

RECONFIGURING THE TWENTY-FIRST CENTURY

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I

PRELIMINARY REMARKS

One of the major difficulties confronting the New Church in the modern world is that it finds itself in a context in which virtually every link between what is spiritual and what is natural has been torn apart. It is a difficulty on two counts. Firstly, Swedenborg constantly refers to the fact that the natural world is the final resting-place of all things spiritual: the foot-stool of heaven, primaries in ultimates, influx, and so on. But our own age is one in which what is called the physical world is exclusively determined by forms of thought that deny such things from the outset, and this denial is carefully fostered to maintain that perspective. Secondly, when we read "God created the heavens and the earth," the word "created" no longer carries the connotation of "preparation," nor that "heaven and earth" are more correctly translated as "heaven/earth." Consequently, the notion of a link that existed from the outset has now gone, and much speculative thought is given over to the separate natures of heaven and earth, with little regard to a link between them, nor any reference made to preparation. The result, of course, is plain literalism, creation versus evolution, and so on. These have become the mainstay of intellectual discussion and debate, and not a single word of any value has emerged from it since at least the mid-nineteenth century, if at all.

The knock-on effect has been disastrous. These days, the traditional Christian line is that the eternal is superior to the temporal, and therefore

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that our eyes should be fixed upon the eternal and not the temporal. This attitude of mind is only a few notches lower than the same view that was used to perpetrate many ills upon mankind in the past. In either case, the actual structure of the natural world becomes relatively superfluous, whose only relevance is given over to purely moral considerations, with no interest in the forms of reality we find ourselves in.

Yet while New Church readers may sympathise with this view, I doubt that such sympathy would extend to what follows. Consider your reaction to this statement: the subject for discussion will be one concerned with the theory of gravity as it is currently understood, the problems and challenges it presents and how they can be resolved. How many people, on reading such a statement would consider this to be a proper item of concern for spiritual consideration? Surely this is a purely scientific matter? What could a Swedenborgian perspective have to do with such things?

No doubt, many people might agree with the sentiment of the criticism of this paragraph, but the reaction I have speculatively presented reveals that we are also just as easily persuaded by elements of the scientific point of view, however much we may resist, because everything we know and think has been educated into us by a system which is best served if we recognise the distinctive categories of thought that define the “subject.”

But consider the case of Swedenborg. Here was a man totally immersed in what we might call the natural sciences for most of his life. His interest should not be identified with mere curiosity about the nature of the world for its own sake, but by a much deeper need, one concerned with the nature of the interaction between the soul and the body, and how they actually relate. This is hardly the definition of the modern scientist, yet in Swedenborg’s case it led him into the study of the natural world in exquisite detail, unparalleled in his own time. Consequently in becoming the “spirit seer,” to use Kant’s pejorative term, he was already armed with more information than anyone alive (including Kant) concerning the structure of nature, and he then began to explore that relation between heaven and earth, God and mankind, body and soul from the other side of the equation.

Furthermore, the vital change at this later period in his life had to be preceded by a change of heart. That is to say, it was not the knowledge of

the world that became superfluous, but rather the state of mind that pursued it as an end in itself. This switched from one driven by “egotistical” concerns, generally speaking, to those concerned more with a heart-based perspective. The actual knowledge itself remained intact and formed a base of operation. Yet the paradox is that this switch could only occur *after* the experience of being otherwise driven, and which ultimately led to the unique principle that this is the correct order of events, but that we should come to realise gradually that independent thought is at its best when secretly driven by the renewed heart. Knowledge of the world itself was not a hindrance, but an actual necessity.

What is more important for us today is to see that what is called the inner sense could not possibly have been understood prior to our own times since the revelation is not the denial of earth and the supremacy of heaven, but a dialogue which gives natural things an incredible warrant of realism in the triune nature of the celestial/spiritual/natural. As beings with a spiritual destiny we may not be of the world, yet we begin and are firmly rooted in the natural world. There is nothing in it that is superfluous to that process of spiritual growth more accurately called evolution, but which is actually regeneration, and it is this key importance of natural things in that triune which becomes the source of illumination through correspondences.

What, then, are correspondences? When we speak of symbolism, very often there is a tendency to think in terms of equations: trees equal intelligence, water equals truth, fish are facts and so on. If every word that had an equivalent meaning were placed in a dictionary, would we then be able to derive an “inner” sense by looking them up or memorising them? And what about the shades of meaning? A single word like “Adam” can be defined as “ground” which then links to other words like “field,” “land” and “earth,” each of which is expressive of a relation between natural and spiritual things and are therefore all connected to a sense of the church as go-between. It is also the derivation of “red” and so associated with the love element in the Divine Marriage. Consequently, Adam also means “person,” except that the person is celestial, with the spiritual counterpart being “Enosh.” Do we hold all these meanings as we read, or is something lost in translation? Furthermore, while words like “sword” have an association with truth, they have an equally strong association with falsity,

depending on the state of the heaven/earth relation of the person to whom it is applied. What is the source of this sense of opposites contained in virtually every expression? Or are correspondences nothing more than a higher sense of metaphor? Is it simply poetry?

All these things considered, it is something not easily grasped by the modern mind which has become accustomed to an entirely different order of meanings which can be found in dictionaries. Furthermore, it is a dictionary that would contain none of the above meanings, and the closest it might get to something spiritual is by defining Adam as “the first man.” It is in this way that the dominant thought process, the exclusive rationale, has actually invaded spiritual concerns. Ask any person who Adam was or what he represented, and the answer would inevitably be “the first man.” Any attempt to correct this meaning is usually met with something like this: “You can make fit any meaning you like, and it will no doubt suit your own cause. I prefer to take it as I see it.” It is in this way that literalism has taken hold.

Consider, for instance, the reference to the man-child with a rod of iron in Revelation 12:5. The rod of iron is now commonly associated with rigid discipline, and is still used as such in common speech. In other words, its meaning is derived from metaphorical use that has become a common way of speaking. Yet if we follow a line of meaning which gives more weight to a link existing between the natural and spiritual elements of reality, then iron represents that natural experience with particular reference to truths that can be gleaned from it, and the fact that it is to be infused with the same from the spiritual element represented by the man-child. The reason for this is not difficult to understand; iron looks like silver, which always has spiritual connotations, and so it has a surface similarity to its spiritual counterpart. But when the link is severed between them, all that is left is the metaphor which no longer refers to the spiritual and tells us nothing at all. There is nothing to store up, and all that is left is a real metal that will rust away. Worse still, if the metaphor passes into familiar usage, it becomes an enormous task to wrest it from its lodging place in the familiar, because the possessors of the metaphor become satisfied with it, and cannot imagine that it can mean anything else.

If correspondences are misconstrued as metaphors, it is a sign that something has corrupted in the way that the natural component in the

triune has been taken for granted. Consider the following interpretation of “the rod of iron”:

By this is meant no more, and no less, than that the New Church will become a power in this world, and will be able to convince all those who are willing to be convinced, just in proportion as it brings its purely spiritual doctrines within the radius of vision of men in this world by preaching them in the first place immediately out of the letter of the Word; and in the second place by bringing down the doctrines into the knowledges of the natural world, *and thus within the sphere of natural light, and hence of natural science.*¹

This is hardly the kind of statement that could be written today since there would be an outcry against the indoctrination of children “in the first place.” In their place, however, is an indifferent learning, of neutral alphabet and number. The implantation of remnants speaks volumes concerning the post-modern fashion, and perhaps it should be noted that there is no objection to the teaching of the doctrines of science that require no participation on the part of the recipient, but which develop an inordinate dependence upon sense-learning as providing a totality of experience to the exclusion of all else. Ground works are a platform to build on, yet it is clear that the ground works of science are now opposed to their use as a springboard for anything that smacks of spirituality. This is not the case with teaching the Bible. It begins with the stories, and it is these that provide the foundation for the greater depth of meaning that subsequent experience demands or intuits. That experience is formed in the natural world, and so it is that the natural world itself becomes the source of much more than itself. Consequently, it is no accident that the New Church gives it so much emphasis.

But is this the case? The statement quoted comes from *Words of the New Church* published in the 1870s. There we find many statements that refer to the special relationship of science in the triune order:

¹ *Words for the New Church* IV–VI (Swedenborg Scientific Association, 1976), 283.

In itself [natural science] is neither true nor false; but in proportion as it is cultivated to the exclusion of spiritual truth, it darkens the understanding.²

Who, on reading this in our time, would wholeheartedly agree with this statement? Isn't it the case that science has increased our understanding of reality and given us many wonderful things in the process? The question is rhetorical, for it is exactly this kind of thought that is now passing for wisdom, and it is why the greater part of all funding in education is given over to science. In effect, the darkness is the light, freed from what are called the restraints of dogmatism that are perceived as an inherent feature of spirituality.

This serves to show how much the modern attitudes have changed since the 19th century. Yet even so, there is much in that view that has yet to see the light of day. Consider, for instance, that the great traditions of Western thought are those that emerged from the critical spirit of Greek thought. The key word here is "critical," and yet what we find in science is an absorption of that spirit as though it were its own sole property. But because science enjoys the status of a form of thought which presents us reputedly with the fundamental nature of reality, it is assumed that the critical spirit is its ownmost and its exclusive character. It is no such thing. It is a spirit enjoyed by every human endeavour, in every field of activity. Yet we are encouraged to believe that it is an exclusive characteristic of science, when in fact it is a reflection of a state of mind that carries over just as much to spiritual concerns as it does to every activity. In spite of that, every effort is made to sell it as an exclusively scientific *modus operandi*. For instance, the Popperian notion of falsifiability, so much the mainstay of scientific practice in the 20th century, is part of the program called the philosophy of science, as though it expressed a peculiarly scientific way of doing things. This is far from the truth. Indeed, in *Words* written so much earlier than Popper, we find this view expressed as a definition of scientific practice:

² *Ibid.*, 295.

