). '[N]ot manifest', it would seem, means not apparent in terms of what already existed. We are faced then with something *new*. What does that mean?

Polanyi in the third paragraph seeks to illustrate the hierarchical relationship 'by considering its mental counterpart' in the transition from the infant to the adult mind (45). On Polanyi's account the child's original store of callow 'innate mental connections' is transformed via tacit comprehension into 'fixed relationships of experience' and 'stable rules of logical procedure' (45). He refers to this as 'the process of education by which the human mind is brought into existence' (45). The consequence is that the individual sees the world in terms (that is, via concepts and principles) that simply were not available hitherto. In the fourth paragraph, Polanyi adds, 'the kind of emergence that I identify with comprehension is an action which creates new comprehensive entities' (46). It is telling that he refers here to 'an action'. Who or what is the actor?

Polanyi in paragraph five addresses the current state (circa 1966) of evolutionary theory. He asserts that the problem of evolution has been misunderstood due to widespread preoccupation with natural selection (i.e., the juxtaposition of random mutation with a hostile environment that entails competition for survival). What is genuinely interesting and most deeply significant, says Polanyi, is not 'evolutionary changes due to the selective advantage of random mutations' but rather 'the rise of higher beings from lower ones and, principally, in the rise of man' (46).

Most important, and hence most deserving of our attention, is how it is that we humans exist. From elsewhere in his writings we know that Polanyi is above all fascinated with the fact that in man the evolutionary process achieves consciousness of itself. Or, to employ the concept for which Polanyi is best known, evolution has given rise to the capacity for tacit knowing, a capacity through which an undiscerning, albeit vital, process becomes aware.7 How this has occurred is 'the most important problem of evolution' (47). In an echo of the theoretical self-reflexivity which is so prominent in *PK*, Polanyi is here emphasizing that nothing is more significant to mind than mind itself. To proclaim in the name of a putative higher principle that scientific study should be embarrassed by an anthropocentric focus and ought instead to dwell exclusively on the operation of impersonal forces such as selective advantage is, says Polanyi, 'the height of intellectual perversion' (47).8

Paragraph six is an extension of the logic of the preceding paragraph. Polanyi states, 'A preoccupation with the way populations of a new kind come into existence has made us lose sight of the more fundamental question: how any single individual of a higher species ever came into existence' (47). In paragraph seven Polanyi elaborates by inviting the reader to accompany him as he traces an individual human back to his or her ultimate origins. In doing so, Polanyi comments, 'Natural selection is concerned with populations; it plays no part in the evolution of a single human being' (47). Implicit here, of course, is the question, 'Then, what does?'

In paragraph eight Polanyi ventures a response to this question. After stressing that there is a fundamental difference between 'accidental mutations' and 'changes of type achieving new levels of existence' (48), he refers to 'the autonomous thrust of evolutionary ascent' (48). Such a thrust, then, is responsible for each of us being alive today and for the emergence (the changes of type) responsible for that being the case. But, we must wonder, the 'thrust' of what?

Polanyi in the ninth paragraph makes explicit what the reader by this point is already beginning to suspect. The phenomenon of emergence that is central to Chapter 2 is attributable to the tacit knowing that was the focus of Chapter 1. Tacit knowing is the mechanism through which we grasp comprehensive entities. Earlier sections of *TD* have shown this to be the case in regard to our own performances and, via performances external to us, in regard to other living things and, finally, persons. Tacit knowing yields meaning, and the resulting comprehensive entities that we discern fall into levels of reality. This is a spectacle that 'reveals the stratified universe of living beings' (49). The 'of' in this sentence is ambiguous. From the context of paragraph nine it is clear that the word can and does mean 'within': there are levels of reality within each living thing. But the same sentence can be understood to mean there is stratification *among* or

between living beings. Paragraph ten, brief yet replete with references to emergence, seeks to illustrate this point. Here Polanyi asserts that (in regard to evolution) the appearance of life is the first instance of emergence. It is the 'prototype' for the ever-increasing sophistication that follows. He then adds, 'I have included all stages of emergence in an enlarged conception of inventiveness achieved by tacit knowing' (49). Tacit knowing, then, is responsible for our grasp of evolution. We are able to comprehend the successive levels of emergence. But, again reflecting the self-reflexivity that is at the heart of Polanyi's thought, there is more: the 'mental powers' that constitute tacit knowing are themselves the product of evolution. This is why, as noted above, Polanyi declares that the evolutionary process can be understood as a movement that, with the advent of man, issues in awareness of itself.[9]

Paragraph eleven contains the final direct reference to emergence in Chapter 2. Here Polanyi looks forward. Man, the product of evolution, has arrived at the point at which he comprehends evolution. Yet, precisely because we discern thereby a panorama of emergence, we have reason to believe that the process will continue. An important part of the drama is that its next steps remain unknown. What *is* predictable, given what has transpired up to now, is that each subsequent instance of emergence will be 'accompanied at every step by an additional liability to miscarry' (50). The potential failing that belongs to the sole creature that has emerged as a moral entity is the capacity for evil. As with any comprehensive reality, failure here is the consequence of a breakdown at a level upon which that reality relies. Evil typically is attributable to the corruption of intellect.[10]

The closing seven paragraphs of Chapter 2, while containing no reference to the concept of emergence, proceed under its influence. Here Polanyi focuses on 'consolidation of the center' (50) which is a chronicle of emergence. Every instance of life is a centre. But complexity increases and awareness grows in the movement from plants to simple animal life and, from there, to the higher animals and finally, at the pinnacle, to human personhood. With each advance along this path, there is more to understand and appreciate. When the unfolding arrives at personhood we confront a being capable of living in accordance with principle or an ideal and therefore of commanding our respect. This very 'potentiality for obedience to higher demands' (52) entails that we regard human beings in a distinctive manner. And, when we encounter an individual who in fact elects to live in such a way, perhaps even 'in defiance of the immemorial scheme of self-preservation which had dominated the evolutionary process up to this point' (52), the appropriate response is reverence. Perhaps the most dramatic instance of emergence, then, is the sense of moral incumbency that would command the sacrifice of one's life in the name of that which is higher.[11]

3. Nagel's Useful Distinctions

In 2012 the prominent philosopher (and atheist) Thomas Nagel surprised just about everyone when he published *Mind and Cosmos* (hereafter, *MC*), a study whose subtitle is 'Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False'.[12] One of the most significant features of Nagel's book is that it shows that the question of emergence is more complex than a reading of *The Tacit Dimension* is apt to reveal. This is not surprising, since emergence has a rich history marked by considerable controversy. Most contemporary discussions of the concept begin with the accounts offered by J. S. Mill (in *A System of Logic* from 1843), C. D. Broad (in *The Mind and its Place in Nature* from 1925), and Samuel Alexander (in *Space, Time and Deity* from 1920), the three widely viewed as the founts of 'British emergentism', and then trace the ensuing controversies. All of this taken together constitutes a very large and complex literature.[13] Yet, the difficult questions associated with emergence are not, strictly speaking, a modern phenomenon, as Aristotelian scholars are quick to point out.[14]

3.1 Analytical Groundwork

Nagel, displaying his well-known analytic propensities, divides into two the explanatory burden regarding mind and its attributes: 'it is clear that any explanation will have two elements: an ahistorical constitutive account of how certain complex physical systems are also mental, and a historical account of how such systems arose in the universe from its beginnings' (*MC*, 54). To this he adds the further distinction between a 'reductive' and a 'reductionist' account:

> I will use "*reductive*" as the general term for theories that analyze the properties of complex wholes into the properties of their most basic elements. I will…use "*reductionist*" for the more specific type of reductive theory that analyzes higher-level phenomena exclusively in terms of physical elements and their physical properties…it is possible for an antireductionist theory to be reductive, provided that the elements to which it reduces higher-level phenomena are not exclusively physical. (54, n. 14)

In light of these distinctions, whenever we are tempted to posit emergence, we ought first to engage in a constitutive analysis of the phenomenon. 'The constitutive account will be either reductive or emergent' (54). Only if the phenomenon proves not to be reductive to 'something more basic about the natural order' (56) would it be proper to conclude that we have the historical challenge of accounting for something completely new.

3.2 Applying the Distinctions

Generally speaking, Nagel resists explanations that involve emergence. This is because these are widely

viewed as magical 'explanatory stopping place[s]', dissatisfaction with which is a major impetus for reductionist analyses (56). As opposed to emergent explanations, Nagel prefers a 'unified' account of the universe (for which he also employs the term, 'monism' [56, 57, 87]). In the name of simplicity he would like everything to be present from the beginning— i.e., to see 'how mind and everything that goes with it is inherent in the universe' (15). He offers 'the ideal of discovering a single natural order that unifies everything on the basis of a set of common elements and principles' (7). The great advantage of such a 'reductive' account is that it allows for the appearance of something apparently new and qualitatively different without entailing the dualism and explanatory complexity implicit in any concession to historical emergence. Take, for example, Nagel's teleological account of consciousness. Under this view the mental and physical are both there from the beginning. He states,

> monism holds that certain physical states of the central nervous system are also necessarily states of consciousness—their physical description being only a partial description of them, from the outside, so to speak. Consciousness is in that case not, as in the emergent account, an *effect* of the brain processes that are its physical conditions; rather, those brain processes are *in themselves* more than physical, and the incompleteness of the physical description of the world is exemplified by the incompleteness of their purely physical description. (57)

Nagel then turns his attention to 'the historical account of how conscious organisms arose in the universe' (58). There are, he says, three possibilities: causal '(appealing only to law-governed efficient causation)'; teleological; and intentional. After extended discussion Nagel concludes that the teleological is the least problematic of the three. He concludes, then, that although constitutively all elements and rules governing their activity are there from the beginning, there is, in addition to these elements and rules, a teleological force (a bias toward development), also there from the beginning, tending toward the existence of conscious organisms.

If consciousness were the only thing requiring explanation, Nagel would dispense entirely with emergence. He discovers, however, in his analysis of reason (i.e., in the attempt to explain how we 'grasp objective reality and objective value' [85]), that the reductive account becomes increasingly implausible. He states, 'Rationality, even more than consciousness, seems necessarily a feature of the functioning of the whole conscious subject, and cannot be conceived of, even speculatively, as composed of countless atoms of miniature rationality' (87). He is thus compelled in the case of reason to adopt an 'emergent

answer to the constitutive question' (87). And, because 'practical reasoning and its influence on action involve the unified conscious subject who sees what he should do' (115), Nagel does the same (albeit inconclusively [116]) for value. As a result there is a corresponding challenge for the historical account (88). On that score, Nagel, *faute de mieux*, opts for teleology.

In summary, then, for Nagel certain aspects of mind indeed appear to be emergent. Their appearance is to be explained by the fact that 'the laws of physics would have to leave open a range of alternative successor states' (92) and that certain 'successor states…have a significantly higher probability than is entailed by the laws of physics alone—simply because they are on the path toward a certain outcome' (93). Nagel is quick to remind us, however, that this is 'teleology without intention' (93).

4. Polanyian Emergence in Light of Nagel's Distinctions

How, in the terms employed by Nagel, are we to classify Polanyi's account of emergence? Taking a cue from Nagel, let us begin by asking whether Polanyi's nominee is constitutively emergent. For the purposes of illustration let us depart from the discussion of consciousness, the home territory of Nagel's analysis, and dwell instead on (the first appearance of) life. In doing so, it would seem that with life we do in fact have constitutive emergence.[15] This is because just as with consciousness 'certain complex physical systems are also mental' (*MC*, 54), so too with life certain complex inanimate systems are also animate. While the relationship between the two domains may be unclear, it can scarcely be denied that there are indeed the two domains.

On Nagel's scheme, in the face of constitutive emergence, we are confronted with the question whether the phenomenon is also reductive. 'Reductive', it will be recalled, means that the properties of the higher order whole are analysable in terms of the properties of the lower order. If they are, we have a monism—and it will be a monism that is not reductionist so long as the properties to which the higher order is reduced are not the categories of the physical world. Let us now return to Polanyi's discussion of emergence in *TD*.

4.1 The Role of 'Ordering Principle' and 'Field'

At first glance it seems clear that Polanyi's account of the emergence of life is not reductive. As we saw, he does, after all, explicitly declare that 'a principle *not present* in the inanimate must come into operation when it gives birth to living things' (*TD* 44; emphasis added) and, later, adds, 'a higher level can come into existence only through a process *not manifest in* the lower level' (45; emphasis added).[16] Before rendering a judgment, however, let us recall the role played in Polanyi's account by the 'ordering principle'. This term, absent in *TD*, is prominent in the discussion of

emergence found in *PK*. Appearing as early as p. 35, where it is cited in order to account for 'the fact that the universe has given birth to these curious beings, including people like ourselves', the term suffuses the closing sections of the book. The following passage is typical: 'I shall try to establish an ordering principle of evolution, by distinguishing the *actions* of such a principle from the *conditions* which *release* and *sustain* its actions' (382). Later, after reminding the reader that operational principles (of machine-like functions) 'cannot be defined in terms of physics and chemistry', he states that it must also follow that 'the rise of new operational principles…cannot be defined in terms of physics and chemistry' (401). The appearance of such new operational principles is attributable to the action of an ordering principle which, by the same logic, cannot itself be understood in terms of physics and chemistry. Because all life is characterized by operational principles, it is unsurprising when Polanyi drives the point home:

> From a seed of submicroscopic living particles—*and from inanimate beginnings lying beyond these*—we see emerging a race of sentient, responsible and creative beings. The spontaneous rise of such incomparably higher forms of being testifies directly to the operations of an orderly innovating principle. (386-387; emphasis added)

The initial appearance of life, then, is itself the product of the ordering principle. Polanyi then asks, 'Does some new creative agent enter the emergent system at every new stage?' (393). His answer is 'no'. Emergence is attributable to 'a process of *maturation*' (395) that has been there all along. Under maturation, '[n]ovel forms of existence take control' (395).

The manner in which the ordering principle serves as an actor or agent for Polanyi is tied closely to the concept of 'field'. In the final chapter of *PK*, Polanyi refers, for example, to a 'heuristic field', a force that 'prompts the mind toward' discovery (403).[17] Polanyi cites the familiar experience of attempting to recall something: we sense the proximity of the forgotten item and can actually feel ourselves coming closer and closer to it (see, e.g., 400). On Polanyi's account, we are in the process moving along a 'gradient'. More to the immediate point, movement along the gradient is a matter of being pulled in a direction. In fact, Polanyi goes so far as to speak of discovery being evoked (143; cf. 356).[18] Also contributing to our understanding of 'field' is Polanyi's suggestion that in this process a potential condition is becoming actual (356).[19] What is true for discovery (operation of the heuristic field) is also the case for physiological development within the individual (ontogenesis according to a 'morphogenetic field' which, significantly, is the expression of an 'organizer' [355-356])[20] as well as for the appearance of increasingly more complex forms of life (and life itself) that characterizes

the evolutionary drama (a 'phylogenetic' or 'generalized' field).[21] Fields, according to Polanyi, can operate on and through inanimate things as well as living beings. When the latter is the case, an 'active center' is the necessary vehicle for expression of the bias that defines the field. Because of the role played here by the living being, we may speak of achievement.