Those who examine the causes of the facts of nature in the light of nature, start what they call hypotheses. When a hypothesis squares with the facts of nature, so far as they are then known, this hypothesis assumes the temporary name of a scientific truth, until some new facts are discovered which no longer square with it, when a new hypothesis is started to take place.³

The Popperian view, in modern times, is held up as a mirror of scientific practice and as an arbiter of truth by proxy—that is to say, it is a methodology entirely dependent upon the subsequent interpretation of sensory input. But it is not a new view, nor is it possible to commandeer it as an exclusive scientific domain. The New Church thinkers recognised it as the methodology of science long before it became an established principle of practice, yet they recognised it for its limitations, while in the modern world, those limits are not recognised, but are seen as endlessly expanding boundaries. Consequently, the challenge faced by the modern New Church must take into account that the limit it recognises as common scientific practice is seen by the modern rationale as an unlimit, as though there were no end to its possibilities, which from its point of view has been made possible by its exclusion of spiritual considerations.

What is interesting about this is that this very attitude is not only not new, but that it is inscribed in the Bible as part of its thematic structure, and which is represented by the Egyptians. We read of the highway to be built between Egypt, Assyria and Israel, yet often give little thought to how this reflects the order of things. All learning begins in the natural, and with the proper ordering of conceptual forms, this learning eventually leads to the spiritual. Consequently, we find ourselves in a world much like that of Biblical Egypt, where all knowledge and learning begins in the natural, but which in its inverted form at end-states is coerced to remain there. Yet what we find here is not so much the exclusive domain of science, but rather the form of the critical mind that operates within it. The plagues of Egypt begin with a few that are matched by the Egyptians themselves, and we may wonder why this is so. In his explanation of the

³ *Ibid.*, 303.

rod turned into a serpent by the wise men and sorcerers, Swedenborg explains that it is a law of order that they possess the ability to “remove influences coming from heaven” (AC 7298). The reason for this is extremely important and pertinent to our own age which mirrors this state in many ways, and Swedenborg continues:

... It should be recognised that it is in accordance with the laws of order that no one should become convinced of the truth instantaneously, that is, should instantaneously be made so sure of the truth that he is left in no doubt at all about it. The reason for this is that when truth is impressed on a person in that kind of way, he becomes so fully convinced of it that it cannot be broadened in any way or qualified in any way. (AC 7298)

Notice that what is meant by the laws of order implies the evolutionary form of all growth that begins in the natural. This growth, at every level, requires the need for truth, whatever its form, to be accepted in total freedom, and not compelled. The problem is that such critical thinking is deemed to be the sole property of those concerned with the nature of a purely and exclusively physical reality, as though it did not apply to matters that are spiritual. Just recently, a non-theistic group, in order to counter the growing “threat” of faith camps, set up a camp of their own in which they expressed the desire to teach children about critical thinking. Notice, therefore, the polarisation that has occurred. Critical thinking is scientific, while non-critical thinking is dogmatic and religious. By usurping the critical mind, treating it as its own private property, the sciences create a facade of authority. This in turn leads to a false confidence in its own powers of discernment, and on more than one occasion I have heard it said that science is in no need of criticism since it is its own best arbiter. It is in this way that spirituality has been drained of its vision and its effectiveness and forced into silence since criticism itself, and therefore the critical mind has become so tainted by this possession so that anything that is not science is regarded as mere opinion, wish-fulfilment or just plain superstition.

Consequently, it is one of the challenges for the New Church to wrest it back. This is not only for the benefit of religion, but it is at the same time a demonstration that science is not its own best critic at all. Far from it.

Time and again in the course of the last three hundred years, ideas have been foisted upon the public that have no attachment to the nature of reality, but only to its representation. For instance, by way of a prologue since it is already mentioned, the current problems with gravity stem from the assumptions of the nature of "force" which are at least three hundred years old. The key word here is "assumption," for it lies unquestioned and uncriticised right up to our own time. Yet there is not the slightest murmur of dissent or objection to it, to the extent that gravity, whether regarded as field or force, is taught as known fact rather than as a tradition, even though there is not the slightest shred of evidence in its support. Indeed, readers must judge by their own reactions to this statement, and consider their own thoughts on the matter. It will be found that what most think to be the case is what they have been taught, and not what they have found out for themselves. In fact, in most minds these remarks will appear preposterous, and this is the right reaction. It reflects the lack of criticism that its usurpation has forced upon us, and creates the appearance of a healthy rationalism for what is nothing more than an act of faith.

But none of these things can actually be realistically discussed unless the critical spirit is re-infused into all areas of thought, and this includes into spiritual concerns. Yet again, this too was part of the New Church programme, if we but knew how to apply it today. It is therefore a matter of the first importance that we should actually see and recognise that all references in the Bible to Egypt and the Egyptians not only correspond to the natural level of existence, but that the sum total of the kind of knowledge that evolved from this kind of thinking is that which today corresponds to the sciences. This correspondence is no mere metaphor. It is actual. It is the re-invocation of the past in the present. But it should be stressed that this is no bad thing, since the point is that it represents the starting point in the whole process of spiritual regeneration. The problems begin when this kind of knowledge dons the mantle of exclusivity and closes down the possibility of the furtherance of knowledge when it becomes spiritual to which the natural is related through correspondences. Consequently, we should recognise in the Egypt of Moses exactly the same state of limitations as the science of today. It is this kind of correspondence that needs to be given greater emphasis, since the problems we face today are equivalent to what Swedenborg referred to as the molestations

of the Israelites of that time, from which the modern world also finds itself incapable of freeing itself.

But this is not something new. It is in exactly this area that the New Church of *Words* points the way forward. Firstly, it outlines the correspondence of science and Egypt:

The Egyptians in the letter of the Word signify those who are in the love of natural science, and amass a large stock of natural science. This science they use in forging arguments against revealed truth, and against the personal Creator of the universe who revealed himself to men in the person of the Lord Jesus Christ.⁴

One can imagine the disbelief in the mind of modern readers to this juxtaposition of statements concerning science and Christ, which should tell us how much work there is to be done. But we get an inkling of its meaning with regard to this correspondence by simply restating the case with no references either to Egyptians or Christ. The modern world is in the thrall of natural science, and has amassed a huge stock of knowledge under this label, and it is this that is used in forging arguments against revealed truth. This we see happening time and again, and if we play the film backwards, we see that it was going on in ancient Egypt at the time of Moses (though not at the time of Joseph).

This statement in *Words* is immediately followed by another that sets the scene of application in the modern world, one which is summarised in the opening remarks of this paper:

The modern Egyptians also use their knowledge of natural things in declaring the independence of matter from spirit, and in denying man's immortality.⁵

But then comes the solution. It is not what one might expect from my tone here, which is to be critical of science. The word "criticism" is perhaps a little too harsh in that its connotations are by and large negative. The aim is to remove from its grasp the exclusive right to the critical faculty that makes it appear this way, and it is precisely this that *Words* directs us to:

⁴ *Words for the New Church* IV–VI (Swedenborg Scientific Association, 1976), 285.

⁵ *Ibid.*, 286.

Yet the fact that the modern scientists make such a perverted use of the natural sciences, is no reason why the church should turn its back on science and why it should declare the cultivation of the natural sciences unnecessary and injurious. *The Church ought not to reject and condemn natural science, but it ought to despoil the modern "Egyptians," and thus make the vessels of natural science, vessels of truth, instead of falsity.*⁶

We are alerted by this phrase, "perverted science." The use of the word "perverted" has changed over the years, and would now be considered a little too strong and misleading, but clearly there is something amiss in our ways of thinking with its emphasis on "natural" thinking, with no weight of meaning given to spiritual thought. Furthermore, we need look no further than natural thinking itself to see what is preventing this access. Wrestling back the critical mind is therefore something of a priority, and it is this that should represent in part the meaning of despoiling and plundering the Egyptians. This is no theoretical endeavour, but a matter of great urgency. Not only that, it was clearly the avowed aim of the New Church of *Words*, in which it sought to apply what is, in fact, taught in Scripture, and which Swedenborg's *Arcana* makes very clear. Prior to the exodus of the Israelites, Moses is instructed as follows:

... It will be when you go, that you do not go empty-handed. And let a woman ask of her female neighbour, and of the female guest in her house, vessels of silver and vessels of gold, and clothes; and you shall put them on your sons and on your daughters. And you shall plunder the Egyptians. (Exodus 3: 21-22)

What could this passage possibly mean, and what does the meaning offer to our own time? Any coherent answer must be sensitive to the structure of mind as we understand it, and perceive in rational thought the larger context denied it by purely natural or scientific thought and structure, which perceives in its own sense of the rational mind an exclusively scientific one.

⁶ *Ibid.*, 286.