4.2 The Answer to Our Question
So, is Polanyi's account of emergence reductive? The answer is 'yes', so long as the judgment is accompanied by a caveat. The account is reductive because that which is responsible for the constitutive emergence—the fields that give rise to new operational principles (and hence life)—exist, potentially, from the beginning. *They* do not emerge historically. Yet, and we now move in the direction of the caveat, unlike Nagel's consciousness which exists side by side from the beginning with mere physical existence, it is not the case for Polanyi that the operational principles (especially those defining living things) are eternal. Just as with Nagel's teleology, a bias toward development exists from the outset. But this bias can and does historically give rise to the unprecedented. Polanyi's account of emergence seems in its fundamentals to be similar to Nagel's account of reason and value.

5. Questions and implications
Polanyi's account of emergence raises a formidable number of difficult questions, many of which have been identified in the secondary literature cited at the outset (see note 3). Of these difficult questions, four seem especially pressing and will be examined here (with occasional reference to that literature):

1) Is Polanyi's account equivocal? (How are we to regard the 'caveat'?)
2) What sense is there to being drawn or pulled by a 'potential'? (How plausible are 'fields' and might 'maturation' be endogenous?)
3) What price is exacted for embracing a pre-existing ordering principle? (If the price is excessive and therefore unacceptable, in what sense, if at all, does emergence remain?)
4) Conversely, what would be the cost to Polanyi's project of abandoning a pre-existing ordering principle? (Would teleology survive and, without it, what becomes of meaning?)

We should expect that additional questions will arise as we take a brief look at these.

5.1 On the 'Caveat'
In August of 2013, on The Polanyi Society email group website, Richard Allen outlined what he considers to be the four possible explanations for the existence of 'new levels and their operating principles'. Allen afterward raised the question of which of the four explanations is employed by Polanyi. He states that while Polanyi affirms the reality of emergence of 'the radically new', he refuses to attribute it

to the action of 'an external creative agency, i.e., God' (one of the four possibilities). Given what was established above, we can say that Allen is certainly correct thus far. He then adds, also correctly, that Polanyi, with his reference to the process of maturation, is pointing to a principle that is both present from the beginning and responsible for the radically new. For Allen this is an instance of equivocation—indeed, a disabling one. It is disabling because it requires that we turn a blind eye toward a problem. Allen is challenging Polanyi: if the principle is active from the beginning, what in the alleged emergence can properly be regarded as new? Alternatively, if the instance of emergence does constitute a new level, it is not in a crucial respect the product of an *original* active principle and therefore itself needs to be explained.

In his post, Allen is raising Nagel's 'historical' question (What is responsible for emergence?) and is dismissive of the response that it is the product of an original principle that later gives rise to the radically new. To refer to an unfolding potential, or the like, is a subterfuge. In order for emergence to occur, something must happen *now*. And if the triggering activity takes place now, why not simply admit this, and concede a contemporary creative agent? Nagel, in relation to constitutively emergent consciousness, escapes this challenge because, on his account, consciousness is there from the beginning. But what about Nagel's 'reason' and 'value' (both of which, he states, were not present at the outset)? Similarly, what about Polanyi's emergence of life, and the process of evolution itself, both of which occur *in medias res*?

For Daniel Paksi, Allen's objection would amount to a pseudo-problem, because there is not a genuine equivocation to begin with. On Paksi's account of Polanyi's emergence, it is a logical requirement that the ordering principle of evolution exist from the beginning (Paksi 2010-2011, 53). At first, the principle is, so to speak, contained. But later it is liberated. Allen's formulation of the issue is therefore misleading. No one in fact asserts that the principle is both not active and active. Rather, the claim is that the principle by its nature is active (always pressing for the radically new). Then, under random and hence unpredictable circumstances, the pressure is released, and the bias that defines the principle is able to express itself. So, the actual question is whether it is coherent to posit such pressure or bias. Or, to employ Polanyi's terminology, does it make sense to speak of 'fields'? And, with this, we come to our second question.

5.2 Refuge in the Endogenous?
Even writers who are friendly to Polanyi deem it unfortunate that the concept of a field or 'pulling' force plays such an important role in his account of emergence. Philip Clayton, for example, interprets Polanyi's reference to an ordering principle fuelling evolution as a relapse of 'Aristotle's doctrine of entelechies, of future (and thus merely potential) patterns pulling natural processes toward themselves' (Clayton 2002-2003, 17).[22] For Clayton, this doctrine is incompatible with contemporary natural science and, therefore, decisively discredited. Walter Gulick adds that Polanyi's indictment of neo-Darwinian thought on the grounds that it cannot account for the action of evolution (i.e., the appearance of life and the emergence of other novel phenomena) is ill founded.[23] It is also unnecessary, since recent developments in biology as well as complexity theory demonstrate that the emergent phenomena that so concern Polanyi can be explained in terms of endogenous 'self-organization' (Gulick 2005, 93-94).[24]

In establishing the groundwork for addressing the last two of our four questions, it will prove useful to summarize Polanyi's case for the existence of a pre-existing ordering principle. This logic is energetically presented by Paksi who observes that, for Polanyi, there are in fact two ordering principles, 'the ordering principle of life's origins and the ordering principle of evolution' (Paksi 2010-2011, 48). As noted earlier, if an ordering principle is responsible for a development, it must have existed prior to the development itself. For Polanyi, the operational principle of a new life form, as well as that of life itself, are the products of an ordering principle that was released by changing environmental conditions. Polanyi's position, as articulated by Paksi, is simply stated: in the face of the fact of the hierarchical complexity of life, a teleological emergent ordering principle is a logical necessity.

5.3 Ordering Principle: Pro and Con
Gulick, of course, demurs. And, in his reply to Paksi, he forces us to consider the third question, namely, what is the price of embracing a pre-existing ordering principle? Predictably, Gulick rejects Polanyi's assertion that a teleological ordering principle is a necessary condition for explaining evolution. He does this on at least two grounds. First, Polanyi, on the basis of their alleged randomness and accidental character, illegitimately dismisses 'contextual circumstances and laws' as an explanation for emergent phenomena (Gulick 2011-2012, 57). According to Gulick, an anthropocentric bias and a puzzling exclusive preoccupation with the focal prevent Polanyi from acknowledging the possibility that in the stimulating changing circumstances of the natural environment we 'have sufficient power to explain biological emergence' (ibid.). On Gulick's account of Polanyi, only what is perceived focally as connected to anthropogenesis is eligible to be regarded as a source of explanation. It is, then, selective blindness, not logical necessity, which prompts Polanyi, *faute de mieux*, to posit the existence of a pre-existing ordering principle.

This initial critique of Polanyi's recourse to a pre-existing ordering principle offers no constructive alternative to Polanyi's suggestion other than to remain alive to the possibility of sufficient explanatory power in 'contextual circumstances and laws'. In his second argument against Polanyi, Gulick is more positive. Here he points to five 'factors' in neo-Darwinian thought, not acknowledged by Polanyi, which are capable of accounting for emergence without any need to refer to a pre-existing ordering principle.25 Unlike the exogenous ordering principle, each of these factors resides within the biological process itself. Again, it would seem, Polanyi's argument for logical necessity is undermined. Emergence is explainable in terms of one or more of the endogenous factors.

The success of Gulick's first argument depends on his effectiveness in prompting the reader to embrace the plausibility of discerning order in what, for Polanyi, are random and accidental events. Ought the reader to do so? Gulick rhetorically asks 'why Polanyi, who so brilliantly shows how independent actions can lead to spontaneous order, should refer to the adjustments made to an environment as "random" and leading only to change rather than a dynamic order' (thereby prompting Polanyi to conclude that neo-Darwinian thought is deficient for lacking an explanatory ordering principle). After all, '[t]here is nothing random or accidental about what traits best allow a species to survive in an environmental niche' (Gulick 2011-2012, 59). Well, yes, this is true. But one suspects that Polanyi would respond by noting that the events that constitute the challenging ever-changing environment are themselves random. Absent a principle independent of the randomness of the stimulus, any response to the stimulus cannot in itself represent something beyond the stimulus.

The plausibility of Gulick's second argument requires the success of the first. This is because whatever novel factors may be discovered within the processes and events that form the background of the evolutionary drama can have no greater explanatory power than those processes and events themselves. Any factor we might specify as a stimulus to emergence is either endogenous to the process, or it is exogenous. If it is endogenous and the process as a whole is random and accidental, so too will be the factor. At that point, Polanyi can speak of the logical necessity for an independent ordering principle. If the factor is exogenous, it may well be that it is the pre-existing ordering principle itself.

A further problem with recourse to endogenous factors as a strategy for accounting for emergence is illuminated by Nagel's description and endorsement of naturalistic teleology. Like Gulick, Nagel speaks of 'self-organization' ('laws of the self-organization of matter' [*MC*, 93]). At first glance this is shocking, given that Nagel by this phrase is referring to teleological laws while Gulick, using the same word,

means to point at factors that purportedly arise within evolution and thereby offer an explanation of emergence under which reference to teleology is superfluous. But, on further examination, Nagel's association of self-organization with teleology proves revealing. Nagel employs 'self' in order to emphasize that his is a *naturalistic* teleology, i.e., that there is in it no appeal to intention or purpose. Teleological laws of nature are as impersonal as are the laws of physics. These teleological laws, according to Nagel, 'apply directly to the relation between the present and the future' and make some outcomes more likely than others (93). On Nagel's account such laws, while in the nature of things from the beginning, have a discernible impact over time and in connection with a transition defined in terms of movement between two moments (unlike the laws of physics, also present from the beginning, which remain active instantaneously and equally at all times). On the other hand, when Gulick employs the 'self' of 'self-organization' he means to rule out not only intention and purpose but also any causal factor beyond the evolutionary biological process itself. Under this portrayal, a factor appears and emergence can and sometimes does as a result ensue. One is prompted to ask, 'How so and why now?' One response to this question is to label it illegitimate (a move that we will consider later). If, however, we stipulate that the question is reasonable, we can rank appearance of the factor as an irresolvable mystery or we can regard it as a consequence of something else. The first response is incompatible with the spirit of the very enterprise out of which the question arises; the latter threatens to become an infinite regress. Should these prove the only alternatives, Nagel's naturalistic teleology takes on a greater appeal.

So, what price is exacted for embracing a pre-existing ordering principle? To begin with, it certainly entails censure by scholars committed to the neo-Darwinian account, especially its contemporary form, bolstered as it is by features such as those cited by Gulick. The price of remaining with the pre-existing ordering principle includes the opposition of any and all observers who reject appeal to exogenous forces as a means of accounting for life and the evolution of life. In the absence of additional clarity regarding the organizing potential of endogenous elements, however, it seems a price worth paying.

In the resulting rumination, it is worth noting that, as pointed out by Paksi and confirmed by Gulick, recognition of a pre-existing ordering principle does not entail a commitment to vitalism (Paksi 2010 2011, 48, 52, 53).26 Yet, it does include acknowledgement of a generalized teleology (a bias in nature toward development) that is widely viewed as superfluous at best, and probably fanciful. It will also incur the opposition of authorities who see only an anthropocentric bias in the assertion that evolution has been led in the direction of the emergence of man (a criti-

cism that seemingly would apply to Nagel as well as Polanyi). It is possible, though unlikely, that the vehemence of this opposition will be mitigated by the realization that the existence of Polanyi's ordering principle does not entail the view that man is, to employ an Aristotelian concept, the final cause of evolution. This is because on Polanyi's account, the process continues to unfold and we cannot be certain where next it will arrive. For all we know, man, like the dinosaurs, may be left behind.

On a positive note, commitment to the existence of a pre-existing ordering principle permits us to continue to regard emergence as reductive. If there are in fact ordering principles for life's origins and for evolution, they have existed from the beginning, and the panorama we know as evolution is, beginning with the initial appearance of life, attributable to their influence. This leads us to the last and most troubling of our four questions.

5.4 The price of abandonment
John Apczynski astutely observes that 'Polanyi was aiming to restore a semblance of credibility to the comprehensive integration of meaning that religious indwelling sustains' (Apczynski 2005, 86). In his account of Polanyi's intention, Apczynski emphasizes the role played by Polanyi's 'heuristic vision' of a meaningfully unfolding universe. This vision was formulated by Polanyi as a rejuvenating successor to the hitherto dominant vision (among many scientists and intellectuals, at least) of a purposeless universe. This sense of purposelessness was the product of a flawed inference from centuries of successful science—an inference facilitated by the bewitching ideal of objectivity. In his heuristic vision, Polanyi is offering a third possibility. Unlike the purposelessness born of the flawed inference and unlike reactive pretenders to meaning that would deny scientific authority, Polanyi's vision embraces science while, in the process, pointing to a source of purpose to which it in fact makes a monumental contribution. In Apczynski's apt formulation, Polanyi's 'reflections…invite us to acknowledge the results of current scientific findings to be functioning in a world whose larger meaning is tacitly affirmed by us and whose larger meaning may be contemplated by us in a way that incorporates the results of scientific inquiry' (84). In Polanyi's heuristic vision, evolution plays a central role. So, too, does emergence.[27] The issue that presents itself is whether Polanyi's vision, and the meaning that it sustains, can survive the elimination of the pre-existing ordering principle (and the associated evoking fields) called for by his critics.

In his response to Apczynski's essay, Gulick suggests that Polanyi's vision is circular: it is the product of 'assuming what he wants to demonstrate, namely, that a purposive ordering principle is ultimate in the cosmos' (Gulick, 2005, 93). To some readers of *Personal Knowledge*, this will seem a peculiar charge.

That is because one of the most prominent features of the book is the confessional statements in which Polanyi forthrightly declares that his thinking, necessarily and virtuously, is circular. In Chapter 10 ('Commitment'), for example, he states, 'Any enquiry into our ultimate beliefs can be consistent only if it presupposes its own conclusions. It must be intentionally circular' (299). Tellingly, Polanyi goes on to say that this very statement is an illustration of its meaning:

> The last statement is itself an instance of the kind of act which it licenses. For it stakes out the ground of my discourse by relying essentially on the very grounds thus staked out; my confident admission of circularity being justified only by my conviction, that in so far as I express my utmost understanding of my intellectual responsibilities as my own personal belief, I may rest assured of having fulfilled the ultimate requirements of self-criticism; that indeed I am obliged to form such personal beliefs and can hold them in a responsible manner, even though I recognize that such a claim can have no other justification than such as it derives from being declared in the very terms which it endorses. (299)[28]

Such a position would be flagrantly subjective and arbitrary if one were at liberty to believe anything he wishes. But Polanyi goes to considerable lengths to demonstrate that, in any defensible conception of 'belief', he and we are not. The ideals to which Polanyi submits include respect for evidence and subordination to the reasonable opinion of appropriate authorities. (These, too, however, are in the final analysis subject to the circularity noted by Polanyi.)