Yet from the perspective of New Church thinking, we perceive in the rational an especial function of go-between in a less simplistic definition of mind. This definition no longer holds currency since we can feel the exclusivity of the rational in the forms of reality all around us and it is this that must be despoiled and plundered, for its use has been restricted. While the Trinity is a demonstration of how all distinctions nonetheless come in a tripartite form, this also carries across to the structure of thought itself where we find it has an intellectual/rational/scientific approach. Just as the Trinity is little understood in classical theology, so also we find the same with this kind of thought structure which has been put in the blender of Enlightenment thought from which exudes a course mixture in which the scientific takes precedence, having built the blender in the first place to produce just this effect. Furthermore, thanks to the absorption of the critical faculty into the scientific arm of the triune, which permits the scientific to obscure these distinctions, the philosophical perceptions which easily recognised the internal/external forms of reality, are now superimposed entirely with the concept of phenomena. There is no longer any real component that is suggested by “internal” or “non-physical”; there is only the data, the input, the sensory. What, then, does it mean to despoil the Egyptians? Quite simply, it is to wrest back the critical faculty, and thereby to show that what is rational is quite distinct from what is scientific, and that it is possessed of its own propensity to look in an entirely different direction from which the intellectual draws its true inspiration.

But we should also note what this entails. It is the females asking of their female neighbours and guests for their vessels. Something of the nature of thought is connected to the affection for it. Thought on its own, whether rational or scientific, is not enough. This aspect of it is noted here to indicate that a deeper use of the rational element is connected to our desire to understand. The scientific enterprise is characterised by its total dissociation, in the sense that it seeks its own agenda that is completely separated from any kind of association with feeling. Yet it is the feeling, apparently removed from thought, which nonetheless seeks an expression of itself as an active element in the very nature of reality, a reality in which it is currently denied any voice.

Such is the project entailed in despoiling and plundering, yet it is not as simple as it appears to be. Because we are the children of our age, we too

express ourselves in the language of our time, and therefore take for granted the meanings of words we use, and the concepts that we have been taught. After all, not too many people would make the words “rational” and “spiritual” synonyms. John’s gospel, for instance, is the rational gospel. But most people, including many New Church members, call it the “spiritual” gospel, and the notion of calling it rational might be offensive. This demonstrates in a superficial way what it means to wrest back the critical faculty.

Everything about New Church theology rests entirely upon the principle of freedom. Without the critical faculty, this freedom is undermined and becomes nothing more than a rule-driven process no different in essence from a promissory note. We have seen what happens to spirituality when it becomes entrenched in a dogmatic position, and it is followed blindly. Yet precisely the same occurs in the scientific rationale when it determines that only that which can be evidenced will be deemed realistic. Perhaps we should note here that the ideas hidden in the statement “Blessed are those who have not seen and believe” has nothing at all to do with blind faith or sensory evidence, but that both are equally pernicious and destructive of true freedom. The word “blessed” always contains the sense of a conjunction to deeper and higher levels of reality, and it is clear that access to it only comes in the spirit of freedom, woven into the very fabric of New Church thinking. And it is in the rational mind that the spirit of freedom is implanted.

In terms of symbology, the rational mind is represented as evolving from its first form, (Ishmael) into its more spiritual form (Isaac), and it is this mind, (the Divine Rational) we see represented upon the altar of Moriah in the process of purification thus making it fit for purpose in the New Testament, and which made it possible for the ram (our own spiritual/ rational selves) to be liberated (delivered) from the tangled boughs of a bush (our natural selves) in the process of regeneration. Consequently, we should see how this is played out today, to the degree in which we are molested by the modern Egyptian who threatens to keep us entangled and un-free in a one dimensional rationalism that is unable to go any further than what is represented by Ishmaeli rationalism. It should be remembered that this form of rationalism was also deemed fit for purpose as the groundwork of rationalism of the Isaac form that is built from it. Conse-

quently, to despoil the Egyptians and to plunder them is not to deny the value of scientific thinking. On the contrary, it is to once again establish the unconditional freedom of the questioning mind to discover its roots in the double and simultaneous domain of the spiritual and physical. It is this mind that can look both up and down. And in our time, it is exactly this quality of mind which has the capacity to see in both directions that is currently set upon and imprisoned. It is this mind that suspects that there is more to reality than what is currently presented to it, and it is in this mind that correspondences begin to resonate as a connection. Perhaps it is clear now why the New Church of *Words* saw this act of despoiling and plundering as a key New Church function, and why it laid such great emphasis on the structure of the rational mind as revealed through Swedenborg in his Writings. As inheritors of that view, it is our task to realise this as a goal, and Swedenborg's revelations provide us with the key to achieving this.

This is therefore the first and most crucial thing to take with us into the obscurity of the wilderness that our own age is struggling to embark upon—the critical mind. Without it, nothing can be achieved. But there is much else.

We may be aware that currently there is very little relation between the spiritual and the natural. One can note the great buzz of attention that exists in the public domain, and be simultaneously aware that no mention is ever made of correspondences which are the true language of connection. By now, given the foregoing remarks, one should recognise that this is largely due to the compelled secondment of the rational to scientific concerns. Indeed, the gulf between these two seems to be widening by the day, as each finds its position is actually a polarisation designed to keep them apart. In some ways, this seems to be represented by the statement that one cannot serve God and Mammon. Yet given that these are the words of Jesus Christ himself, one must recognise from that alone that the statement is possessed of hidden depths, and is not represented by current polarities. How can the meaning of this be realised in our time?

The answer is simple. By plundering the Egyptians, we find a ready-made correspondence that beautifully parallels this situation. It lies in quantum indeterminacy.

The quantum view concerns the very small, and it soon emerged that the concepts of the large scale did not apply at this level with any useful outcome. In effect, their range of application had been found, and it was necessary to develop a new batch of concepts at this level, if it was going to yield useful results. The large scale language of forces found themselves giving way to a language of tendencies and inclinations that could not be derived from the principle of inertia in the way that the language of forces on the large scale had been. In effect, the inability to determine simultaneously both the position and momentum of a particular particle was not a result of the deficiency of ability, but the inapplicability of the concepts of position and momentum at that level. This was a surprise initially, for one does not expect that a measured thing will be altered fundamentally by the very act of measurement. Yet in some ways this should not have been a surprise. These scientific discoveries revealed their philosophical roots, for Plato prefigured this kind of notion long ago in the *Sophist*, when he wrote that the act of knowing, by acting upon what is desired to be known, actually alters it so that it is not known. The question that is raised by this concerns knowing itself, and what it means to know anything at all. Because we have lived for so long in a climate in which these questions are forgotten or ignored, it is clear that, the quantum realm aside, there is still with us the false notion that everything that can be known must be scientific in character, and bend to its concepts, which effectively means bowing the knee to the principle of inertia, even though the bulk of reality does not conform to it.

What can be learnt from this is fairly straightforward. The words we use to give expression to ideas are never so abstract that what they express have no roots in experience. However, the ideas drawn from that experience, and the concepts formed from them, can only relate to the partial views reflected in that experience. Consequently, the language is always an expression of boundaries of application. New ideas emerge from new kinds of experience, and it is somewhat arrogant to assume that these can simply be enfolded within boundaries whose range of application does not include the experience, or simply be ignored.

It should not be assumed that I am drawing parallels between the spiritual domain and the quantum realm, as if to make a case for a different order of realism that is spiritual in nature with its own structure

of ideas. Indeed, this is a much-quoted way of arguing a case, but it is not the point being drawn out here. It is indeterminacy itself. To understand this, it is a prerequisite to assume that the function of the spiritual view is to provide a context for regeneration. When we consider the meaning of this very large word, and what is needed for this process to occur, it is necessary that the mind itself, initially bent in the direction of the senses and all that such experience gives rise to, must subsequently bend itself in an entirely different direction. Notice this difference, that the initial “bending” is virtually compelled, while the subsequent “bending itself” is not passive or compelled but self-driven. A new order of reality is sought, yet it is one that is founded upon the physical (in exactly the way that Isaac is founded upon Ishmael) as a necessary prerequisite, and to which it remains connected, even though the tendency is to assume that it is “not of this world.”

This “turning” however, is no natural progression in the way one normally thinks of progress. It is nothing like moving to the next level, like passing an entrance exam as a sign of fitness to do so. The spiritual begins at a point when, in an individual life, the natural notions of advance and progress become exhausted, at which point these begin to be less prominent. It is a kind of mental casting away. Of course, from a purely physical point of view, there is no end to learning, but this is not the point. What this points towards is this, that the intentions within the spiritual and natural domains are set against each other to the extent that it is perfectly legitimate to say that a spirit of aversion exists between them. In fact, if this were not the case, there could be no regeneration since there has to be a conscious turning away from one towards the other, and it is for this reason that there is a casting aside. Consequently, if we were to look behind all the arguments of atheism, indeed if they were all stripped away, what we find behind them is a sense of this aversion. This is not a fault, and should be regarded as a natural state. If it were not there, what would there be to turn away from? Consequently, it has been an error to view these two as polarised, as though set against each other. It is more the case that they complement each other through their difference, like Yin and Yang. It is in this sense that they bear the hallmarks of a quantum indeterminacy correspondentially, for the more one is rooted in the physical exclusively, the less one is capable of perceiving the necessity of a

spiritual life. It is never the case that an atheist does not believe in God because there is no evidence. On the contrary, the use of evidence itself as a reason for such belief does not result in belief, since it then becomes compelled and does away with the rational mind. It is therefore, something like a contradiction. The exclusively rational mind places great stress upon evidence, and at the same time it opposes the spiritual because of the threat it appears to pose to the independent spirit of the enquiring mind.

This returns us to the beginning. In our time, great efforts have been made to sever all references that attempt to link the natural and the spiritual in ways that place such a gulf between them that there does not seem to be a way of reconnecting them.