This matter, fundamental as it is to Polanyi's thought, threatens to take us far afield. The reason for mentioning it here is that it serves as a reminder that if Polanyi were at the outset to posit that which he later claims to demonstrate, and then relies upon, we ought not to be surprised. Indeed, given the confessional statements, it is precisely what we would expect. Further, and more to the point, we are thereby invited to understand Polanyi's ordering principle as playing a vital role in his heuristic vision. While Polanyi, the eminent scientist, is certainly not endorsing delusion and will surely yield to the evidence, it is equally clear that his affirmation of a pre-existing ordering principle is far more than a discrete empirical claim and that the question of its justification is tied to the consequences and implications of the vision taken as a whole.

5.4.1 Polanyi's visionary enterprise
The nature and significance of Polanyi's visionary enterprise becomes clearer when we recognize it as an instance of what Charles Taylor calls a 'cosmic imaginary'.[29] This term refers to 'the ensemble of

ways we imagine the world we live in' (Taylor 2007, 323). As such, it permits us to feel at home—in large measure because it explains how things are, and why. In his 1958 review of *Personal Knowledge*, Michael Oakeshott says of its closing chapter ('The Rise of Man') that 'It is a vision of the natural history of mankind, brilliantly imagined and expressed in sentences of un-inflated eloquence' (Oakshott 1958, 80). In offering this judgment, Oakeshott is responding to statements such as these:

> While the first rise of living individuals overcame the meaninglessness of the universe by establishing in it centres of subjective interests, the rise of human thought in its turn overcame these subjective interests by its universal intent. The first revolution was incomplete, for a self-centred life ending in death has little meaning. The second revolution aspires to eternal meaning, but owing to the finitude of man's condition it too remains blatantly incomplete. Yet the precarious foothold gained by man in the realm of ideas lends sufficient meaning to his brief existence; the inherent stability of man seems to me adequately supported and certified by his submission to ideals which I believe to be universal. (*PK*, 389)

Polanyi characterizes the evolutionary drama as 'a great spectacle, the spectacle of anthropogenesis [that] confronts us with a panorama of emergence' (389). The spectacle (so far) issues in the human mind through which the process becomes aware of itself. We have in this account a paradigmatic instance of cosmic imaginary. This is because Polanyi is offering to our imagination a picture of the world (a 'cosmos', to borrow from Taylor) and man's place within it. There is an order and a direction to our existence. Within that order we find ourselves playing a critical part in a great unfolding. There is meaning. If we are properly informed and initiated, things—past, present, and future—make sense. Most important, because the imaginary illuminates moral sources, there are grounds for proper behaviour and a good life.

5.4.2 Gulick's Sharpening of the Issue
In light of the central importance to Polanyi's enterprise of his cosmic imaginary, perhaps the most intriguing aspect of Gulick's extensive work on Polanyian emergence is his repeated confident assertion that we can, without serious loss, dispense with the 'mysterious pre-existing principles' (Gulick 2002-2003, 35).[30] Along with ordering principles Gulick would jettison the 'teleology and progressivism' of Polanyi's account as well as any 'finalistic character to evolution' (Gulick 2010-2011, 49)[31] There will as a result be no purpose on a grand scale, and there are no unfolding 'fields' to which evolution is subordinate (Gulick 2010-2011, 47; 2011-2012, 58).[32] Finally, although Gulick retains a species of

anthropogenesis, he observes that man is 'puny in the vastness of the universe' (Gulick 2002-2003, 43). While from a shrunken perspective this assertion is undeniably true, it represents a sentiment entirely at odds with Polanyi's project. In fact, Polanyi straightforwardly recognizes it as such and its dismissal, qua an affirmation of the personal, can be understood as the primary premise of *Personal Knowledge*.[33]

Yet Gulick would retain central elements of Polanyi's account. Precisely through his corrective purge of the Polanyian imaginary he hopes to preserve Polanyi's 'vision of an increasingly complex world of biologically-based achievement culminating at present…in human reality'. As noted above, Gulick will do this by 'using teleology-free [endogenous] complexity theory' (Gulick 2010-2011, 49). Within Gulick's phrasing is a guarded anthropogenesis—guarded because the cosmos issues in man merely 'at present'. We have already seen, however, that no purge of Polanyi is necessary in order to arrive at this conclusion, since Polanyi himself recognizes that the evolutionary panorama is open-ended and could very well proceed beyond a forgotten humankind. Significantly, within Gulick's correction of Polanyi there is 'qualitative emergence' (Gulick 2010-2011, 47).[34] And, most directly relevant to our immediate concern, Gulick argues that despite the rejection of ordering principles and their associated cosmic teleology, there still remains 'purpose and meaning' (Gulick 2005, 89 [Abstract]).

In the most sophisticated of his analyses of the phenomenon, Gulick identifies three 'orders' of emergence. It is the third of these, titled 'Human World', which provides the occasion for purpose and meaning.[35] What distinguishes the emergence of the human world is 'symbolic creativity'. In contrast to the 'mute' mechanical process and 'self-preserving, interest-centered' causalities that characterize the emergence of the 'Dynamo-Physical' and 'Biological' worlds, respectively, the emergence of the human world represents an unprecedented degree of autonomy. Gulick elaborates:

> Human consciousness, in its distinctiveness, is symbol-infused, and this allows for a selective purposefulness that transcends second-order [Biological] emergence. Through indwelling symbols, a person is able to imagine what is not and what could be. Through symbols, humans are able to select between alternative visions for considered reasons, and this is the very essence of free choice. Symbols open up a considered past and alternative futures. They accumulate in memories and congeal as habits, and thereby they form cultures that shape human behaviour. Thus humans engage in…niche construction: humans create the language and cultural worlds (Polanyi…calls this the noosphere…) in which they live and have

their being. Humans use the power of symbols to probe the material world and reshape it technologically in myriad ways. Humans comprehend and manipulate the blind processes of the first-order world as it emerges from mysterious, minute particles. Humans use symbols to create machines with operational principles comparable to the telic principles guiding biotic beings exhibiting second-order emergence…Thus symbol usage allows for self-generated causality, a kind of emergent activity…[36]

It is this third-order emergence and its possibilities that permit Gulick elsewhere to refer to participation in 'a purposeful cosmos' (Gulick 2005, 95). Interestingly, this participation is made possible through worship of God. Giving oneself over to God—and here Gulick indicates that he understands himself to be closely following Polanyi—constitutes an affirmation of meaning. In Gulick's felicitous phrasing, such commitment 'is a virtually self-authenticating way of discovering how life is invested with purpose and significance' (Gulick 2005, 96). We enjoy here, it would seem, the fruit associated with Polanyi's cosmic imaginary.

5.5 The Vital Question: Whence Comes Meaning?
The question that will no longer be suppressed is this: Is the experience of such meaning a reasonable prospect in the absence of Polanyi's ordering principle and the self-understanding and sense of participation it makes possible? In the stripped-down imaginary, there are no fields pulling us in one direction or another. There is nothing to evoke emergence, though emergence continues to exist. Does emergence remain reductive, as we have seen it is for Polanyi? If so, it certainly is not reductive in the same way, given that Polanyi's reductive emergence is attributable to timeless ordering principles that are absent from the revised imaginary. But, on this alternative account, there exist factors endogenous to evolution that give rise to 'self-organization'. These are internal to the process and account for emergence. They must, however, arise during evolution for, if they in any sense preceded it, we would have returned to something comparable to Polanyi's original imaginary with its pre-existing principle. One is tempted at this point (rather in the spirit of Richard Allen) to raise the question of what accounts for the appearance over time of the endogenous factors which are responsible for emergence. But this temptation is tempered by the suspicion that the very impulse would be regarded by opponents of teleology as begging the question. On what grounds, it will be asked, are we justified in supposing that there must be an explanation? The same austerity that bans reference to teleology would rank as superfluous any expectation of a rationale for evolution as a whole. The evolutionary spectacle simply *is*, endogenous factors and all, and that is that.

The ghost of Rorty speaks from afar: 'Get over it! You don't need anything more!' Such policing of expectations is alien to Polanyi—as well as even to the atheistic Nagel who openly declares that '[t]he world is an astonishing place' and that 'certain things are so remarkable that they have to be explained as non-accidental if we are to pretend to a real understanding' of it (*MC*, 7). Rorty, reminding us of Gulick, would in response no doubt observe that such thinking is circular: it is only because we posit significance that there is the impulse to explain it. Polanyi, perhaps with reference to his 'calling', would reply that embracing such a view and responding accordingly is a well (if self-reflexively) justified choice. For his part, Nagel prefers to say that such significance is mere common sense. It would seem that Polanyi offers the more penetrating understanding of the matter.

So, where is the meaning and purpose in the revised imaginary? With Polanyi's vision we are buoyed by the prospect of participating in and contributing to a great unfolding; we are party to a movement that reaches back before life itself and promises to extend indefinitely into the future. Man (and perhaps his successor as well, whatever that may turn out to be) is the process become aware of itself. And in the awareness we find the reality: 'Looking back from this point on the immensities of the past, we realize that all that we see there, throughout the universe, is shaped by what we now ultimately believe' (*PK*, 404).[37] In stark contrast, the revised imaginary, lacking even impersonal agency, strips us of any trace of pre-existing purpose. There is no possibility of an unfolding because the universe, bereft of purpose all the way down, is incapable of harbouring even the potential for such a result. Yet, as with Polanyi's imaginary, within the evolutionary record offered by the revised account 'centers' (e.g., human individuals) do emerge. But is there anything for them to behold or appreciate? One might argue that without the unfolding all that exists is an uninteresting sequence of insignificant events. The ghost of Rorty responds, 'So? Your expectations are perverse. There is no justification for disappointment'. At this point, one can imagine Polanyi responding in a manner such as this: 'As I have forthrightly declared in my discussion of "calling", I am inescapably a product of my own particular time and place. As such I have expectations and a corresponding bar for significance and appreciation. I will not be satisfied with the revised imaginary. I realize that there is no reasonable prospect that I will through argument be able to compel you to join me in adopting these expectations and the appreciation they make possible. I can only practice and dwell in this vision, describe it honestly and with passion, and invite you to join with me in it. You have a choice, as did and do I. For my part, I embrace what I see, yielding to an obligation which I have come to understand to be my fate and

responsibility. I have every reason to believe that matters are the same for you as they are for me. Among my obligations is to clarify what is possible. In the exercise of your ensuing responsibility I can play no direct role'.

6. Conclusion

For Polanyi, while the existence of achieving centres is manifest, the heuristic field (and associated 'gradient of a discovery') that is purportedly responsible for achievement is an 'assumption' (*PK*, 403).[38] But achievement, whether it occurs in a rat, an ape, or a human, exists in the mind of a beholder.[39] It is of course possible to withdraw commitment to the heuristic field. But so too it is possible not to recognize achievement. Why on Earth would we do that, if we may choose not to do so? And, for reasons that are clarified through a lifetime of thought, we realize that we *do* in fact have such a choice—a choice that enables justification and provides each of us with grounds for meaning. This, it would seem, is Polanyi's central point.

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Bibliography

Alger, David W. 2013-2014. 'Emergence from Within and Without: Juarrero on Polanyi's Account of the External Origin of Emergence'. *Tradition & Discovery: The Polanyi Society Periodical* 40 (3): 23-35.

Apczynski, John. 2005. 'The Discovery of Meaning through Scientific and Religious Forms of Indwelling'. *Zygon: Journal of Religion and Science* 40 (1): 77-88.

Clayton, Phillip. 2002-2003. 'Emergence, Supervenience, and Personal Knowledge'. *Tradition & Discovery: The Polanyi Society Periodical* 29 (3): 8-19.

Clayton, Phillip, and Paul Davies, eds. 2006. *The Re-Emergence of Emergence: The Emergentist Hypothesis from Science to Religion*. Oxford: Oxford University Press.

Grene, Marjorie, ed. 1969. *Knowing and Being: Essays by Michael Polanyi*. Chicago: The University of Chicago Press.

Gulick, Walter. 2002-2003. 'Response to Clayton: Taxonomy of the Types and Orders of Emergence'. *Tradition & Discovery: The Polanyi Society Periodical* 29 (3): 32-46.

2005. 'Polanyi on Teleology: A Response to John Apczynski and Richard Gelwick'. *Zygon: Journal of Religion and Science* 40 (1): 89-96.

2010-2011. 'That "Treacherous Footnote": Assessing Grene's Critique of Polanyi'. *Tradition & Discovery: The Polanyi Society Periodical* 37 (2): 45-55.

2011-2012. 'On the Adequacy of Neo-Darwinism: A Reply to Daniel Paksi'. *Tradition & Discovery:*

The Polanyi Society Periodical 38 (2): 56-60.

Nagel, Thomas. 2012. *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*. Oxford: Oxford University Press.

Oakeshott, Michael. 1958. 'The Human Coefficient'. *Encounter* 11 (3): 77-80.

Paksi, Daniel. 2010-2011. 'In Defense of Polanyi's Understanding of Evolution: A Response to Walter Gulick'. *Tradition & Discovery: The Polanyi Society Periodical* 38 (2): 48-55.

2010. 'Emergence and Reduction in the Philosophy of Polanyi (I)'. *Appraisal* 8 (2): 34-41.

2011. 'Emergence and Reduction in the Philosophy of Polanyi (II)'. *Appraisal* 8 (4): 29-43.

Polanyi, Michael. 1969. 'Life's Irreducible Structure' in *Knowing and Being: Essays by Michael Polanyi*, Marjorie Grene, ed. Chicago: The University of Chicago Press.

1974 (first published in 1958). *Personal Knowledge: Towards a Post-Critical Philosophy*. Chicago: The University of Chicago Press.

1983 (first published in 1966). *The Tacit Dimension*. Gloucester, MA: Peter Smith.

Taylor, Charles. 2007. *A Secular Age*. Cambridge: The Belknap Press of Harvard University Press.

Notes

1. See Polanyi's preface to the Torchbook edition of *Personal Knowledge* (New York: Harper & Row, 1964), xi.

2. Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* (Oxford: Oxford University Press, 2012). For a review of the book that seeks to place it within a Polanyian perspective, see Jon Fennell, 'Plausibility and Common Sense: *Mind and Cosmos* by Thomas Nagel', *Tradition & Discovery*, Vol. XL, No. 1 (2013-2014), pp. 45-52.

3. These precincts have been visited before. More than ten years ago, an entire issue of *Tradition & Discovery* was given over to a paper on the subject by Philip Clayton ('Emergence, Supervenience, and Personal Knowledge'), followed by four responses to that paper, and Clayton's reply to them. (See *Tradition & Discovery*, Vol. XXIX, 3 [2002-2003].) Among other earlier discussions of emergence in Polanyi's thought is an exchange between Daniel Paksi and Walter Gulick. See, in this connection, the original paper by Gulick, 'That "Treacherous Footnote": Assessing Grene's Critique of Polanyi' in *Tradition & Discovery*, Vol. XXXVII, 2 (2010-2011), and the ensuing essays: Paksi's 'In Defense of Polanyi's Understanding of Evolution: A Response to Walter Gulick' (XXXVIII, 2) and Gulick's 'On the Adequacy of Neo-Darwinism: A Reply to Daniel Paksi' (XXXVIII, 2). Also addressing Polanyian emergence is a two-part article by Paksi: 'Emergence and Reduction in the Philosophy of Polanyi' in *Appraisal*, Vol. 8, 2 and 4 (October 2010 and October 2011). Finally, see an additional paper by Gulick: 'Polanyi on Teleology: A Response to John Apczynski and Richard Gelwick' in *Zygon*, Vol. 40, 1 (March 2005), 89-96. Although a close examination of these predecessor studies would take us far afield, it will prove both necessary and useful to make occasional reference to them.

4. In this paper we will be referring to the hardbound 1983 reprint of *TD* (Gloucester, MA: Peter Smith, 1983). *TD* was originally published in 1966. All citations to page numbers will occur within the text.

5. The first of these paragraphs opens with the words, 'Inanimate nature…'.

6. That the answer to this question points beyond this principle itself is suggested by *Personal Knowledge* when Polanyi refers to 'an ordering principle capable of producing operational principles which the system had not previously possessed…' (399). Cf. 386: 'the process must have been directed by an *orderly innovating principle*, the action of which could have only been *released* by the random effects of molecular agitations and photons coming from outside, and the operations of which could only have been *sustained* by a favourable environment'. See, too, 402, where Polanyi asserts that random mutation and natural selection can *release* a new operational principle but never *establish* one. Again, if the principle is released, must it not already have existed?

7. Cf. *PK*: 'the appearance of the human mind has been so far the ultimate stage in the awakening of the world' (405). The 'so far' in this sentence is too seldom appreciated by commentators on Polanyi.

8. Cf. the opening paragraph of *PK*. Considering Polanyi's passion on the matter, one expects here a citation to Alexander Pope: 'The proper study of Mankind is Man' (*An Essay on Man*).

9. Cf. *PK*, 385: Man is 'the most precious fruit of creation'. Interestingly, Polanyi then adds, 'the knowledge of this fact lies outside natural science'. This is because 'the study of man's rise extends…far beyond biology, into our acceptance of what we believe to be man's nature and destiny'" (386). Man's significance and the meaning he is capable of discovering in his life is attributable to affiliation with a larger unfolding drama.

10. This is a phenomenon well understood by C. S. Lewis. See Jon Fennell, 'A Polanyian Perspective on C.S. Lewis's *The Abolition of Man*', *Journal of Inklings Studies*, Vol. 4, No. 1 (April 2014), pp. 93-122.

11. In one of his late writings (from 1968), Polanyi offers a similar account of increasing levels of responsibility in terms of boundary conditions as opposed to emergence: 'the mind includes an ascending sequence of principles. Its appetitive and intellectual workings are transcended by principles of responsibility. Thus the growth of man to his highest levels is seen to take place along a sequence of rising principles. And we see this evolutionary hierarchy built as a sequence of boundaries, each aiming at higher achievements by harnessing the strata below them, to which they themselves are not reducible' (Polanyi 1969, 238).

12. See note 2 above.

13. Two such representative accounts reside on the Web at O'Connor, Timothy and Wong, Hong Yu, 'Emergent Properties', *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/sum2015/entries/properties-emergent/, and http://www.iep.utm.edu/emergenc/#H4.

14. See, for example, Victor Caston, 'Epiphenomenals, Ancient and Modern', *Philosophical Review* 106:3 (July 1997): 309-363.

15. It seems to be a foregone conclusion for Polanyi: 'How can the emergent have arisen from particulars that cannot constitute it?' (*PK*, 393).

16. See, too, *PK* (399) where Polanyi portrays ontogenetic maturation as emergence marked by 'operational principles which the system had not previously possessed' and phylogenetic emergence as 'producing operational principles that are altogether unprecedented'—the latter being 'fully developed emergence'.

17. Note the reference to 'force' and 'forces' at *PK* 398-399.

18. In a much later formulation, Polanyi retains the term: 'It appears, then, that DNA *evokes* the ontogenesis of higher levels, rather than *determining* these levels. And it would follow that the emergence of the kind of hierarchy I have defined here can only be evoked, but not determined, by atomic or molecular accidents' (Polanyi 1969, 235; emphasis is Polanyi's.) The reader must wonder, however, just *what* is evoked.

19. See 398: 'this field of forces would also be the gradient of a potentiality: a gradient arising from the proximity of a possible achievement'.

20. See, too, *PK* 383 (note 2) where Polanyi reflects on the possibility that 'the morphogenetic field is the true *ordering principle* of ontogenesis' (emphasis added). Interestingly, Polanyi's language near the end of *PK* is more guarded than it is when he introduces the concept of morphogenetic field. On p. 398 he remarks, 'The morphogenetic field (or its organizer, *if there is one*)…' (emphasis added). In this reluctance to specify a higher order agent, we are reminded of Nagel's insistence that his teleology exists without any trace of intention. If Polanyi in the discussion of his more comprehensive fields remains consistent in his reticence to specify an agent, might the two thinkers coincide on this fundamental matter? Whatever the outcome, it must accommodate Polanyi's conception of 'a field as the agent of biotic performances' (402).

21. In a dramatic summary, Polanyi refers to 'the possibility of unprecedented achievement guides the maturation of the germ plasm to ever higher evolutionary stages' (*PK*, 400). This is 'fully developed emergence' (399).

22. See, too, Clayton's treatment of Polanyi in Philip Clayton and Paul Davies, eds., *The Re-Emergence of Emergence: The Emergentist Hypothesis from Science to Religion* (Oxford: Oxford University Press, 2006), 15ff.

23. See, for example, Gulick 2011-2012, especially 59-60.

24. See also Gulick 2010-2011, 47-48. On the question of endogenous motivation for emergence, see, too, the work of Alicia Juarrero and the response to her criticism of Polanyi's exogenous position by David W. Alger 2013-2014.

25. The five are 'mutations, genetic drift, exaptation, migration and species isolation, and dynamic species-environmental interaction' (58).

26. Gulick concurs at 2011-2012, 59. But Gulick adds a qualification in 2002-2003: Polanyi 'shows he is sympathetic to non-substantive varieties of vitalism' (35).

27. Apczynski observes that Polanyi in *PK* asserts 'that evolution describes an achievement producing fundamental innovations' (84).

28. An equally revealing statement appears at *PK*, 324: 'by contrast to a statement of fact claiming to be impersonal, an affirmation made in terms of a commitment gives rise to no insatiable sequence of subsequent justifications'.

29. See Jon Fennell, 'Polanyi's Revolutionary Imaginary', an as yet unpublished manuscript of a paper delivered (and responded to by Charles Taylor) at the meeting of The

Polanyi Society (U.S.) in San Diego in November 2014.

30. See also 'shadowy ordering principle' on the same page.

31. Cf. Gulick 2005, 92 and 93.

32. Cf. Gulick 2005, 94: 'But there is no good reason to postulate an immanent drive within the cosmos to realize the potentiality of a stable open system'. Do note that Gulick has not rejected 'the potentiality of a stable open system' but only a cosmic bias toward arriving there.

33. See *PK*, 3.

34. Cf. the reference in Gulick 2011-2012 to 'evolutionary emergence' (59).

35. The discussion of the three orders occurs in Gulick 2002-2003, 42-44.

36. The reader will note the numerous Polanyian concepts and themes. Gulick's acknowledgement in this passage of emergent creativity ('self-generated causality') on the basis of symbol usage is reminiscent of Nagel's reference to value creation: 'And once there are beings who can respond to value…intentional action becomes part of the historical picture, resulting in the creation of new value. The universe has become not only conscious of itself but capable in some respects of choosing its path into the future…' (*MC*, 124). Since Nagel's account, so markedly similar to that of Gulick, depends for its creativity on a teleological impetus, one all the more wonders if something of the sort is in an unacknowledged fashion operating in Gulick's revised imaginary.

37. The indispensable model for this principle, applied to one's own life, is Augustine's *Confessions*. The Saint, in showing how this happened to him, invites us to experience the same for ourselves. Perhaps this constitutes the source for the theocentric purpose and significance specified by Gulick. (The critical question is whether the Augustinian move is possible without the sources of meaning ruled inappropriate by Gulick's purge.) It is of considerable interest to note that Nagel joins Polanyi and Augustine in retroactively recognizing purpose (but, in Nagel's case, without recourse to theism): 'Mind, as a development of life, must be included as the most recent stage of this long cosmological history, and its appearance, I believe, casts its shadow back over the entire process and the constituents and principles on which the process depends' (*MC*, 8).

38. Note the pair of references on this page.

39. See *PK*, 404 (especially the reference to 'ultra-biology') as well as 263-264 and 343-348.

JUSTICE, RELIGION, AND THE HUMAN QUEST
FOR PERFECT HAPPINESS:
CAN PHENOMENOLOGICAL REALISM AND THOMISM
AGREE ON THESE ISSUES?

John Hofbauer

Abstract: Phenomenological realism is often perceived to be at odds with the Thomistic tradition, mainly because it rejects the scholastic categories used by Thomism. The perceived antagonism lies in certain phenomenological realists' caricature of Thomism on questions concerning the quest for happiness, the virtue of justice and the virtue of religion. There may, however, be more commensurability here than is usually anticipated. To illustrate the ways in which these schools are compatible, we highlight some frequently overlooked directions in Aquinas' thought.

Key Words: Altruism, Aquinas, Thomism, Phenomenological Realism, Dietrich von Hildebrand, self-interest, Justice, virtue of Religion, , happiness

1. Introduction

The school of phenomenological realism, which began with the likes of Edmund Husserl and Martin Heidegger, is often perceived to be at odds with philosophers in the Thomistic tradition, and mainly because of its explicit rejection of the traditional scholastic categories used by Thomism. Beyond, however, its origination with Husserl and Heidegger, other major figures have emerged in the school of phenomenological realism that are significant in their own right. These figures include the prolific writer, Dietrich von Hildebrand, Karol Wojtyla (Pope John Paul II), Josef Seifert, and John Crosby, from the International Academy of Philosophy in Lichtenstein. To a large extent, perhaps, the perceived antagonism lies in the caricature that certain proponents of phenomenological realism have painted about Thomism on questions concerning the self-interested quest for happiness, the virtue of justice and the virtue of religion (as a mode of the natural virtue of justice). It is our belief, however, that there can be more commensurability here than is usually anticipated, particularly if Aquinas' implicit reasoning is taken into account. To illustrate the ways in which these two schools of thought are compatible, we will highlight some frequently overlooked directions in Aquinas' thought.

Initially, we will concentrate on Aquinas' implicit awareness of the distinction between the 'Good' as the 'absolute ultimate end' and happiness as the 'subjective ultimate end' (this awareness is expounded upon, for example, by Jacques Maritain in his work, *Moral Philosophy*). We will analyse this distinction in the context of the priority which phenomenological realism has given to the 'moral good' (value response) over an essentially egocentric quest for happiness. In this context, we will also be utilising phenomenological realism's distinction between authentic and inauthentic happiness, insofar as each type of 'happiness' results, respectively, from a concentration on either the important-in-itself or the importance of the merely 'subjectively satisfying.'

Afterwards, we will draw a parallel between phenomenological realism's concept of value response as complete 'self-donation' and Aquinas' notion of 'religion' as a virtue. We will also incorporate the significant aspects of Pieper's interpretation of Thomistic justice, insofar as they affirm the reasonability associated with the ideal of loving God more than the self. Along the same line of thought, there will be a discussion of Aquinas' interpretation of the theological virtue of charity, together with an examination his notion of man as *imago Dei* in the context of the call to Christian 'perfection.' We will also incorporate into this discussion a treatment of Aquinas' distinction between 'concupiscible love' and 'friendship love,' focusing on its unique significance for the task of commensurating these two schools of philosophical thought.

In his work *Moral Philosophy*,[1] Maritain describes, in compelling fashion, the impact that the Incarnation had upon the self-centredness associated with Aristotelian moral philosophy. The primary effect of the Incarnation was to force 'the distinction between the supernatural plenitude in which the human subject is fulfilled, with the endless joy that goes with that fulfilment, and the divine Essence, the subsistent Good, the vision of which beatifies the human subject' (*Moral Philosophy* 77). With Christian revelation, the notion of the 'Good' became much more than simply the moral goodness (the 'Good as right') associated with natural, Aristotelian virtue. The Good became a transcendent 'person-ality' and as such it was now perceived to be separate and distinct from the happiness associated with the one given the grace to possess it in the 'Beatific Vision.' And not only was it now perceived as distinct from the happiness of the subject possessing it, but it also carried within itself an obligation for the moral agent to love it more than he loved his own self:

> . . . it is for love of the subsistent Good, loved more than all things, more than the human subject itself and more than his own happiness, it is for love of the absolute ultimate End that man desires the beatitude in which his own

being is divinely perfect. . . .the Good is something other than happiness, and . . . the first demand and the first condition of moral rectitude is to love the Good more than Happiness. (*Moral Philosophy* 77).

One can see how Maritain's interpretation of the distinction itself (between the Good and Happiness) as well as the concomitant obligation to love it more than one's own happiness, is consistent with the arguments phenomenological realism has made on the same issue. For Maritain's comments here parallel phenomenological realism's persistent demands for the moral agent to put aside any pre-occupation with his own self-interest and happiness and to love the Good (the 'important-in-itself') for its own sake.

Now Maritain makes the commensurability with phenomenonlogical realism even more probable with some additional implications that flow from the distinction, as well as from the obligations that naturally coincide with it:

> Beatitude is loved but God is loved more; and beatitude, precisely because it is union with the supreme Good subsisting in itself, can only be really and truly loved if it is loved in and for the love of that subsistent Good, supremely loved for itself. The love which the human being naturally has for himself is not abolished, certainly, but it loses first place, it is chased from the primary and royal seat; the absolutely primary love, the love which is above and beyond all others, can and must be torn away from the self and directed toward the uncreated Personality with whom the human person is in a direct relation over and above all the things of this world . . . .
>
> Thus the egocentricity, within which Aristotelian eudaemonism was enclosed, has been definitively overcome. At the very moment that beatitude is promised to man, he is offered the possibility of finally being delivered from himself and from the devouring egoism which perverts his love of himself. . . . Christian hope makes me wish that God be *mine*, but it is not *for me* or by reason of myself that I wish God to be mine; it is for God and for love of God, for I love God more than myself and more than my happiness. Christian morality is a morality of beatitude, but first and foremost it is a morality of the divine Good supremely loved. (*Moral Philosophy* 78-79)

Thus the love that the self naturally has for its own interests is not abolished, as Maritain has indicated here, but it been demoted to a significant degree, based upon the quality and transcendence of the Good that the self is called to love more than its own being and interests. But the most compelling aspect of Maritain's reading here lies in the implied *freedom*

that is made available to man as a result of the Incarnation. Specifically, it is the freedom from himself and his own immanent interests that is granted. For, concomitant with what Aquinas claims is an innate desire to love God more than himself, is the often overlooked desire that man possesses to be finally released from the self-imposed chains that bind him so closely to an inordinate interest in his own self-interest.

More than anything else (except, certainly, for the possession of the 'Good' itself), this freedom from self-interest is, perhaps, what lies at the bottom of the 'rapture' and the 'euphoria' that phenomenological realism associates with the 'donation' of self in value response. As a point of comparison, let us look at their own distinction between 'authentic' and 'inauthentic' happiness in order to link the happiness of the moral agent, or his lack of it, with the freedom from self-interest (as well as the freedom for the Good in *itself*) that Maritain argues for so compellingly.