But imagine the case anew and to be like this: suppose that the spiritual exists within the physical much like the quantum in the heart of the very large. If now the natural insists upon its own exclusivity, it is actually expressing an aversion, and in this state the spiritual withdraws according to the principle of freedom which is this – love cannot and does not force itself, for this is what it means to be spiritual. Consequently, the rational, in denying the spiritual, expresses its aversion to such a presence within itself, and effectively shuts down any possibility of receptivity.

If this is the case, then the worst possible method of combating this attitude is by trying to argue against it, for in many ways, this “shutting down” is exactly the position that needs to be reached if regeneration is ever to take place. And yet this is exactly what we currently find to be the dominant trend.

Within the general Christian movement, there are very many voices raised in opposition to the view of exclusion of spiritual content in the natural world as expressed by atheism and by science. This is not to say that science and atheism are the same thing, but that in recent times, some scientists have been loud in their proclamation of atheism. However, because the Christian movements have by and large failed to recognise the presence of a natural aversion as a prologue to regeneration, the tendency has been to take arms against the spirit of atheism with a methodology drawn from science in a literal way, and to look for evidence of things like the resurrection, even the very existence of Jesus Christ, as a proof of historical fact. This attempt at establishing fact is no doubt intended to remove the arguments from mythology, yet from the point of view of the

hard question in atheism, it would achieve nothing for it does not touch upon the issue of aversion. At best, it would serve to make one aspect of Christianity a little more compelling, and that in itself works against the spirit of religion. And yet apologetics, the research programme that pursues this line of enquiry, is a thriving industry. It is effectively the scientisation of religion, and one wonders how it could then raise itself up from this position. Even the view that takes the Bible at face value has become a kind of defence as a result of this polarisation, and in both instances science has become an enemy by association.

The spiritual seed that dwells within the natural is unable to root itself in the kind of combative spirituality that opposes the natural in this form. One should consider these approaches as the stony ground of the parable of the sower. What is sought is the ideal ground for such germination, and it cannot come from these directions. Indeed, if we consider this from a historical perspective, we can see how this has had disastrous consequences for religion, and this is an example frequently cited by Swedenborg. When we consider the early church and its declaration of opposition to Aryanism at the Council of Nicaea, the result of this form of polarised opposition was to invent a theology that could combat it. What suffered as a result was the creed of the early church which was forced into making a disastrous alteration. Where once it had read that Jesus Christ was born of the Virgin Mary, the whole tradition of this human birth, and this also means the long process of spiritual gestation which is the Old Testament, this suddenly became a non-event as Christ became co-eternal with the father, not at all evolved, and from that moment on the mystery of the Trinity was forged which was conveniently above all human understanding. You either bowed to it, or became a heretic and suffered the consequences. From that moment, the spiritual essence withdrew as religion hardened into a dogmatic form driven by secular interests, a position from which it has never truly recovered, nor ever could. While the risen Christ pointed out all the places that referred to Him in the Scriptures at the end of Luke's gospel, then apart from a few quotations and usually taken from Isaiah, the modern Christian church has a tendency to focus the bulk of attention on the epistles of Paul. It is simply not equipped to see the presence of Christ aspectually in all the major figures of the Old Testament, let alone recognise the importance of the states of the different

churches nor recognise them, and how the decline of each has an importance lesson for the church of today.

Yet in the teachings of the New Church there is something entirely different. Its emphasis upon a more profound meaning recognises the nature of learning and that it always leads to a point of significant change, a change driven by a feeling state, an affection, and that via a process of vastation, the mind slowly learns to look upwards. It is in this process that correspondences begin to emerge, and it is only at such a point that this is possible. Only then can a sort of mirror reflection begin to develop as the will of heaven becomes enacted on the earth. But at this point in time, the emphasis is completely the reverse of this. If there is a heaven at all, it must mirror the earth, or indeed that there is no such mirror and no such heaven.

If this directive is to be carried out, then the work must surely begin with the plundering of the Egyptians. After all, having mentioned mirrors, it cannot escape our notice that there is a sense in which the current state is perfectly mirrored by the state of Egypt at the time of Moses, with Jesus Christ as the pivot around which both swing in the same arc. In terms of a modern Egypt, it is not irrelevant that Swedenborg was a lifelong scientist, and that his opposition to science was an opposition to that which effectively closed down correspondences. One should be clear about this. In terms of this equivalence, the Magi have virtually disappeared with their internal emphasis which gave correspondences their meaning, leaving only the wise men in place whose function was purely external. What we find in Swedenborg is not an opposition to the physical world, nor to natural understanding whose focus begins with that world, for the natural world is the beginnings of everything. It is the exclusivity of the wise men whose power began with the formulation of the principle of inertia as a foundation for understanding in our own times. And it is this principle which Swedenborg alone identified as the cause of the closing down of correspondences. It is surely the task of the New Church in the modern world to reflect this at the very base of its teachings, if correspondences are to come into their own, and establishing the link between heaven and earth in a non-combative, non-compelled form.

Consequently, this defines the aim of what is to follow, and it will only appear as if this is a paper concerned with science. By its emphasis on the

inertia principle, the rational has closed down access to the spiritual which occurs through correspondences, and has effectively imprisoned the critical faculty that is so important to further development.

In some ways, when reading *Words for the New Church*, there is a sense in which these represent its “first works,” and as the angel at the beginning of Revelation declared to John, the essence of a church lies in its first works, and that these should not be forgotten. Perhaps we should remind ourselves of that work as stipulated in *Words*:

... one of the duties of the New Church in future will consist in wresting the facts of nature from the hands of the modern “Egyptians,” and instilling into the sciences the genuine principles of revealed truth . . . That this work, however, is one of paramount importance to the New Church, and that its success among mankind as a Church is involved in it, appears from this consideration, that “inasmuch as the understanding has been closed by the sciences, it must be opened again by means of the sciences.” SD 5709⁷

II

“FOOTNOTES” REVISITED

“Footnotes to Swedenborg” (this journal, January–June 2008, 321–359), was always intended to be an introduction or prologue. It was largely concerned with the historical position of Swedenborg’s opposition to Enlightenment thinking. But what is relevant about this, and what always matters, is to see how those criticisms, by being ignored, could apply to the circumstances and the mores of our own time which have been shaped by thought processes in their absence, and what difference it could therefore make in application.

However, this task is far more difficult to do than one imagines. There is a natural tendency to assume that with the passage of time, our own knowledge has increased little by little, and that our own times are conse-

⁷ *Words for the New Church* IV–VI (Swedenborg Scientific Association, 1976), 317.

quently unparalleled in the scope of their insight into the true nature of reality which previous times could only have guessed at. One of the side effects of this is that the relevance of any past thinkers is only gauged in terms of their contribution to our current position. Consequently, one finds in studies of Swedenborg's thought plenty of areas of agreement, and none whatsoever where his views are at odds with current thinking. Swedenborg's position was first and foremost critical, as befits a thinker of his calibre who refused to take anything for granted. Ours, however, is an age that is non-critical, in that the basis for anything that appears to be critical is actually founded on principles which determine what can and cannot be criticised, thereby shoring up the terms of reference that define the restrictive practices that have come to define the modern world.

This frame of mind, one that assumes the wisdom of our own age, is not the one that I ascribe to or will follow in the course of this paper. There is another way of viewing our apparent progress, and it is this other way that will determine what will follow. We live in a time which has been witness to the gradual unfolding of certain principles of thought that were laid down at the inception of the Enlightenment movement, and which have achieved their full flowering in the shapes and forms of the modern world, represented by the visible presence of the fruits of its labours as seen in the structure and infrastructure of cities and their technologies, modern means of communication and transport, and a thousand different devices we now imagine we cannot live without. Consequently, the arguments that favour these principles are actually not arguments, but a finger pointing at the marvels of modern engineering and technology, and these are the proofs of justification. While 17th century natural philosophers (the forerunners of the modern scientist) could not have foreseen these things, nonetheless they are enfolded within the principles of thought established by them and which have unravelled over time into the shape of the modern world, and almost exclusively so.

Here, then, is a general statement concerning Kant's intentions. The principles of thought which underlay this movement are encapsulated in his *Critique of Pure Reason*. The aim of this critique was to plot the range of application of the purely rational mind. By setting them down, Kant was not being anti-theistic, but rather he was asserting that religion did not belong to the domain of pure reason, and that nothing could be said about

it from that position. In effect, he created a schism which favoured the rational view as the only and exclusive form of knowing, thereby relegating religion to the sidelines, a position from which religion has never recovered, and which left the field open to exclusively rational considerations. In effect, the range and scope of application is engineered to have just this outcome, the result of which is that today, we tend to ask for evidence of a specific form to substantiate anything at all about the nature of reality, one in which religion plays no real part since it is outside the bounds of this kind of thinking. It is a very simple move from this position to assert that religion is something that is taught 'at home' or in the church, and has no place in any relevant way within the school curriculum. The implication is that religion has little to do with public life, and should be corralled in the private domain where you are free to think whatever you like.

But now here is a hypothesis: Enlightenment ideas have now reached their limit. The assumptions that underpin them have attained to their maximum range. Perhaps a metaphor would help to carry this. If one imagines what the first motor car looked like and how fast it travelled, it would seem to be remote in every way from the modern car, being faster, more comfortable and reliable, as well as safer, yet in essence they are both born from the internal combustion engine. No doubt, it can be refined further still, but it is essentially the same idea in a different setting. It is in this sense that I am suggesting that Enlightenment ideas have reached their limit and their maximum range of application, and whatever changes that may have occurred are not so much fundamental as cosmetic. What they reveal is what they always assumed, that the unaided rational faculty attempts to portray and represent the whole scope and nature of reality, but in actual fact places restraints upon it for its own sake and its own self-preservation. We are living in a time that represents that limitation, and the reason we can know that it is reached is because it is a felt state.