To begin with, we should note the element of consistency in von Hildebrand's work, *Christian Ethics*.2 He makes the argument that 'self-centred happiness' alone can be directly intended as an 'end' or object of choice by the moral agent, while 'authentic happiness' can never serve as the 'primary motive' of the moral agent's 'actions and desires.' His argument is consistent here because his previous assertions made during his analysis of 'self-donation' often spoke of the element of 'surprise' surrounding any subjectively beneficial effects that might accrue from pure value responses. The moral agent, then, should always be in a position such that he renders himself capable of being 'surprised by joy,' because of a primary focus on the object (value) itself. True joy (authentic happiness) is essentially a *gift*, incapable of being self-given, even if desired for its own sake. Authentic happiness, then, can only be 'bestowed when we abandon ourselves to God for His own sake' (*Christian Ethics* 305). Self-centred happiness ('inauthentic happiness'), on the other hand, can be directly intended (as mere 'satisfaction' of the subject) because the moral agent can position himself in such a way that the 'merely subjectively satisfying' stands as his primary, or even sole, motivation:

> . . . self-centered happiness alone can be directly intended. Authentic happiness, on the contrary, by its very nature cannot be the end of our actions, but it is definitely a gift bestowed on us when we abandon ourselves to a good endowed with a genuine value. Ultimate authentic happiness can only be the object of a general longing, but not the primary motive of our actions and desires. It presupposes precisely that we abandon ourselves to a good possessing a genuine value

for its own sake. . . . The decisive question from the moral point of view is precisely whether a man primarily desires authentic happiness or self-centered happiness. Thus, although it is true that 'every man by nature seeks happiness,' it is erroneous to assume that every man subjectively desires the same happiness. (*Christian Ethics* 309)

This passage indicates, to a degree, von Hildebrand's tacit agreement with Maritain's interpretation of the 'subjective ultimate end' (complete happiness), insofar as it here concerns the moral agent's obligation to love the 'Good' for its own sake and to put self-interest aside. To reiterate, the quality of the 'happiness' associated with the merely subjectively satisfying, is not even remotely similar to the authentic joy which may arise from a primary concentration on the valuable object itself. The unsurpassable joy which accompanies love of the Good for 'its own sake' is apparently accepted by both philosophers as a *consequence* of the selfless focus on the 'absolute ultimate end.' Nonetheless, and despite the fact that Maritain is of the Thomistic school, it would seem as though the vast majority of Aquinas' explicit thought patterns specifically include self-interest as a component of final beatitude – beatitude understood as the complete satisfaction of the desires of the 'restless heart.' The present issue, then, is whether phenomenological realism's concept of 'authentic happiness' can be commensurated with the rest of Thomism, together with Aquinas' explicit description of final beatitude, as it will be considered now independently of Maritain's position.

In his *Summa Theologiae,* Aquinas outlines the trivalent aspect that comprises the moral agent's actual state of beatitude:

> . . . there must be a concurring of these three for happiness: vision, which is perfect knowledge of the intelligible end; comprehension, which implies presence of the end; and delight or enjoyment, which implies response of the one loving in what is loved. (*ST* I-II, Q. 4, a. 3, *corpus*)

The three-fold nature of happiness, then, includes the 'Good' itself, the perfect knowledge or intellectual 'vision' of this 'Good,' and the joy 'born of love' which is present by virtue of the fact that the first two conditions are present. As a whole, these three components present in man's final beatitude all combine to produce one continuous 'activity' – and they stand in contrast to any theory that understands final happiness as a state of 'rest.' In his *Treatise on Happiness,* Aquinas cites Augustine's *De Civitate Dei* to explain this idea of happiness as an activity: 'What we call the end that is a good is not that [i.e., the *inquietas* of man's "restless heart"] which is consumed so as not to be, but that which is brought to

completion so as to be fully.'3 This notion of the 'end as good,' coupled with Aristotelian/Thomistic 'potency-act' model of the human soul, both seem to lend themselves to an understanding of happiness as the satiation of rational desire. Aquinas' potency-act model of the soul furnishes the moral agent with an infinite capacity to take on the immaterial forms present in the totality of 'being,' a capacity which culminates in the possession of God as *Ipsum Esse Subsistens.* To repeat, the combination of this capacity with the seemingly unquenchable desire of the Augustinian 'restless heart,' both point to a notion of happiness that is primarily and essentially interested in the fulfilment of self and the *satisfaction* of restless desires. This final fulfilment would effect a complete reduction of the act-potency relationship in the soul.

If the rational desire of the moral agent were to be 'consumed' at the end, then a significant aspect of human nature would have been destroyed rather than fulfilled. In other words, the rational desire would have been strictly instrumental and not 'constitutive' of the end. Aquinas' notion of rational desire as a 'constitutive good,' instead of it being a merely instrumental one, can be illustrated by examining the typical dynamic that exists between singing and praying. Singing is not simply a means to the 'end' of prayer, for one good is included in, or constituted in, the other. The fact that singing was used for prayer does not destroy the inherent dignity of singing. Thus, in man's final beatitude, the possession of God as unrestricted Being is perceived by Aquinas to be a 'congregation,' or synthesis, of everything that is good. Upon reaching his final beatitude, the moral agent 'becomes' everything that is good because he will possess the dominant and inclusive Good (*bonum universale*) – a Good which is good from every viewpoint and which satisfies the purpose of all other goods since it does not destroy their inherent dignity. If the ultimate end of man were merely an 'aggregation' (of separated goods) rather than a 'congregation,' then all the goods required achieve any dominant (but *uninclusive*) good – such as the rational desire for self-fulfilment – would have to be jettisoned upon reaching the final end. And this disposal would destroy the inherent dignity of goods such as self-interest, for these goods would have been *only* means and not constituents.4

Again, if no part of the natural desire for fulfilment is to be discarded and if this natural desire is to be fully realised at the end (Aquinas' understanding is that even when desire is satiated, the activity is not terminated), then the moral agent's capacity for *action*, as a constitutive good, cannot be jettisoned either. Rather, man 'enters into the joy of the Lord' (Matt 25:21).5 For Aquinas, beatitude is an 'active reception' of the vision of unrestricted *Esse.* Beatitude is an activity, a perfect state of 'living-doing,' which does not 'produce' anything extrinsic

to itself because it is an activity through which the perfection and the activity are able to remain within the agent.6 Here is a restful *fruitio,* a repose of the will that occurs because the intellect – out of its own *self-interest* – has 'found the object which completely dazzles it.'7 Beatitude must be an activity which is wholly 'alert' as opposed to a stagnant state of passivity, a state which implies suffering and death.8

The 'Good,' then, has to be the object of the moral agent's activity *and* the activity that he is doing. This dipolar unity, which connects the standard of perfection to the standard of activity, is intrinsic to any system in which the soul is not its own perfection but is rather an *ens in potentia.* It is clear, then, that Aquinas' explicit arguments concerning the essential characteristics of final happiness give self-interest a prominent, if not a primary, role in its attainment. There really can be no question that, in the Thomistic system, true happiness can be achieved even when the moral agent is primarily interested in the perfection of his intellectual nature and the satisfaction of his 'restless heart.' But, independent of the question of self-interest, there is still a degree of commensurability between Aquinas' position and that of phenomenological realism. Aquinas' understanding of final beatitude can still be reconciled with phenomenological realism's contention that happiness is essentially a 'gift,' for the joy which accompanies the Beatific Vision and the perfection of nature is understood to be a gift by Aquinas as well. For Aquinas at least, it is a gift which respects the inherent dignity and autonomy of nature and its aspiration: as one Thomistic commentator once said, 'If sight were given to a blind man, he would nonetheless see with his own sense of sight.'9

While it is true that more commensurability can be found in Maritain's treatment of happiness than in Aquinas' explicit position on the topic, it can be shown that Aquinas' treatment of the moral virtue of 'religion' will bring him much closer to the sensibilities of phenomenological realism. The virtue of religion is understood to be a 'natural' virtue (rather than an 'infused,' theological virtue), a qualitative characteristic that predisposes the moral agent to recognise and to reverence three aspects of his contingent existence. It enables him to affirm God's metaphysical superiority, his own status as creature, and the response that is due – in justice – to God as a result. In his *Summa Theologiae,* Aquinas addresses this virtue in Question 81 of the *Secunda Secundae* during his reply to the objection that 'religion' includes, in addition, 'a relation to one's neighbour':

Since servant implies relation to a lord, wherever there is a special kind of lordship there must be a special kind of service. Now it is evident that lordship belongs to God in a special and singular way, because He made all things and has supreme dominion over all. Consequently a special kind of service is due to Him, which is known as *latria* in Greek; and therefore it belongs to religion. (*ST* II-II, Q. 81, a. 1, ad. 3)

The 'lordship' that belongs to God is based upon Aquinas' metaphysical understanding of God as a 'necessary' being who subsists in Himself (*Ipsum Esse Subsistens*) and Who is the origin of all other existents. All other existents are contingent 'participated acts,' who participate in the uncreated being of God, Who alone is 'pure act' (infinite, unlimited existence itself). By virtue of the fact of this metaphysical subordination, Aquinas believes that man has an obligation in justice to 'repay' God, as much as it is possible, for the unparalleled gift of existence. The significance, here, is that this religious obligation is due to God as an act of reverence for His essential 'lordship' and for no other reason. There is no sense here that the moral agent should revere the dominion of God out of a need to 'consume' or to 'satisfy' some inner teleological trend. The respect is owed simply because God is 'important-in-Himself,' so to speak, for He is perceived – at least in this context – as having intrinsic value, independent of any relation to the appetite of the moral agent: '. . .religion approaches nearer to God than the other moral virtues, in so far as its actions are directly and immediately ordered to the honour of God. Hence religion excels among the moral virtues' (*ST* II-II, Q. 81, A. 6, *corpus*). The 'honour of God' is the exclusive 'end' of religion, so any attempt to place the virtue of religion on an equal footing with the other moral virtues such as prudence, fortitude, or temperance is bound to fail.

Aquinas' treatment of the virtue of religion as directed exclusively to God is echoed, to a large degree, by Pieper's handling of justice (and the 'extravagance' and 'excess' inherently associated with it) in *The Four Cardinal Virtues.*10 Here, justice is linked with the whole 'cult of sacrifice' that always seems to accompany man's attempt to 'repay' God and to 'set aside' actions and places exclusively for His worship:

. . . it is more easily understood why the offering of sacrifice should be a requirement of justice linked to man's condition as *creatura.* Thomas has actually formulated this point: *Obligatio sacrifici pertinet ad ius naturale* – the obligation of sacrifice is an obligation of natural law. I claim that this doctrine is more easily understood if we set out with the idea of a *debitum* that cannot be repaid, that is, with the notion of an actually existing obligation that nevertheless and by its very nature cannot be wiped out. Here perhaps is the key to the extravagance inherent in religious acts. Helplessness and impotency prompt this extravagance, because it is impossible to do

what 'properly' ought to be done, an effort beyond the bounds of reason, as it were, tries to compensate for the insufficiency. (*Four Cardinal Virtues* 106)

This effort to do 'what properly ought to be done,' attempts to honour God for His *own* sake, and again, not out of any 'project' designed to consume and appropriate the 'other,' or to attain satisfaction with oneself. Historically, however, these attempts have often led to 'excesses of sacrificial offerings such as self-annihilation, killing, burning.' The whole tradition of penitential oblations (and the excesses associated with them) has been marked by this recognition of the need to resolve the *debitum,* or 'injustice,' that characterises the essence of the relationship between creature and Creator (*Four Cardinal Virtues* 106).

The need to sacrifice and to perform penitential deeds for God has its roots in the nature of man, Pieper maintains, in a 'natural law' which requires man to love God more than his own self. During his treatment of both justice and temperance, Pieper argues that it is 'natural' for the moral agent to *transcend* his natural desires for consummation and satisfaction for the purpose of 'loving' the Person Whom, all along, he has loved *most of all.* Certainly, we must admit that there is an element of teleological ordination here, but this teleology can be interpreted in much the same way as phenomenological realism interprets this kind of teleology: for it is a teleology which is ordered to transcendence, one that ordains the moral agent to love God more than his own self-interest. Here, during his analysis of the psychological abnormalities associated with intemperance, Pieper exhibits his solidarity with Maritain and the school of phenomenological realism on this point:

> It is a noteworthy fact – but who has ever called attention to it? – that almost all pathological obsessions, witnesses as they are to a disturbed inner order, belong to the sphere of *temperantia*: sexual aberrations as well as dipsomania, delusion of grandeur, pathological irascibility, and the passive craving of the rootless for sensations. All these petrifications of selfishness are accompanied by the despair of missing the goal striven for with such violent exertion of will – namely, the gratification of the self. In the nature of things, all selfish self-seeking is a desperate effort. For it is a natural, primal fact, prior to all human decision, *that man loves God more than himself,* and consequently that he must of necessity miss his very goal – himself – by following the ungodly, the 'anti-godly,' path of selfishness. (*Four Cardinal Virtues* 204)

The perversion, then, of natural and legitimate self-interest is this 'petrification of selfishness,' one that,

if it is taken far enough, leads ultimately to the despair of any form of final happiness or fulfilment In its extreme form, Pieper refers to despair as the 'anticipation of nonfulfilment.' There is a certain irony involved in any inordinate quest for satisfaction. The irony lies within the frustration necessarily present in any quest to satisfy and to 'fulfil' the self with 'goods' other than the 'Good' which the moral agent actually loves more than himself – at the end of the quest for satisfaction, the moral agent is left with ultimate dissatisfaction and final nonfulfilment.

There is another site of commensurability to be examined, and it concerns Aquinas' interpretation of the divinely infused virtue of charity, which incorporates his distinction between between 'concupiscible love' and 'friendship love.' He makes this distinction between the two different 'kinds' of love while at the same time giving 'precedence' to the virtue of hope (in the 'order of generation') over the virtue of charity:

> Now there is a perfect and an imperfect love. Perfect love is that whereby a man is loved in himself, as when someone wishes a person some good for his own sake; thus a man loves his friend. Imperfect love is that whereby a man loves something, not for its own sake, but that he may obtain that good for himself; thus a man loves what he desires. The first love of God pertains to charity, which adheres to God for His own sake; while hope pertains to the second love, since he that hopes intends to obtain possession of something for himself. (*ST* II-II, Q. 17, A. 8, *corpus*)

Although hope has the formal structure of concupiscible love (love as desire, or instrumentalising love), it is not necessarily the typical form that 'concupiscible love' takes, for typically, concupiscible love is identified with the 'love' that the sensory appetite has for its proper object. But the divine charity that Aquinas refers to here actually is the typical form that 'friendship love' takes, for it affirms the other for their own sake, for their intrinsic preciousness as an object of value, and it even seeks the happiness and well being of the other. Aquinas' implicit position here seems to be that the person possessing the virtue of charity should love as God loves, for God does not love His creatures in order to 'satisfy' a desire for appropriation and fulfilment Instead, God is already 'perfect,' and He loves in order to communicate His intrinsic Goodness and to bestow upon His creatures the perfections and happiness He already enjoys.

Aquinas' understanding of man as an 'image' of God, and the ensuing call to Christian perfection, also seem to function here, in some fashion, in Aquinas' interpretation of divine charity. For example, when considering the question of whether the justification

of the 'ungodly' is a miraculous event, Aquinas contends that the human soul has been 'made to the likeness of God, and it is fit to receive God by grace . . . so that it may afterwards become perfect' (*ST* I-II, Q. 113, A. 10, *corpus*). Thus, the 'gift' to man of His own 'image' carried with it an obligation to 'become perfect' (an obligation based on the Biblical command to 'become perfect even as your Heavenly Father is perfect . . . .'), but it also assumes that man has the capabilities associated with the possession of a spiritual soul. Human perfection and the above description of divine charity would not be possible if the moral agent was not already in possession of the capabilities associated with being an 'image' of God. The capabilities which Aquinas is assuming here and which he has addressed in the context of proving the 'spirituality' of the human soul11 are natural potencies such as the capacity for self-reflection, the ability to understand spiritual, intelligible structures (the human intellect as *capax universi*), and the capacity for self-transcendence. Acts of divine charity would not be possible if these capacities were not present, so any arguments citing commensurability with phenomenological realism's concept of 'self-donation' would seemingly require an inclusion of Aquinas' notion of man as an 'image of God' as well. Thus, given the transforming effect of 'actual grace,' this Thomistic account of the moral agent's nature could conceivably furnish him with the capabilities necessary for acts of charity (or altruism) wherein a response is given to the beloved, based upon its inner preciousness or objective 'importance,' and given *solely* for their own sake – out of *justice*. The moral agent could then be 'perfect' as his 'Heavenly Father' is: for he could 'respond to value' in the same way that God responds, not with a 'love' that is based solely upon appetite, and not out of an egocentric desire for satisfaction and appropriation, but rather, out of an authentic desire for the well-being and happiness of the beloved.

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Bibliography

Aquinas, St. Thomas. *On the Truth of the Catholic Faith: Summa Contra Gentiles.* Trans. James Anderson, Vernon Bourke, Charles O'Neil, and Anton C. Pegis. Notre Dame: University of Notre Dame Press, 1975.
   Summa Theologica. Translated by the Fathers of the English Dominican Province. Westminster, Md: Christian Classics, 1981.

Maritain, Jacques. *Moral Philosophy: An Historical and Critical Survey of the Great Systems.* New York: Scribner, 1964.

Pieper, Josef. *The Four Cardinal Virtues.* Notre Dame: Notre Dame Press, 1980.

Happiness and Contemplation. Translated by Richard and Clara Winston. Chicago: Henry Regnery Company, 1966.

Von Hildebrand, Dietrich. *Christian Ethics.* NY: McKay, 1955.

Notes
1. Jacques Maritian, *Moral Philosophy* (NY: Charles Scribner's Sons, 1964), p.77.
2. Dietrich von Hildebrand, *Christian Ethics,* NY: McKay, 1955, page 304.
3. St. Augustine, *The City of God* (XIX, 1), cited in Aquinas, *ST* I-II, Q. 1, a. 5.
4. This point is expressed by Aquinas in his work *Summa Contra Gentiles:* 'For this reason, according to Augustine's *Literal Commentary on Genesis,* whatever things (*bona honesta*) have been made by the Word of God to subsist in their proper nature have also come to be in the angelic understanding [thus also in the moral agent's perfect understanding and possession of the Divine Essence] so that they might be understood by the angels' *S.C.G.* 3.1.59.6.
5. Josef Pieper, *Happiness and Contemplation,* (Chicago: Henry Regnery Co., 1966), p. 52.
6. Pieper, p. 56.
7. Konrad Weiss, *On Poverty in the Spirit,* quoted in Pieper, p. 109.
8. Pieper, p. 40.
9. Bartholome de Medina on Aquinas *ST* I-II, Q. 3, a. 2 (cited in Ramirez, III p. 76), quoted in Pieper, p. 53.
10. Josef Pieper, *The Four Cardinal Virtues* (Notre Dame: University of Notre Dame Press, 1980), p. 106.
11. Some of the areas where Aquinas has addressed the question of the spirituality of the human soul, and the capabilities associated with that spirituality, include the following: *ST* Ia, Q. 75, A. 2, A. 5, Q. 93, A. 4; *ST* I-II, Q. 2, A. 8, Q. 5, A. 5, ad. 2, Q. 109, A. 3.

QUANTUM PERSON: COLLAPSING THE WAVE FUNCTION

Michael A. Piel, Karen K. Johnson & Karen Putnam

Abstract: Understanding quantum physics principles can be intellectually challenging. By providing the basics of the quantum mechanisms of duality, superposition, entanglement, and observation sufficient groundwork is laid to ensure connections to the concept of quantum person can be recognized and understood. Looking at the behavioral dynamics of a quantum person from an ontological, epistemological, and phenomenological viewpoint allows the reader to determine whether to accept, reject, or suspend their judgment on adopting this empowering perspective.

Key Words: Quantum Person, Quantum Duality, Quantum Superposition, Quantum Entanglement, Quantum Observation

1. Introduction: Thirty Spokes Turning Silently

A wooden cart weaves its wobbly way across the dusty rutted rock-strewn road. As the cart suddenly stops, one clearly notices that what was once hidden is revealed- the wheel has thirty spokes. Being a person is a continuum, always progressing and rolling continually forward in a seemingly irreversible temporal flow. In stopping to reflect on the concept, the person dynamic unfolds to one's awareness. Regardless of which philosophical heuristic or definition is applied, one understands the confusing concept 'person' primarily in context of actual and potential outcomes and usefulness, all of which are based on one's assumptions and expectations. As such, the whole dynamic of person often remains hidden because one only has visibility to parts as parts and not the whole as a whole. Like quantum particles in grasp of the Heisenberg Uncertainty Principle, person as a continuum partially hides from one's grasping intellectual grip allowing for only partial and limited divulging of the foundational core of person. To accurately understand and appreciate the mysterious phenomenon of person, one must first be open to observing the whole dynamic from an unfamiliar paradigm.

In exploring the concept of person, clarifying how the word *individual* is subsequently used establishes critical assumption and expectation boundaries. An individual is the single entity result of the accumulation and integration of a mixture of various, compound, and intricate factors (see Figure 1). While these complex discrete factors can be understood in compound and wide-ranging ways, these specific listed factors are not meant to be all inclusive but rather only as a window to all possible road-sign indicators.
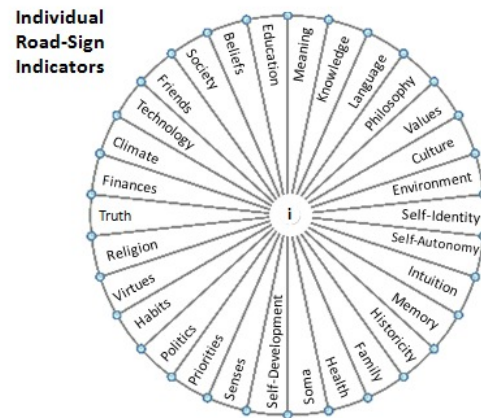

Figure 1. Individual Road-Sign Indicators.

Quantum physics has been influencing numerous fields of study for several decades. While considerable debate among physicists echoes over the extension of micro-world principles to the macro-world, many academics, practitioners, and researchers from diverse fields continue to illuminate the interconnections. Ongoing advances by physicists continue to challenge researchers and their perspectives as they incorporate these emerging insights into their respective disciplines (Russell, 2013). Not unexpectedly, there does not seem to be a foreseeable end to the emerging possibilities as fields engage in this positive adoptive merging.

Understanding quantum physics principles can be intellectually challenging. By providing the basics of the quantum mechanisms of duality, superposition, entanglement, and observation sufficient groundwork is laid to ensure connections to the concept of *quantum person* can be recognized and implicitly understood. Looking at the behavioral dynamics of a *quantum person* generally from an ontological, epistemological, and phenomenological viewpoint allows the reader to determine whether to accept, reject, or suspend their judgment on adopting this empowering perspective.

2. Quantum Duality: Both This and That

One cannot investigate quantum physics without first reflecting on the nature of light. Light (i.e. a photon) exists as both a particle and a wave (Arbab, Widatallah, & Khalafalla, 2012; Lehnert, 2006). Decades of research into the phenomenon has yielded little consensus and enlightenment into the precise significance, definitions, and meaning of the particle-wave duality (Arbab et al., 2012; Greulich, 2010; Lehnert, 2006; Rinaldi, 2011; Unruh & Georgiev, 2007).

Considering that the cosmic dark ages ended about

500 million years after the Big Bang, light has existed since that *First Light Cosmic Renaissance*. Scientists know that normal matter (i.e. what one sees) accounts for about 4.9% of what the universe is made of. The other 95.2% is unknown, postulated as dark energy (68.3%) and dark matter (26.8%). Given the primordial age of light and our collective nominal understanding of the universe, perhaps there is no surprise in having considerable challenge in understanding the particle-wave duality. Surprisingly however, whether light behaves as a wave or a particle is determined by one's observation.

Every individual is gifted with a set of existential filters from which the world is presented. Through careful examination of these road-side indicators, one begins to see not only what is included and provided but moreover what is excluded and concealed. Existential filters serve as the inner and outer perceptual and experiential parameters of one's understanding.

The quantum duality of a person transcends individual single entity limitations. A quantum person emerges from the *between space* interconnecting one individual with another individual (see Figure 2). From an ontological, epistemological and phenomenological perspective, a quantum person is both *this* individual and *that* individual.
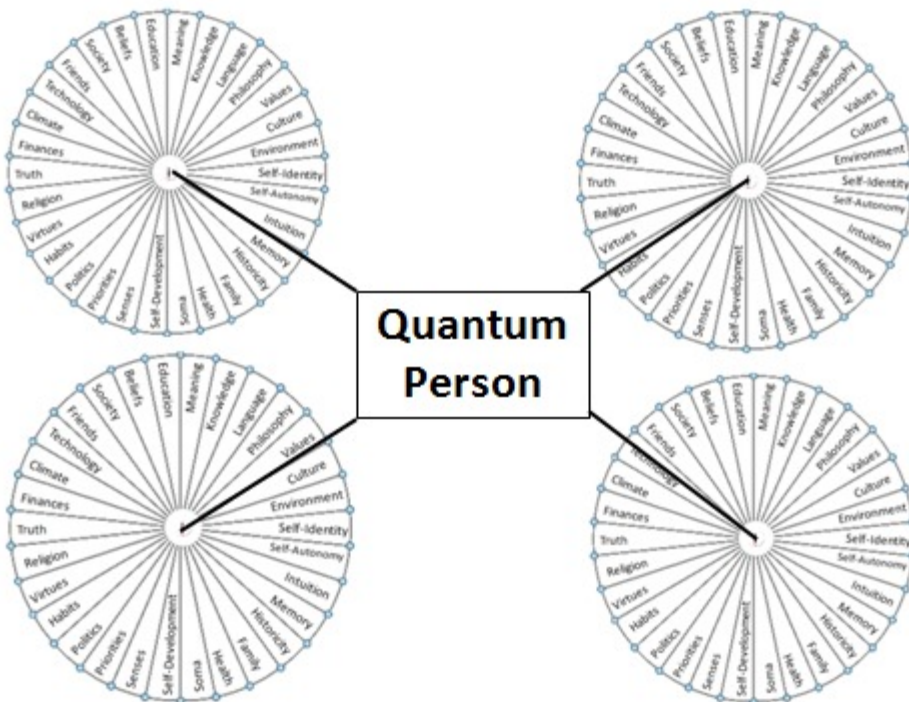

Figure 2. Quantum Person.

Asking why something exists rather than not existing is a fundamental philosophical question regarding Being. This question of Being has reverberated through the philosophic discussions ever since Parmenides first suggested that there is Being and nothing else (Heidegger, 1962).

The fundamental departure point for responding to the ontological question of Being rests in how Being is experienced and interpreted (Heidegger, 1962). A quantum person perceives Being through the *between space* interconnections among all individuals. The perception of Being drives individual being. Without other individuals there is no interrelation of perceptions of Being, without interrelations there is no person.

The search of meaning is one of the truly human endeavors which make us unique (Heidegger, 1962; Buber, 1970; Marcel, 1965). Heidegger (1962) considered that we exist as *being-in-the-world* which is essentially existing as *being-with-others*. In some sense to be human is to be engaged in meaning with others. As a result of our co-existence, whether meaning is created or invented, the search for meaning is an ongoing existential activity no one escapes. The variability of the search and results is as unique and complex as the individuals pursuing it.

Human existence can only be thought of in terms of co-existence (Heidegger, 1962; Buber, 1970; Marcel, 1965). Meaning is not invented or created but individually self-discovered in the authentic world of human co-existence. Meaning is discovered by the quantum person in the *between space* between all interconnected individuals.

Like communication networks, the *between space* is a numerical progression of the number of nodes on the network. The reality of a quantum person is the result of the observations of all the members of the interconnecting and interacting individuals in the network. In the unique interactions with any specific individual, the quantum person becomes either *this* individual or that individual.

3. Quantum Superposition: Neither This nor That

Being neither this nor that, quantum particles exist as a wave of probability (Heisenberg, 1958/1999). Existing at the same time in all their potential states, particles are in quantum superposition. Schrödinger's Cat paradox (see figure 3) illustrates the concept of quantum superposition and highlights the importance of observation (Aharonov, 2013; Meland, 2014; Stepuk, 2014). Since only in opening the box can one determine if Schrödinger's Cat is dead or alive, in the box the cat is in a superposed state being neither dead nor alive and both dead and alive (Aharonov, 2013). Quantum
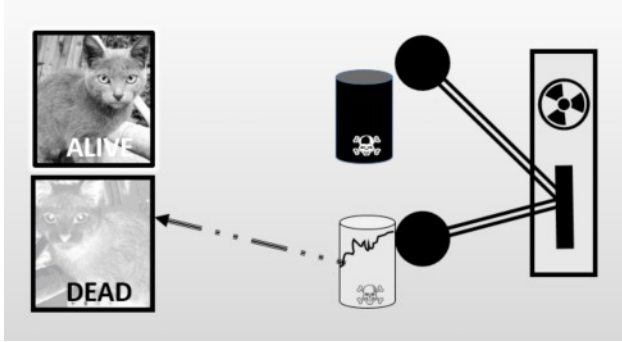
Figure 3. Schrödinger's Cat Paradox

superposition has been precisely demonstrated in various scientific experiments (Walther, Jian-Wei, Aspelmeyer, & Ursin, 2004).

The quantum superposition of a person transcends individual single entity limitations. A quantum person emerges from the *between space* connecting one individual with another individual (see Figure 2). Within the quantum system framework, a person is concurrently both potentially *this* individual and potentially *that* individual as well as neither *this* individual *nor that* individual.

An individual co-exists in a world with other individuals. Within a universe of virtually an infinite quantity of individuals, the possible collapse of the wave function event of a quantum person approaches infinity. From an ontological, epistemological and phenomenological perspective, a quantum person is neither *this* individual nor *that* individual.