In that last sentence lies the key problem in its dual form. How can we "know" this when knowing itself is exclusively identified with the rational method? The "felt" state itself is also largely identified with an emotive perspective; this is now universally acknowledged as a complex of sentiments that only clouds and obscures the rational method. The self-same arguments with regard to this bifurcated view of thought and feeling had

been used to establish the supremacy of the rational method in the early Enlightenment, and have re-appeared time and again ever since in various attempts at justifying the continuation of the purely objective way of thinking that is meant by rationalism. With each movement forward, the arguments became more and more sophisticated, (much like the internal combustion engine) till they reached a point of entrenchment that would guarantee the notion of a "felt" state being subsumed under the weight of structure and artefacts created by the rational method. Their very existence, lines of gleaming motor cars sitting in our garages and on the streets of everywhere, these donned the mantle of evidence, and such evidence then defined the knowing state. The felt state (call it intuition for the moment) could be safely ignored as a provider of knowledge and insight.

It is foolhardy to think in terms of simplistic causes which can be laid at the foot of any single movement, but this need not be a point to labour over. The point is that an idea or ideas have a certain range of application, and are then superseded by something else entirely. This is very different from the idea of a constant progression and evolution, as though ideas have a universal range or an infinity of dimensions. Notice therefore the foundation for a more cyclic approach, and it is this approach that we find in the ideas of Swedenborg. Indeed, it can be no coincidence that the pattern of the five churches shows this kind of movement, and we can clearly see how his exegesis is founded upon it, and which is informed by it. The rise and fall of different states of mind point towards the establishment of new patterns of thought. That we may be at the tail-end of a more recent secular movement does not mean that it is not subject to the same processes and pressures of social, political and psychological entropy, which are the harbingers of a change of state, one that cries out for new ideas and fresh thinking. The oil has run out, the internal combustion engine has had its day.

Any new movement of thought is possessed of a vigour and an audacity that is very difficult to contend with. Nevertheless, Swedenborg's was a lone voice in being critical of the principles that underlay the Enlightenment as he clearly recognised that the philosophical principles of the experimental method were essentially constrictive upon human experience. If we consider that the whole exegesis he provides us with is built upon the gradual unification of the thought state and the felt state, the

mind and the heart, the understanding and the will, or simply truth and good, we can see immediately that it can have nothing in common with the principle motivations in Enlightenment thought whose aims automatically remove the felt state from its manifesto. Here we can see the Philistine position, of truth separated from good, played out in a secular domain. It is this very exclusion that limits the range of thought and it is our age that is living in its limit. And like the Philistine view, it is aggrandising of itself alone.

This is something of a generalisation, yet his challenge is far more specific than that. In the *Hieroglyphic Key* we find an entirely different base principle from that being constructed by the new experimental method: all reality, at whatever level we care to consider it, is driven by an impulse which he called “conatus,” a word no longer in common usage since it has been successfully overlaid by the conceptions of science. This should not surprise us, since what constitutes an explanation in those conceptions is directly opposed to any such idea or principle. This opposition can be found hidden within the principle of inertia which by its nature cannot possibly entertain any such conception and it is from this principle that the laws of motion emerge, laws that are by and large still intact and entrenched within modern conceptions of reality. There is no need to look any further than these two objections—the principle of inertia, and the bifurcation between the perceptions of the mind and the heart. Swedenborg recognised in conatus an impulse inherently a feature and a presence in every aspect of existence, without which it was impossible to establish any kind of connection between the different layers of reality that were ultimately to become his theory of correspondences, and his objection to inertia lay in the fact that it actually closed the door on them and cut off any such communication. In so saying, one should note that this “cutting off” has much in common with the notion of truth separated from good, and indeed faith separated from charity, which we now accept unquestioningly as a natural state in the practice of science, and we behave as though such correspondences have nothing at all to do with the scientific perception.

This has been a mistake, whose repercussions still reverberate throughout the modern world. The principle of inertia, and the science founded upon it, has taken a position that is unjustifiable on any philosophical

grounds. But it has done so because the mind has been seduced by its own success. Through it, there seems to have been an enablement, an ability to control and manipulate reality through a methodology that assumes from the outset that the principle of inertia describes something real, when there is no such state anywhere in the universe. In fact, it simply represents the interests and preferences of a purely rational methodology as it is found in the human mind and subsequently projected and imposed outwards. It will then only see there what such a methodology can reveal, and nothing at all concerning those aspects of ourselves associated with the felt state implied by conatus. Reality was to become a mirror of how we think, even though it has more in common with how we feel. The way to prevent the apparent restrictions on thought imposed by conatus, or impulse, is to demote the relevance of the latter, and the evolution of Enlightenment thought has been this constant endeavour.

Dreams of a Spirit Seer

This is, of course, not the mainstream attitude. But at the same time, given the critical function of philosophy, it should also be emphasised that virtually nobody in our times has brought the principle of inertia to task in any significant way, for it is largely considered to be a scientific concept and not a philosophical one. It is taught in all education institutions as though it were a matter of fact in scientific courses, and has become unconsciously adopted as a true description of reality, and with the same commitment as any other doctrine, whether secular or religious. While religion has recently been giving cause for concern in most modern philosophies of education and ethics with their apparently non-critical form, not a word or whisper is raised concerning the philosophical position that is passing itself off as science. It is not even recognised that this is the case. Given that Swedenborg's was the only real challenge to this position, we must regard Kant's response to Swedenborg, in *Dreams of a Spirit-seer* as something of a landmark in the history of thought, since from that moment on, the perennial philosophy concerned with the relations of the heavens and the earth, or the soul and the body, or God and man, faded from sight and has never recovered. Yet even when we look at Kant's objections, the noise he makes with regard to what he calls "spiritist"

philosophy cannot help revealing his own prejudices that are deliberately phrased to favour the emerging scientific perspective. *Dreams* virtually opens with a declaration of faith in the inertia principle:

The dead matter that fills the universe is according to its proper nature, in a self-same state of inertia and stability; it has solidity, extension, and shape, and its manifestations, which are based upon all these grounds, permit a physical explanation that is at the same time mathematical, and together they are called mechanical.⁸

It is quite clear what the basis of Kant's attack is going to be, but in this paper, it would be useful to look for the underlying conditions of thought that gave precedence to this relatively new way of thinking called science. 100 years earlier, Thomas Hobbes did exactly the same thing in attempting to use the inertia principle to justify every view, both political and social as well as natural. While his book "Leviathan" is generally assumed to be a social or political work, nevertheless it also followed the self-same scientific method that was newly emerging, only applying it further afield to social and political concerns directly. Notice therefore how "Leviathan" from the outset, employs exactly the same principle of inertia, and in the same tone as Kant much later, by making it a virtual principle leitmotiv as an overture:

When a Body is once in motion, it moveth (unless something els (*sic*) hinder it) eternally; and whatsoever hindreth it, cannot in an instant, but in time, and by degrees quite extinguish it; . . . so also it happeneth in that motion, which is made in the internall (*sic*) parts of a man, then, when he Sees, Dreams, &c.⁹

From the point of view of the Swedenborgian perspective, there is something very interesting to note in Hobbes's view. Notice the use of the expression "as . . .so." We are familiar with it in the Hermetic tradition as

⁸ Kant on Swedenborg. *Dreams of a Spirit-Seer and Other Writings*. (Translated by Gregory R. Johnson and Glenn Alexander Mageer. Swedenborg Foundation Publishers, 2002), 15.

⁹ Hobbes, Thomas. *Leviathan*. (Cambridge University Press, 1997), 15.

“as above, so below,” or “as within, so without.” It is this kind of phraseology that is our introduction to correspondences in Swedenborg, but which was to develop into a more sophisticated form in his later years. Nonetheless, it is already present in the *Hieroglyphic Key* when he speaks of the relations between the different layers of reality. Hobbes’s view is a failure, but oddly enough, Kant produces something similar in *Dreams*:

If one wishes to call this compulsion we feel in us to harmonise our will with the General Will “moral feeling,” then one speaks of it only as an appearance of what actually takes place in us, without coming to its cause. Thus Newton called the certain law governing the tendencies in all particles of matter to draw closer to each other their gravitation, not wishing to involve his mathematical demonstrations in a vexatious participation in philosophical disputes that might arise concerning its cause. . .¹⁰

This is such an important statement in terms of its form of argument that it is impossible to gloss over without more careful comment. Firstly, Kant notes in Newton’s mathematics a description and not a prescription of gravitational cause and contrasts this with something similar with regard to moral feeling. But more than this, the form of this comparison has a strong resemblance to a correspondence, and it is this resemblance that spurs him on, as if the earth component (gravitation) gives him a right to comment on the heaven component (General Will). These words “earth” and “heaven” are deliberately chosen here to clarify this distinction for they represent the source of the whole correspondential form as it is found in the Lord’s prayer: Thy Will be done, as in heaven so upon the earth. Yet it is clear that what is happening in Kant is a subtle inversion of order. This reciprocation favours the earth, and how it is found to work there determines how the spiritual world operates. On the earth gravitation, whatever its cause, is a “genuine effect produced by the universal activity of matter operating on itself and for this reason also [Newton] gave it the name ‘attraction’.” Consequently, it is the success of the mathematical

¹⁰ Kant on Swedenborg. *Dreams of a Spirit-Seer and Other Writings*. (Translated by Gregory R. Johnson and Glenn Alexander Mageer. Swedenborg Foundation Publishers, 2002), 21.

model supplied by Newton that is the source of confidence that gave a primacy to the earth component which the spiritual world is then to be modelled on:

Should it not be possible to represent the phenomena of the moral impulses in thinking natures, who are reciprocally related to each other, likewise as the effect of a genuinely active force through which spiritual natures flow into one another such that the moral feeling would be this felt dependency and an effect of the natural and universal reciprocal interaction through which the immaterial world attains its moral unity by forming itself into a system of spiritual perfection in accordance with the laws governing its own cohesion.¹¹

The implications of this kind of inverted correspondence have been devastating to any notions of spiritual life. Whatever it is that binds reality in terms of the laws of nature, the spiritual domain also must be bound by similar laws. To know the former is to know the latter, and both are founded upon the natural, and are therefore to subscribe to the laws of motion founded upon the principle of inertia, which as Swedenborg stated, can not be representative of correspondence since it effectively closes them down. Indeed, Kant takes an opposite view to Swedenborg with regard to the doing of good actions, yet seems to make them acceptable, by claiming that they have absolutely no consequence as far as the earth component is concerned, but are entirely reflected in a purely spiritual context. In effect, the crack that had been appearing in the unity of heaven/earth over the previous 1000 years is turned into a chasm in the hands of Kant.

What is important about this is that we should be sensitive to the sea-change in terms of the state of mind that is being affected here, for to all intents and purposes the end result has an appearance of similarity to the view found in Swedenborg:

When the community of the soul with the corporeal world is finally cancelled by death, life in the other world would only be a natural continuation of that connection in which it had already stood in this life,

¹¹ *Ibid.*, 21.

and all the consequences of the morality practiced here would reappear there . . . the present and the future would therefore be of one piece . . . even according to the order of nature.¹²

One could easily be seduced into thinking that it did not matter which world reflected which since the earth-bound view, according to Kant, is very little different from that which reciprocates with the influx of a heavenly view. It is as if Kant is trying to match Swedenborg in terms of the largesse of vision. Yet he is doing so for one express reason, to discredit any conception of knowledge that does not begin where he begins, and to do away with revealed knowledge altogether.

It is a great difficulty when one has to take refuge in an extraordinary Divine Will in order to remove the difficulty that springs from the imperfect harmony between morality and its effect in this world, because no matter how likely our judgement of it according to our concepts of the divine wisdom may be, a strong suspicion always remains that the feeble concepts of our understanding may perhaps have been applied to the highest quite perversely.¹³

Here one can perceive the beginnings of an argument subsequently called the "God of the gaps." Kant speaks as though with humility concerning the limits of the human mind, yet what he is actually doing is removing any possibility of the rational mind looking upwards, and insisting that rational thought is tempered only for earth-bound matters. Consequently, his humility is rhetorical, and helps establish his cause. By contrasting these two worlds in this way, inverting the order of reflection to favour the natural view, a view that is now to be entirely founded upon the principle of inertia as the starting point of both science and philosophy and with which he began his attack, he storms the high ground of intellectual thought, arguing in a way that Hobbes could not, and doing so by the misuse and inversion of true correspondential order. "As the earth, so the heavens."

¹² Ibid., 21.

¹³ Ibid., 22.

Because this idea of correspondences is so central to understanding Swedenborg and the vision he presents us with, it is clear that we must give far greater consideration to it than ever before, because it is through its misuse that the Enlightenment view under which we still labour was able to get such a firm grip on our critical, rational minds.

Correspondence

There is an interesting passage in *The Spiritual Diary* which throws a lot of light on this subject, written in the form of an encounter from which we can derive a great deal of illumination on the source and meaning of correspondences. It is under this title: **Concerning the difference between the delights of pleasure and true happiness:**

When I deeply felt delights or pleasantnesses I did not know whence they came, for it is very difficult for a soul or spirit to distinguish between *fictitious* or *counterfeit* delights, and those that are *true* or heavenly, because with them the sensation is as yet so gross that they do not know the difference; wherefore I conversed with the spirits around me concerning those delights, as to whence they came. Hence it was said that false delights or pleasures sometimes so *counterfeit* those that are true and heavenly that it is by no means possible to distinguish between them; indeed, unless the Lord inspires a knowledge of the distinction, a spirit is not at all aware of it. How very often do evil spirits, indeed, the worst, mock and fascinate those who are in the other life by similar fictitious delights; for they suppose them to be heavenly delight itself, when nevertheless it is altogether infernal, because it is turned into what is infernal and into torment. Thus they not only inject a pleasantness perceptible to their inmosts, but also represent beautiful *counterfeit* forms of different objects, such as gardens, as if they were those of paradise. For evil spirits, especially those high above the head, continually study how they may *imitate* such things, and thus *seduce* or *allure* souls over to their side, so that they may be associated with themselves . . . Such is the life of pleasures in the body. (Emphasis added) (SD 755)

This passage is so rich in content with regard to the implications for correspondences that it is difficult to know where to begin. Students of Swedenborg's thought will know that his experiences were never ad hoc, but all held a lesson in them, in this case several lessons. The first thing to notice is the constant use of words such as "counterfeit" and "fictitious," indeed the actual ability to imitate itself. Furthermore, the true correspondence can be distinguished in only one way, through the Lord who inspires a knowledge of the distinction. We should also be mindful of the fact that in this lesson, Swedenborg himself was unable to distinguish between the real and the imitative. It is for this reason that we should give some serious thought to his assertion that he was taught by the Lord himself, since this is the only means by which such distinction can be made. In the absence of that ability, it is therefore logical to conclude that we are liable to be led astray by that which has the appearance of truth but which actually acts to blind us to it. After all, while this may be a spiritual lesson, Swedenborg always keeps his mind on the relevance to us here, and concludes by saying that this is reflected in the life of pleasures in the body.

Could it be, therefore, that just as the spiritual level exhibits features of deception, that we actually find examples of it as correspondences on the natural level? When looking at the structures in the natural world, we find many non-human activities that are decidedly imitative: the octopus that is chameleon-like, the chameleon itself and many other creatures that blend into the colours and patterns of their backgrounds, the colony of flattid bugs that resemble a flower, and the flowers that resemble insects and so on. Or take it one step further, and consider the processes of replication in the fabric of the living body, especially and significantly with respect to viruses. In order to survive, they need to be able to present themselves in such a way that they are accepted by the host body. In reading Fredric Bryntesson's article on the HIV virus (*The New Philosophy* Vol CXII Nos 1 & 2), one cannot help but be struck by the inversion of order that a retrovirus displays, as well as the central role played by deception in the process of infection:

The violation of order in the case of HIV-1 integration forces the cell to perform an abnormal function, and the parasite tricks the host cell into a

response that ultimately seals the fate of the host cell and the organism. This is an example of how the virus deceives the host cell.¹⁴

Even on a more conscious level, such as playing certain games like poker, an important element in it is the ability to deceive an opponent. But within all these examples, there is a much deeper meaning that can hardly be admitted to consciously, which is that we are also self-deceivers. This is something that Swedenborg often hints at with respect to hypocrisy, yet at the same time he deals with it in a manner that is non-judgemental since it is determined by our own perceptions, and those things we attach ourselves to as most relevant to our lives. Consequently, if these do not concern the Lord or our spiritual lives, then there is no way of distinguishing the expansive view from the restricted view. The lesson that Swedenborg learnt is one that he subsequently carries into his thoughts about the nature of charity, and he says just this in *Arcana Caelestia*:

Natural good saves no one, whereas spiritual good saves all. The reason for this is that the good which is given form by the truths of faith provides heaven—that is, the Lord through heaven—with a level to flow into, in order to lead the person, withhold him from evil, and subsequently raise him to heaven. But natural good is not like that. People therefore whose good is merely natural can be carried away by falsity as easily as by truth, provided that in outward appearance the falsity looks like truth. They can also be lead as easily by evil, provided that the evil is presented as good. (AC 7761)

None of the foregoing remarks are intended as proof of anything, but rather to show that a vital process in any kind of life is highly imitative, and the aim of this is to subsume that which is being imitated in order to overlay it with a new order. This in itself is a process, a technique, and should be thought of as the principle of overlaying. Swedenborg cites many examples of this in the *Arcana*, but it is easily pictured if one

¹⁴Fredric Brytesson. "The Life Cycle of the Human Immuno-Deficiency Virus: A useful tool for teaching Scientifics and New Church Principles in the Classroom." (*The New Philosophy*. Volume CXII, Nos. 1 & 2. Swedenborg Scientific Association.), 783.

considers this: in order to become a viable voice, the early Christian church employed the principle of overlaying by building its churches on top of pagan sites. The original is overlaid with a new kind of worship and in a short time took hold of the minds of the people. It is this technique that we are witness to in *Dreams*. It is no longer an attack of one person upon another, but an attempt to establish a new way of thinking about reality, a new order, one that no longer wished to subscribe to any spiritual action or thought in the substance of reality, and which was to be determined by purely rational thought unencumbered by spiritual considerations, since these were a hindrance to the newly formed laws of motion. As just seen, this was achieved by Kant through the principle of overlaying, of making his views appear to be similar to Swedenborg's, but expressed in an intellectual form, and imitating the method of correspondence.

We can know that this is no real correspondence, merely the facsimile of one, because it is not inspired by the Lord. But this would not be satisfactory to the modern intellectual palate for many reasons, even though true. So look at it from the point of view that Swedenborg presents in the *Hieroglyphic Key*. There can be no such correspondence since the principle of inertia cannot permit it. But no matter how lengthy and detailed one's arguments might be, this too can be dismissed as cogent argument since we are the benefactors of what inertial views have provided.