An individual encounters the world with a distinctive set of road-side indicators. Whether those factors are pre-determined or not has little influence on the dynamics of quantum person. Why? A quantum person is not the result of a single individual but the result of the interactions, the collapse of the wave functions, between one individual and other individuals. The uncertainties in these interactions make this dynamic a probability function (Schwandt & Szabla, 2013). These uncertain interactions are not isolated to one interaction but include all possible interactions with all possible individuals.

Resembling Schrödinger's Cat, an individual is neither this person nor that person until observed. The quantum person is potentially all possible configurations of the combined interactions between individuals. What does this mean for the quantum person?

The quantum person realizes that their *person* reality is a reification of the observations from and with all possible individuals. Since all individuals are unique, the interactions between various individuals are equally unique. Since all interactions are unique, the quantum person reification is equally unique.

This quantum dynamic applies equally to the being, knowledge, and consciousness of the quantum person. Who a quantum person is, what a quantum person knows, what a quantum person is aware is the result of the collapse of the wave function from the

infinite set of between spaces of individual interactions. An unobserved quantum person is neither this individual nor that individual.

4. Quantum Entanglement: As One and Not As One

Spooky-action-at-a distance was Einstein's term for the non-locality entanglement of particles (Aharonov, 2013; Brumfiel, 2012; Ormerod, 2013; Weidemüller, 2013; Zhao & Schöllkopf, 2012). Measuring one member of an entangle particle pair instantly determines the state of the other entangled particle (Gargiulo, 2013; Merali, 2012; Weidemüller, 2013). Through experimental techniques scientists have demonstrated quantum entanglement in various laboratories throughout the world (Brumfiel, 2012; Matthews & Thompson, 2012; Weidemüller, 2013).

The non-locality entanglement of particles does not easily fit into one's normal understanding of how the physical universe works (Bohm, 1951; Matthews & Thompson, 2012; Ormerod, 2013). One must conclude that entanglement points to a system allowing immediate communication between particles (Bohm, 1980). Considering the likelihood that there is a fundamental connectedness and awareness in all wave-collapsed reality seems convincingly logical.

The quantum entanglement of a person transcends individual single entity limitations. A quantum person emerges from the *between space* connecting one individual with another individual (see Figure 2). From an ontological, epistemological and phenomenological perspective, a quantum person is *as one* individual and *not as one* individual.

A quantum person emerges from the collapse of the wave function between individuals. Since a quantum person is non-locally entangled with every other quantum person, the activities of one individual influence all the activities of all other individuals. Not only is every quantum person interconnected but at an ontological, epistemological, and phenomenological level inescapably and inevitably entangled.

The entanglement of the quantum person gives rise to and highlights the concept of existing both *as one* and *not as one*. Both the subject (as one) and object (not as one) of the entanglement is the quantum person. The non-locality of a quantum person brings to center the ubiquitous influence and reifying power of one quantum person with another quantum person. There is *no as one*, without a *not as one*.

5. Quantum Observation: Seeing and Being Seen

All particles exist in a wave function of probability. Observation is what shifts potentiality to actuality (Gargiulo, 2010; Gargiulo, 2013; Lee & Wexler, 1999). Observation emerges from consciousness (Chopra & Kafatos, 2014) which is itself contingent on self-observation (Vithoulkas & Muresanu, 2014). Consciousness serves as both source and target, as the observer and observed.

Hawking and Mlodinow (2005) suggested that all things in the universe are interconnected, interrelated, and entangled. Decoherence is a theory that explains the macro-world in quantum terms (Gargiulo, 2013; Seife, 2006) framing the whole universe as continuously and increasingly entangled (Epperson, 2012; Seife, 2006). In such a universe, the observer is entangled in and with all probability wave functions.

The quantum observation of a person transcends individual single entity limitations. A quantum person emerges from the *between space* connecting one individual with another individual. From an ontological, epistemological and phenomenological perspective, a quantum person is an amalgamation of *an actual* individual with *all possible* individuals.

The quantum person is that which sees other individuals and is also that which is seen by other individuals. The collapsing of the wave function occurs multi-directionally between each and every individual. The quantum person is the dynamic consequence of an ongoing and ever-ending collapsing of wave functions.

6. Quantum Person: Spinning Our Shared Humanity

While the exact boundaries of quantum principles remain a gray area among physicists (Rakovic et al., 2014), applying these principles to the macroscopic world has become a knowledge enabling enterprise (Gargiulo, 2010). Only in looking can one unlock the possibility of authentically seeing. Unable to ignore quantum physics discoveries and potential implications, new and innovative breeds of researchers continue accelerating, increasing, and aggrandizing the margins of our understanding of our globally interdependent world.

The *between space* among individuals is the shared encounter continuum where the quantum person reality unfolds; where mere possibility becomes actual reality. In the encounter continuum, anything and everything regarding person is possible. Given the breadth and depth of these virtually limitless possibilities for a quantum person, cautious, careful, and critical reflection is necessarily advised.

Only through reflection can we observe our own thoughts or the thoughts of others. Only through reflection can we observe our own being and the being of others. Only through reflection can we understand ourselves as person or others as person. Only through reflection is any knowledge possible about parts as parts and/or the whole as whole.

Reflection emerges from wonder, a wonder characterized by openness and immediacy. Within a metaphysic where being and thought are one, knowledge reflected reveals more of what is not known than what is known. All knowledge (being and thought) is interconnected as one. If an individual wants to know about another individual, that knowledge can only be recognized in context of all connections and relationships.

Reminiscent of Hans-Geog Gadamer's (2011) perspective on hermeneutics and language, becoming a quantum person is something that happens to an individual. Being a quantum person reveals the singular integration still point where the phenomenological, epistemological, and ontological spokes of an individual become one. The oneness then disappears yielding and merging into the collective collapse of all interrelated and interconnected wave functions.

On the lightened path, the wooden cart begins to move; our individual reflection stops but the dynamic encounter continuum of the quantum person continues spinning.

> Thirty spokes share the wheel's hub;
> It is the center hole that makes it useful.
> Shape clay into a vessel;
> It is the space within that makes it useful.
> Cut doors and windows for a room;
> It is the holes which make it useful.
> Therefore profit comes from what is there;
> Usefulness from what is not there. (Tsu, 600BC/1972, p. 11)

In considering everything as being connected to everything else, what one does not know makes the known knowable. How an individual behaves determines the world and the meaning of the world in which an individual lives. Seeing person in a new way has the potential to change how an individual acts, knows, and thinks. Change how one views person and one changes the world. Perhaps as a *quantum person* our shared world can become a little more humane.

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Bibliography

Aharonov, D. (2013). 'Trusted Entanglement'. *Nature, 496*(7446), 436-437.

Arbab, A. I., Widatallah, H. M., & Khalafalla, M. A. H. (2012). 'Toward a Complete Wave-Particle Duality: Do Matter Waves have Inertia?' *Advances in Natural Science, 5*(3), 32-34.

Blake, W. (n.d./1953) 'Auguries of Innocence' in *Selected Poetry and Prose of William Blake* (N. Freye, Ed.). (1953). New York: The Modern Library.

Bohm, D. (1951), *Quantum Theory*. New York: Dover.

Bohm, D. (1980). *Wholeness and the Implicate Order*. New York: Routledge.

Brumfiel, G. (2012). 'Physics Nobel for Quantum Optics'. *Nature, 490*(7419), 152.

Buber, M. (1970). *I and thou* (W. Kaufmann, Trans.).

New York: Charles Scribner's Sons.

Chopra, D., & Kafatos, M. C. (2014). 'From Quanta to Qualia: how a Paradigm Shift turns into Science'. *Philosophy Study, 4* (4).

Epperson, M. (2012). *Quantum Mechanics and the Philosophy of Alfred North Whitehead*. New York: Fordham University Pres.

Gadamer, H. G. (2011). *Truth and Method*. New York: Continuum International.

Gargiulo, G. J. (2010). 'Mind, Meaning, and Quantum Physics: Models for Understanding the Dynamic Unconscious'. *Psychoanalytic Review, 97*(1), 91-106.

Gargiulo, G. J. (2013). 'Some Thoughts about Consciousness: from a Quantum Mechanics Perspective'. *Psychoanalytic Review, 100*(4), 543-58.
doi:http://dx.doi.org/101521prev20131004543

Greulich, K. O. (2010). 'Single Molecule Experiments Challenge the Strict Wave-Particle Dualism of Light'. *International Journal of Molecular Sciences, 11*(1), 304-311.

Hawking, S., & Mlodinow, L. (2005). *A Briefer History of Time*. New York: Bantam Dell.

Heidegger, M. (1962). *Being and Time* (J. Macquarrie & E. Robinson, Trans.). San Francisco: Harper & Row. .

Heisenberg, W. (1999). *Physics and Philosophy: the Revolution in Modern Science*. Amherst, N.Y.: Promedieus Books. (Original work published in 1958.)

Lee, B. X., & Wexler, B. E. (1999). 'Physics and the Quandaries of Contemporary Psychiatry: Review and Research'. *Psychiatry, 62*(3), 222-34.

Lehnert, B. (2006). 'Photon Physics of Revised Electromagnetics'. *Progress in Physics, 2*, 78-85.

Matthews, J. C. F., & Thompson, Mark G. (2012). 'An Entangled Walk of Photons'. *Nature, 484*(7392), 47-8.

Marcel, G. (1965). *Being and Having: An Existential Diary* (K. Farrer, Trans.). New York: Harper Row.

Meland, C. (2014). 'Talking Tribalography: LeAnne Howe Models Emerging Worldliness in "The Story Of America" and Miko Kings. *Studies in American Indian Literatures, 26*(2), 26-39,113.

Merali, Z. (2012). 'The Quantum Space Race'. *Nature, 492*(7427), 22-25.

Ormerod, N. (2013). 'Bernard Lonergan and the Recovery of a Metaphysical Frame'. *Theological Studies, 74*(4), 960-982.

Rakovic, D., Dugic, M., Jeknic-Dugic, J., Plavsic, M., Jacimovski, S., & Setrajcic, J. (2014). 'On Macroscopic Quantum Phenomena in Biomolecules and Cells': From Levinthal to Hopfield. *BioMed Research International,* doi:http://dx.doi.org/10.1155/2014/580491

Rinaldi, A. (2011). 'When Life Gets Physical: Quantum Effects in Selected Biological Systems have been Confirmed Experimentally, but how Widespread is their Role Remains Unclear'. *EMBO Reports, 13*(1), 24-7. doi:http://dx.doi.org/10.1038/embor.2011.236

Russell, H. A. (2013). Quantum Anthropology: Reimaging the Human Person as Body/Spirit'. *Theological Studies,74*(4), 934-959.

Stepuk, A. (2014). 'Offshore Investments Investments-Cui Prodis? Schrodinger's Cats in Offshore Financing: Both Alive and Dead'. Paper presented at the Fifth International Science Conference, Megatrend University, Belgrade. Abstract retrieved from http://www.esd-conference.com/book_of_proceedings_Belgrade_2014.pdf.

Schwandt, D. R., & Szabla, D. B. (2013). 'Structuration Theories and Complex Adaptive Social Systems: Inroads to Describing Human Interaction Dynamics'. *Emergence : Complexity and Organization, 15*(4), 1-20.

Tsu, L. (1972*). Tao Te Ching* (G. Feng, & J. English, Trans.). New York: Random House. (Original work published around 600BC.)

Unruh, W. G., & Georgiev, D. D. (2007). 'Comment on "Single Photon Experiments and Quantum Complementarity" by D. Georgiev'. *Progress in Physics, 3*, 27-33.

Vithoulkas, G., & Muresanu, D. F. (2014). 'Conscience and Consciousness: A Definition'. *Journal of Medicine and Life, 7*(1), 104-8.

Walther, P., Jian-Wei, P., Aspelmeyer, M., Ursin, R., & al. (2004). 'De Broglie Wavelength of a Non-Local Four-Photon State'. *Nature, 429*(6988), 158-61.

Weidemüller, M. (2013). 'Spooky Action Gets Collective'. *Nature, 498*(7455), 438-439.

DISCUSSION NOTES

A Poet's Appeal to Personalism: a Note on Alyosha *(Augur Press, 2016).*

Daniel Gustafsson

Two things, it seems to me, threaten the irreducible reality and dignity of the personal life today: reductionism and relativism.

In the struggle against these twin tendencies of a depersonalised age, philosophy should resign its role as the henchman of science – *let's be done*

> *With doubt, with your school-yard squabbles and hair-*
> *splitting, your wisdom's distrust of delight... –*

and accept instead its vocation as the shield-maiden of poetry. Personalist thought, certainly, must be responsive to both 'extra-utile' and 'extra-rational' sources of value and revelation.

Hence my fond invocation of Alyosha Karamazov, saintly foil of the sceptical Ivan. Alyosha's loving response to his brother's venomously disenchanted worldview – his relational and symbolic refutation Ivan's rational-empiricist argument – should be the riposte of the poet and personalist alike to the negations of materialism.

> *He tells you, don't look, don't love, only think!*
> *It's enough to make the world shrink...*

For the world does shrink, and we with it, if scientism and solipsism prevail against our mutual and ek-static mode of being. Poetry, meanwhile, is entirely premised upon the personal. The relational and irreducible is not only the subject matter of poetry, but its very medium and material – manifesting the ineffable in the corporeal, the invisible in the apparent:

> *Grant us beauty to cleanse our vision...*

For beauty is a radiant proof of that in human experience which overspills or oversteps the merely causal and mechanical. It is one of the surest signs of our moral and spiritual dignity and potential. Beauty should therefore be no less a source and aim of the personalist, than of the poetic, endeavour:

> *That true design may vanquish false powers...*

For it is the poetic mode of apprehension, and the poetic mode of re-presentation, that safeguards a world abundant in its offerings of splendour and significance:

> *The ground is littered with anemones,*
> *And the finches are in flitting and flight...*

Hence these poems seek to give place to wonder and reverence, the origin of real philosophy: not a practice of academic speculation, but a life lived in response to wisdom's incarnate and ineffable disclosure.

It is an unshakable tenet of personalist thought that we are dialogic beings. We exist face to face and, as it were, mouth to mouth; for language is an essential aspect of our inter-personal reality:

> *Our lives are unfolded in language,*
> *And we languish without conversation...*

Language, for beings like us, is not only the functional projection of thought. Reflective, diachronic and metaphoric, the fabric of language itself offers new possibilities of meaning and of personal expansion. In poetry, this dialogic mode may be realised in its most distilled form. Dialogue can change us, improve us, and involves us in mutual transformation:

> *This is the fabric of our passion,*
> *This is how we fashion ourselves...*

The lack of a dialogic sense has repercussions for the way we inhabit the natural as well as the cultural world. In a post-colonial and post-modern climate, pathologically uneasy about inherited goods and values, it becomes difficult to motivate care for a shared world, a shared language and a shared place. Our own time, zealous in its pursuit of progress and levelling, is impatient with reflection and disdainful of cultural preservation. Also our efforts to salvage the environment may, I believe, suffer from a lack of a relational anchoring and approach.