Actually, we know it is not a true correspondence because Kant says so. In a letter to Moses Mendelssohn he writes:

. . . my attempt at an analogy between actual moral influxes of spiritual natures and universal gravitation is not a serious opinion of mine but rather an example of how one can go in philosophical fabrications, completely unhindered, when there are no data and how necessary it is in such tasks first to decide what is required for a solution . . .¹⁵

Is this the honest Kant, declaring privately that he does not hold with the correspondential position? Or is he looking to curry favour in order to

¹⁵ Kant on Swedenborg, *Dreams of a Spirit-Seer and Other Writings*. (Translated by Gregory R. Johnson and Glenn Alexander Mageer. Swedenborg Foundation Publishers, 2002), 86.

further his own ambition? Either way, there is a gulf between what he declares publicly and what he asserts privately.

And yet is it not exactly this that Swedenborg is implying? Consider it from a philosophical position. The force of gravity emerges as an external agency compelling matter via the principle of inertia, from which nothing that is self-activated can possibly emerge. It is this external agency that Swedenborg is questioning, and which Kant is defending. In the same letter to Moses Mendelssohn, Kant writes:

In my opinion, everything depends on our seeking out the data of the problem, how is the soul present in the world, in material as well as non-material things. Thus, we need to discover the power of external agency and the receptivity to being affected from outside . . .¹⁶

Consequently, we see the direction that Kant is taking. His is a position completely convinced by the power of reason and the senses that inform it, and these are entirely external. The former is to become an exclusive mirror of the latter. The following quotations, seen together, give a strong flavour of his dominating attitude:

The undisputed characteristic of life in what we see by our outer senses is, doubtless, free movement, which shows itself as arising from the will; but the conclusion is not certain that, where this characteristic is not encountered, then no degree of life is found.¹⁷

. . . keep to mechanical causes, and thereby follow a more philosophical method that, while sometimes failing, more often proves right and that also alone is of useful employment in science, while on the contrary, the influx of beings of incorporeal nature can at best only be known that it exists but never how it takes place or how wide its effects extend.¹⁸

And yet again, in his letter to Mendelssohn, he writes:

¹⁶ Ibid., 84.

¹⁷ Ibid., 16.

¹⁸ Ibid., 18.

I am fully convinced that the dominant path is completely inverted, that the methods in vogue must infinitely increase delusion and error...Geniuses such as you, mein Herr, approach this science in order to create a new era, to mark the foundations anew and to draw the plans of this hitherto haphazardly constructed discipline with a master's hand . . . if I can persuade you to collaborate with me in this work...something important for the development of the science could be attained . . .¹⁹

There is no doubt some historical justification for taking this position, since the alliance of religion with politics had dissolved the correspondential form of religion and made it into a compelled structure, thereby dissolving all human freedoms. The method that Kant foresees is one that frees thought from such a tyrannical hold, and we can sense his excitement at this prospect as it emerges over the horizon:

. . . if they should eventually open their eyes to a view that does not exclude agreement with the understanding of other human beings, then none of them would see anything that did not, in the light of their proofs, appear obvious and certain to everybody else as well, and the philosophers would certainly inhabit a common world together at the same time, such as the mathematicians have long possessed, an important event that cannot be put off much longer, *so far as signs and portents that have for some time appeared over the horizon of the sciences are to be trusted.*²⁰

Consequently, it becomes plain why Kant is bending philosophy in the direction of an exclusive science – in order to prevent the infiltration of dogmatism. This is why he envisages the importance of philosophy as setting limits to the scope of knowledge:

. . . to that extent, metaphysics is a science of the limits of human reason.²¹

. . . eventually science arrives at the determination of the limits set for it by the nature of human reason . . .²²

¹⁹ Ibid., 86.

²⁰ Ibid., 29.

²¹ Ibid., 57.

²² Ibid., 59.

. . . the boundaries [of philosophy] draw closer together and marker stones are laid that never again allow investigation to wander beyond its proper district.²³

One can see that Kant is planning to make philosophy into the philosophy of science, in which only the experience of the senses and their technological extensions would play the significant role, and this means that there would be no internal element that played any role whatsoever. Everything real would be deemed to exist within the ring of marker stones as the proper and only suitable domain of realism. At the risk of sounding repetitive, he achieves this by overlaying the correspondential system with a correspondence of his own, only to deny it once his philosophy of science has taken a foothold.

But now, after having cogently laid out his plans and intentions, he reveals an altogether more sinister turn of mind in his exclusion of all things spiritual.

Before we were wandering like Democritus in empty space, where the butterfly-wings of metaphysics had lifted us, and conversing with spirit forms. Now that the *styptic* power of self-knowledge has folded these silken wings, we see ourselves back on the low ground of experience and common sense, happy if we regard it as our assigned place from which we may never depart with impunity and which contains everything that can satisfy us, so long as we stay with what is useful.²⁴

The use of the word “butterfly” is no accident. Kant was well aware that the Greek word “psyche” which referred to the soul was also the word for butterfly, and the word “styptic” refers to binding. The notes at the end of *Dreams* explain the use of this word:

Once the wings of metaphysics have been bound, we will be confined to the surface of the earth. A butterfly with its wings bound looks like a worm; hence Shell observes that Kant’s process is the exact reverse of the

²³ Ibid., 60.

²⁴ Ibid., 57.

metamorphosis of caterpillar into butterfly. More precisely, a butterfly with its wings bound looks like a cocoon of the body.²⁵

There could not be a more definitive statement of the newly forming rational position. Everything was to be understood on purely physical grounds, tempered by a priori ideas through which to filter incoming data that experience provided. And what's more, there was to be no room for any other kind of thinking. Or rather, thought itself was to be purged of all ideas not rooted in a specific kind of experience. The butterfly-wings of *Dreams* develop into the flight of the dove in the introduction to *Critique of Pure Reason*, but only by first denouncing any kind of spiritual intuition:

Misled by such a proof of the power of reason, the demand for the extension of knowledge recognises no limits. The light dove, cleaving the air in her free flight, and feeling its resistance, might imagine that its flight would be still easier in empty space. It was thus that Plato left the world of the senses, as setting too narrow limits to the understanding, and ventured out beyond it on the wings of the ideas, in the empty space of the pure understanding. He did not observe that with all his efforts he made no advance—meeting no resistance that might, as it were, serve as a support upon which he could take a stand, to which he could apply his powers, and so set his understanding in motion.²⁶

These days, there is a tendency in philosophy courses to re-interpret the idea of Plato's exit from the cave as a foray into the capacity to form concepts, while the inherited perennial philosophy that spoke of a simultaneous existence in two worlds is soundly denounced, thanks to Kant. It is an example of how effective Kant's overlaying technique had been in ousting all reference to anything spiritual. Yet in many ways he is expressing the mood of his times. The signs and portents appearing over the horizon were the irresistible attractions of a form of thought that is thoroughly natural through and through, and we are to be encouraged to study the worm and the cocoon, and not the butterfly. And yet while

²⁵ Ibid., 182.

²⁶ Kant, Immanuel. *Critique of Pure Reason*. (Everyman's Library, 1996.), 34.

reading the *Dreams* so thorough is the attack upon Swedenborg that one could not imagine that he was actually referring to a scientist that was head and shoulders above the rest of the field. And it was because of this that while there would have been many points of agreement between them, Swedenborg would never have agreed that the rational mind was rooted solely in nature. His view of it is that it is the link between heaven and earth and can therefore see in both directions. But there is an order; in order to reach upwards it appears to have a probationary period when its concerns are entirely earthly, and usually drawn from others. It eventually reaches that butterfly point and the idea that marker stones are set in place to prevent that further development was something entirely malodorous:

But they who do not seek to be more learned than their senses, proscribe such knowledges, and strive to forbid and prevent the philosopher from approaching their altars and hearths, being desirous that penetration shall go no further than is allowed by the testimony and arbitrament, as it were, of the senses; and that the bounds of wisdom and of our knowledge shall be set within a sphere that is purely animal, and is far removed from the human and rational. (*Psych. Trans.* p. 25)

Could there possibly be a starker display of minds in epic opposition? It is not difficult to see how the basis of science, rooted as it was in sense experience, took on the trappings of a religion in its own right. Its marker stones have become altars, upon which is sacrificed the dual character of reason, and its general principles founded upon the principle of inertia subsequently become articles of faith, articles that are still in place to this day.

Before moving away from this, there is a need to give a little more emphasis to Kant's use of this word, "styptic." The word that was used to mean soul, or spirit, in Egyptian times was "Ka" whose Greek equivalent was "Psyche," which, as stated above, also means butterfly. This would not have been lost upon the 18th century readership who were quite familiar with this, since it was held in their mind as a fundamental correspondence—the pupa metamorphoses and becomes a butterfly / the body metamorphoses and becomes a soul. The form of correspondence would have been obvious: *as* the pupa / butterfly, *so* the body / spirit. But Kant is

intent upon removing this correspondence; the styptic form is literally a contracted form, the wings of spirit drawn inwards and re-enfolded. In effect, he reverses the process of metamorphosis and all of reality is to be transmuted backwards into a worm, or a cocoon, and it would be forbidden to develop beyond this stage.