These poems enjoin us, therefore, to care for a world endangered by entropy, deconstruction and desecration:

> *this frayed and threadbare fabric*
> *Is not ours to unmask or unmake;*
>
> *Our task is to love...*

When gratitude is replaced by entitlement, mutual responsibilities by individual rights, resulting in a loss of historical as well as situated consciousness, personalism should serve to affirm those relations that make us who we are, as persons inhabiting – as well as inheriting – a particular time and place. We are not self-sufficient. Nor are we simply consumers. We are heirs and stewards, and the world is ours by trust:

> *Now that we are of the living,*
> *This long-cherished landscape belongs to us*
> *Only in the lasting need of giving...*

We live at a time when reductionism is becoming increasingly politicised. In the discourse of rights, the personal is entirely overshadowed by the individual and the collective, the quantifiable monads and masses susceptible to standardised solutions. To speak, as I believe we must, of the spiritual aspects of personal

dignity and relationality is becoming all but impossible; indeed, religiously indebted and inflected language is becoming increasingly unintelligible.

Hence my fervent invocation of Yuri Zhivago; for this poet and physician, an object of mockery for the materialist-determinist powers that be, was persecuted for his defence of the personal in conditions too like our own:

> *And you'd never enlist with your scalpel,*

> *The quill and chisel of your healing arts,*
> *For their cure-all campaign of negation:*

> *You have witnessed their botched operation…*

We too have witnessed the wasteland of utility and universality, of platitude and bureaucracy; the reduction of all that is most particular, precious and perplexing in life to calculations of the lowest common denominator; and we summon against this malaise the healing arts of empathy and imagination; for we know

> *That life is all muteness and misery*
> *Unless blood is married to metaphor,*

> *Unless the heart-walls and the measured floor*
> *Break open to music and mystery…*

BOOK REVIEWS

***Dignity: Its Essential Role in Resolving Conflict*, by Donna Hicks. Foreword by Archbishop Emeritus Desmond Tutu**. New Haven: Deal University Press, 2011. 240 pp. ISBN 9780300188059

Whither and whence human dignity? Questions about it and discussions of it have existed since the ancient world, from concerns about *dignitas* and social status in the Roman Empire, through Judeo-Christian reflections on the nature of God as person, the diminishing of the medieval Christian vision from the Renaissance forward, and finally, to postmodern views that preclude any consideration of grand narratives. And human dignity is if anything, one of our grandest narratives.

Nevertheless, the question of dignity remains of great and vital interest today. Looking back on that long history of consideration, one thing becomes instantly clear: it is much easier to address dignity out of a theological perspective than out of a philosophical one. Philosophers, however, have not given up on the task, and others have taken to it as well.

In contemporary times, where thinking abut dignity has been the most puzzling of all. It was the atrocities of the Second world war that brought questions of dignity to the forefront, and those discussions led to enduring documents such as the Nuremburg Code and the United Nations Universal Declaration of Human Rights, whose authors recognised human dignity but left it specific scriptural definition to subsequent generations. The 20th century also saw the continued development of more reductionistic notions of personhood as a sciences ever more deeply embraced materials and biological visions of personhood. This worldview allowed neuroscientist Ruth Macklin to comment not long ago that dignity is nothing but a 'useless concept' for the field of bioethics, and that restricting the conversation to terms such as 'autonomy' would serve us much better.

For the thinker moving out of a theological worldview, the *Imago Dei* frequently takes pride of place: human beings have dignity because they are created in the image of God. In complementary ways, Catholic and Protestant thinkers continue the discussion on human dignity. Catholic thinker Christopher Tollefsen notes the mid to late 20th century formulations from the document *Gaudium et Spes* of the Second Vatican Council through the writings of Pope John Paul II, who grounded dignity in our nature and destiny. Protestant thinker Paul Copan also sees us as 'image bearers,' and recognises the need for a metaphysical grounding for human dignity that transcends the authority of the state. In the end, much contemporary discourse on human rights is grounded in some notion of human dignity.

Discussions about dignity are, of course, not limited to philosophy. People working on the ground to improve the lot of individuals across the world whose rights are endangered have a great stake in the discussion about dignity. One notable expression of this discussion is Donna Hicks *Dignity: Its Essential Role in Resolving Conflict.* Hicks is an associate of the Weatherhead Center for International Affairs at Harvard University and for over two decades has been involved in the field of international conflict resolution, working in such tragic areas of the world as northern Ireland during The Troubles, Sri Lanka, Columbia. Hicks is a psychologist by training, was worked to develop a model of human dignity.

I will admit to a certain wariness on my part when, at the beginning of her book Hicks talks about trying to 'operationalize' human dignity, the term more likely to be found in the laboratory writers and make concrete and measurable than in discussions of the nature of human dignity. She is by no means scientific reductionist, though, that her talk of operationalizing has grown out of her experience of working with individuals who have seen the dignity profoundly violated. Her book begins with an attempt to capture the essential elements of dignity, though this is the fruit of considerations of how human dignity is violated, and also how it is restored. She articulates 'Ten Essential Elements of Dignity' which, when violated, lead many along the road to violence. She names these elements: acceptance of identity, inclusion, safety, acknowledgment, recognition, fairness, benefit of the doubt, understanding, independence and accountability. She arrived at these, she writes, from working conflict resolution, and in particular, 'observing the groups dynamics.' Emotional undercurrents affected the political discussions. Both parties had reactions that were not verbal. I made sense of the emotional content of the unspoken conversations by invoking the concept of dignity and putting words to the whirling emotions: 'how do you treat me so badly? Don't you see how unfair this is? Do you think I don't notice the degrading ways you are treating me? Can't you see that I'm a human being?' Hicks' interventions, then, in conflict resolution involve respecting the core of other people's identity and integrity, making people feel they belong, helping people to feel physically and psychologically safe encouraging people to learn to listen, validating others, treating others involved in negotiations with justice, treating people as trustworthy in negotiations, attempting to understand the perspective of others, encouraging individuals to act on their own behalf, and taking responsibility for one's own actions.

There is a flip side to this point, which Hicks terms 'temptations to violate dignity' which she sees as

being at the source of many of the worlds conflicts including saving face, refusing to accept responsibility for one's actions, seeking false security, avoiding conflict and others.

Overall, the book serves as a careful analysis of human interaction, and of the many facets of personhood that can deepen our connection with others or violate them. Those looking for extended philosophical discussion of dignity will not find it here and if that is one's purpose, one will be disappointed. At the same time, Hicks has done a great service in thinking about dignity on the ground, and the ways that human beings are violated, and in the ways that they can heal. Dignity will always have a theoretical and a practical side; Hicks has made a significant contribution to the way in which personal activity, intimate and writ large, can foster or violate persons.

James Beauregard

***Retrieving Realism: A Contemporary Philosophical Conversation* by Hubert Dreyfuss & Charles Taylor.** Harvard University Press, 2015. 184 pp. ISBN 978-0674967519.

This concise and clearly written book by two prominent, senior North American philosophers is certainly worth study. In a manageable corpus, Dreyfus and Taylor (D & T) critically engage a set of contemporary philosophers (Rorty, Davidson, Quine, Sellars, Searle, Derrida, McDowell) and in the process offer their own constructive philosophical alternative to views of these figures. Rorty is the elephant in the room in this book, but certainly there are many smaller animals that are circumspectly dispatched. This host of contemporary thinkers remains, D & T argue, deeply shaped by the seeds that Descartes sowed, even if they don't think so. They have not really broken the 'thrall' (68) of the 'mediational construal' (65) which shapes most modern approaches to philosophical problems. The medicine required, according to D &T, is a supercharged version of the 'embedded construal' (65), for only this can really avoid an epistemic perspective tacitly presuming an inside/outside dynamic, what D & T call 'the basic image of the I/O' (58). The resources D & T draw on in their criticism and their constructive philosophical alternative view are principally Heidegger, Merleau-Ponty and Gadamer (with nods to Wittgenstein, Hegel and Kant). In the final chapters of the book, D &T argue for a kind of realism—one they view as different than that found in the realism-antirealism discussions in contemporary philosophy, one in which something like a view from nowhere is possible. This is D & T's 'retrieved realism,' which humans can achieve in serious scientific inquiry and perhaps in other contexts of inquiry also.

Retrieving Realism is an interesting conversation between D & T and an articulate set of contemporary figures in the philosophical mainstream. The book makes no significant use of Michael Polanyi's thought or that of D & T's friend Marjorie Grene, although there are a great many points in the discussion, at least to this author, where D& T might have made illuminating use of ideas developed by these figures. There is one provocative reference to PK (which the bibliography [likely done by someone other than D or T] wrongly attributes to Karl Polanyi): D & T suggest 'the Polanyian scientist' is like a 'Kantian moral sage' insofar as he or she is a person whose 'spontaneity' seeks a 'higher fulfilment' in being reconciled with 'necessity.'(76). Perhaps this is a hint that Polanyi's 'universal intent' is an interesting philosophical matter, but it is not a point D & T develop. Their agenda is to show that 'our spontaneity can be preconceptual' (77) and this means humans, like other animals, develop perceptual skills (a perspective also carefully developed by Polanyi) which D & T, drawing on Merleau-Ponty, use to criticize McDowell's ideas which seem to have no clear place for the 'protoconceptual' (78).

There are some odd and interesting historical things about this jointly authored 2015 book. D & T go back a long way and part of that history includes involvement in an important project initially put together by Polanyi and Grene that likely helped at least indirectly to shape the philosophical outlook of both Taylor and Dreyfus. In 1965, Polanyi, Grene and Eduard Pols received a Ford Foundation grant to put together an interdisciplinary academic meeting at Bowdoin College. The meeting brought together for discussion European and North American scientists, philosophers, and artists whose work was critical of reductionism and scientism. This five-day August meeting sponsored by the Study Group on the Foundations of Cultural Unity (SGFCU) had 26 participants, including Charles Taylor. In 1966, the Ford Foundation extended the grant to fund a similar meeting at Bowdoin and in 1967 a large Ford Grant was awarded to the Study Group on the Unity of Culture (SGUK, the reorganized and renamed rendition of the SGFCU) which sponsored about 20 interdisciplinary meetings (some large and some small) on specific topics over the next five years. In 1967, Dreyfus joined the SGUK and, although Polanyi's involvement waned after 1969, Grene soon had D & T deeply involved in this project, playing leadership roles. The SGUK meetings brought together thoughtful intellectuals to discuss an array of topics which surely qualify as key issues in the last decades of the twentieth century.

Not only is D & T's association with each other and with Polanyi and Grene of long duration, but so also is their connection with matters treated in this new book. For a number of years before 2015, a book titled 'Retrieving Realism' was listed by Harvard

University Press as a forthcoming Taylor book. But the now published book is, of course, jointly authored and it is clear that some sections focus on topics Taylor has earlier written about and some sections draw on Dreyfus' earlier work. In Taylor's important 1987 essay 'Overcoming Epistemology,' many of the arguments in *Retrieving Realism* are articulated. The 'Preface' of Taylor's 1995 collection of essays *Philosophical Arguments* (Cambridge, MA and London: Harvard University Press),which includes 'Overcoming Epistemology,' discusses Taylor's long-standing concern that Descartes made central to modern philosophy the presumption that if we can deal with the 'problem of knowledge' then we can later move on to determine what can legitimately be said about other matters. The essay makes clear how deeply rooted Taylor believes is a Cartesian 'mediational' perspective underlying not only foundationalism but also many anti-Cartesian, anti-foundational, anti-representational modern philosophical voices such as that of Rorty. *Retrieving Realism* grows out of and is an extension of 'Overcoming Epistemology.' Dreyfus' 2004 essay 'Taylor's (Anti-) Epistemology,' included in a collection on Taylor's thought, (*Charles Taylor*, Ruth Abbey, ed. [CUP]: 52-79), illuminatingly lays out Taylor's argument in 'Overcoming Epistemology,' suggesting that Taylor's antiCartesiansim is the key to much of Taylor's writing. Taylor and Dreyfus are long term friends and philosophers who share deep roots in existential phenomenology. This new book seems to be a collaboration that has slowly added modules to a personal conversation that began many years ago between friends with common philosophical convictions about what is important.

Those who find in Polanyi both important affinities to Merleau-Ponty, Heidegger and Wittgenstein as well as an interesting interdisciplinarity, a straightforward idiom and a resonant depth will, I suspect, be a little disappointed that there is no use made of Polanyi in this engaged conversation of D & T with their chosen set of contemporary philosophers. For my part, I think Michael Polanyi and Marjorie Grene already some years ago retrieved a sensible sort of realism (see Grene's discussion in her chapter on realism, 'The Primacy of the Real,' in *Philosophical Testament* [1995] which covers some of the same ground in D & T's critique of the realism-anti-realism debate in professional philosophy). I find many points elaborated in this new book to be scintillatingly articulated and worth pondering; nevertheless, I cannot finally help but wonder if much of what D & T aim to fix philosophical attention upon was not captured in many of Polanyi's notions about 'personal knowledge.' They say 'at the most primitive level of our grasp of things, there is a contact which straddles the gap between 'subject' and 'object,' and which shows these terms to be

ultimately out of place' (94). They affirm that you cannot 'give a state description of the agent without any reference to his or her world (or a description of the world qua world without saying a lot about the agent' (94). Surely Polanyi's emphasis upon indwelling and the way in which tacit elements are integrated by a person outlines a closely aligned philosophical perspective (see PK, 300). D & T are committed to the priority of 'ordinary engaged coping' in human affairs and they recognize such coping as the basis for a 'decentered , critical stance' which can emerge only 'from within this ordinary way of being, suspending it completely in relation to our objects of study, but always relying on our everyday coping skills' (103). They contend 'our humanity also consists in our ability to decenter ourselves . . . to learn to see things in a disengaged fashion, in universal terms, or from an alien or 'higher' point of view' (69). Here D & T amplify the 'being-in-the-world' theme which they consistently emphasize, drawing on Heidegger, Merleau-Ponty and Samuel Todes. They intend to point to the peculiar possibility of a type of human understanding grounded in a primordial bodily engagement that puts us in 'contact with reality which surrounds us at a deeper level than any description or significance attribution might make of this reality' (70). This peculiar possibility of human understanding, grounded in our bodiliness, seems much akin to what Polanyi sketches in his PK chapter redefining objectivity (PK, 3-17), in his discussions of universal intent, and in his descriptions of tacit knowing. D &T target the long history of modern philosophy's emphasis upon 'good method,' showing how this has led down a path focused on the 'paradigmatically monological, carried out by and in individual minds' (106). The 'embedded view' opens non-monological opportunities which emphasize 'resources for recognizing differences of scheme' (106-107), and here there is a nod toward Gadamer, a figure about whom Taylor has written eloquently. Polanyi's account of the social nature of scientific and cultural enterprises as dynamic orders in which skills are cultivated and tradition serves as a ground for innovation and transformation is a similar non-monological perspective. Finally, D & T argue for a 'robust realism' to counter Rorty's 'deflationary realism' which they see as in fact a kind of antirealism (132). 'Robust realism,' as it turns out, is necessary 'to understand the status of the structures studied by natural science' which must 'make sense of an independent reality' (132). Rorty seems to have driven figures like D &T who are deeply committed to a philosophical perspective grounded in the insights of existential phenomenology to reckon seriously with science. At least to this Polanyian, this seems a move worth making.

Phil Mullins

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