What we need to do here is to see the significance of such imagery in its use as correspondence, and to be aware that this way of expressing thought had been around since ancient times. If we do this, we will begin to see the relevance of such images to our own times, for they are defined by the styptic process that was instigated by the Enlightenment. But far more relevant than this is the image that emerges from this reversal of thought. There is another creature that emerges from its outer shell much like a butterfly, but unlike the butterfly the form it then has is exactly the same as that prior to its emergence. It is the snake or the serpent, in the process of sloughing its skin, and which remains exactly the same afterwards. The nature of this creature is actually captured by Kant's intention: "we see ourselves back on the low ground of experience and common sense, happy if we regard it as our assigned place from which we may never depart with impunity."²⁷ The point about the serpent is that it crawls on the ground and never raises itself up from it, nor wishes to do so. Furthermore, we are to resign ourselves to it, and call it a satisfaction. In short, Kant defines the trend that will be followed for the next three hundred years, and which is still the dominant trend. But here is the point: what we see enacted at the inception of the Enlightenment is the drama that unfolded and was represented by the eating of the fruit of the tree of knowledge by Eve, who comes to represent that styptic satisfaction of the proprium, determined to take centre stage.

There is little doubt that the reason this is no longer common knowledge is linked to the manner in which the Bible had been manipulated to such a degree that it lost its relevance with regard to its spiritual message. As a consequence, the imagery of correspondence became overlaid to such a degree that the meanings being discussed here vanished altogether. These days, as far as the popular imagination has it, the serpent is the devil. By attempting to re-invigorate the true power of correspondence,

²⁷ *Dreams*, 57.

we not only return the meaning to its origins, but we then see them played out in dramatic form, even to the point that we see in the serpent's words the very form of knowledge that Kant is promulgating, and which was destined to take hold. We are not to raise ourselves towards heaven, nor even recognise that the aspect of mind that is capable of it is hard-wired into us, and that we can see both upwards and downwards, both within and without. No, the only thing that matters is sense-awareness, and Swedenborg is loud in his criticism of this position when laying open the meaning of the first few pages of the Bible:

“Their eyes would be opened” means that if they did probe into matters of faith from sensory perception and factual knowledge, that is, from themselves they would see plainly that it was not. “They would be like God . . .” means that if they did so from themselves they would be like God and could be their own Guides . . .and so be like the Lord. It is characteristic of self-love that people do not wish to be led from the Lord but from themselves. And when this is so people rely in matters of belief on sensory evidence and factual knowledge. (AC 204)

Without having to point it out in stark terms, it is quite clear that his exegesis is not merely stating what the meaning of these lines were intended to carry; he is actually defining the times he was living in, as well as our own times. Our age is the age of the serpent, or serpent-thinking, entirely sensual and with its sense of aversion to the spiritual accentuated even further. Given that such an exegesis is more or less unique to the New Church, does this not bring us even closer to the spiritual sense by actually seeing it played out before our eyes in the physical world, in the philosophies that have dominated our thoughts since Swedenborg's time, and in the form of the world subsequently shaped by them that can be appropriately called the new Egyptianism?

For the time being, it is not necessary to go any further than this analysis, for we have reached that point of need in the twenty first century in which those philosophies and the sciences founded upon them have reached their limit of application, and still there is something wanting.

The question is this: how are we to recognise that limit in an age that is shaped by them, and one in which we are no longer in the habit of

questioning such things? Indeed, how are we to recognise such a situation if all our concepts, the very ideas by which we express ourselves, are themselves tainted by those principles in such a way that we cannot even say what we would like to express, because the words do not exist?

Answer: Invent new words. This is not as difficult as it sounds, for in many ways, it is a process of rediscovering what has been lost or subsumed. But in order to do this, it is necessary to look at our concepts and ideas and how they have been instrumental in forming our concepts of reality. In fact, I have a particular conception in mind which is the theory of relativity. The reason for this is simple enough; there are many general statements that have emerged from our post-modern era that point towards the realms of subjectivity in all areas of thought, but these have rarely been applied to actual scientific concepts. As a result of the lack of this application, much that is passed off as science is actually philosophy, and it is still not recognised that relativity theory has more in common with philosophy than it does with science. Therefore, in order to explore the manner in which inertia in particular acts as a restriction to thought, it is necessary to see how it infuses much of this theory. More than this, however, it is also necessary to show how our perception is altered by a change of conception, and what the implications are for New Church thinking. After all, is this not what it means to plunder the Egyptians?

In that regard, I should perhaps point out one major difficulty which has been created by the marker stones Kant referred to. Why should an approach suggested by Swedenborg be relevant to a theory about which he could not possibly have known anything? Furthermore, why should it even be regarded as a problem, since the theory of relativity is by and large considered to be pretty well established as a description of reality?

The answer is not difficult to find if one accepts the dual nature of reason, and that it has a component that fixes its attention in quite another direction. Nonetheless, it must begin with the physical and there could not be anything more physical in the popular imagination than the theory of relativity, complete with its apparent paradoxes. But more importantly, the New Church is founded upon just these roots, so that in a sense it is actually a responsibility within the church to direct its attention to these matters. It has the arsenal of ideas which Swedenborg provided, and quite frankly, it is time that we rolled up our sleeves and got our hands dirty

precisely because every effort has been made to prevent this kind of venture. Let us remind ourselves of Swedenborg's own awareness of this very exclusion as he experienced it:

[they] forbid and prevent the philosopher from approaching their altars and hearths, being desirous that penetration shall go no further than is allowed by the testimony and arbitrament, as it were, of the senses. (*Psych. Trans.* p. 25)

From the opening remarks to this point, the intention has been to move closer to the point where it becomes necessary to move away from the general philosophical statement to actual problems that reflect the limitation imposed by Kant's marker stones. To recap, all thought had been removed from the summit of the high mountain, and has had every spiritual element stripped out of it, every effort bent to the service of demonstrating the exclusively materialistic origins of everything. At this point, you could be forgiven for thinking that these last words, apart from summarising the position, were merely an attempt to convict by metaphor in order to demonstrate the three hundred years of stypicism our knowledge has undergone. In actual fact, they are a paraphrase of a statement made by an influential thinker of the twentieth century. Here is his original statement:

Why is it necessary to drag down from the Olympian fields of Plato the fundamental ideas of thought in natural science, and to attempt to reveal their earthly lineage? Answer: In order to free these ideas from the taboo attached to them, and thus to achieve greater freedom in the formation of ideas and concepts.²⁸

²⁸ Einstein, Albert. *Relativity, The Special and the General Theory*. (Random House, 1961), 142.

One might imagine that these are the words of a philosopher. To some extent that is correct, since this particular thinker is just as well-known for his philosophical thoughts as for his scientific achievements. They are, in fact, the words of Albert Einstein, reiterating the Kantian position but in a more up-to-date setting with which we are more familiar. Not only that, but they appear in his own book entitled *Relativity*, and therefore represent the thinking inherently contained in his ideas on the subject.

This theory must therefore be seen as a challenge to us, for if the position of the New Church that these ideas represent is to have any currency, then they are to test themselves in real application in the actual ideas of our times.

Just recently, I was approached by a minister of the New Church, David Lomax, who informed me that his grandfather had also been interested in this theory, and that in fact, a New Church magazine had published a critique of relativity in three editions in the 1970s. That in itself was a surprise, since in the popular imagination it may not seem to be the appropriate place to have published such criticisms. Perhaps there is something to learn here, that the Swedenborg movement in general is precisely the right body to publish such material, and that it actually did so more than thirty years ago. This, then, is the starting point.

III THE FOURTH OPTION

(A number of ways are currently employed to try to resolve the problems that are inherently present in quantum gravity. Reference is made to the quantization of the gravitational field, or developments in different forms of string theory, such as loop quantum gravity. These need not concern us. What if the fact of the existence of a problem was pointing towards something very simple in the core of our concepts and our ways of thinking—this is the option being pursued here and which is why it is referred to as the fourth option.)

Before moving towards the theory of relativity, it should be emphasised that the basis for a critique will be that the assumption of the principle of inertia acts to restrict our perception of reality, and that its precedence in

thought as a founding principle for science rigs any conclusions in its favour, since it actually defines what science is, and for which it acts as a synthetic statement. But this does not mean that the principle itself will be discussed in any great length, for the question is not one concerned with its explanatory ability. After all, what passes for an explanation is already determined by the principle. The problem is less a question concerning its ability to explain, but rather it is an attempt at searching out its status as a description of reality to which it corresponds, which in turn raises questions about its scope, its direction, what constitutes its boundaries, (Kant's marker stones) and what needs to be done to see beyond them.

The attitude of realism that exemplifies scientific thought is one that assumes that what is knowable and what is known is independent of the knower. In this form, we find the generally accepted definition of objective knowledge, in that it is established via a means that is indifferent to our participation in the act of knowing to make it knowledge. Science itself is defined by the Latin verb "scire" which means to know facts, while the other form of knowing "cognoscere" (to know emotively) has no warrant of realism attached to it. Stated baldly, we could all be dead tomorrow, and yet the principle of inertia would still be true.

But there is an intended irony in that last statement—the principle of inertia is perfectly suited to such an objective view since the correspondence for both is a dead, unknowing state. Yet binding these two together, the preferred state of mind with a principle to reflect it, it cannot go unnoticed that what is defined by this is a cadaver. A corpse by definition cannot move itself, pick itself up or be prone to inclinations that steer its course, and it is precisely this that is laid over experience and through which it is subsequently filtered. That filtration process removes any notions of volition, desire or spirit for these cannot be part of the program of realism.

Note that the criticism is philosophical, and bear in mind also that it has already been stated that the critical spirit has been wrested from philosophy and attached to science. This has had the effect of making what is philosophically weak into something that is scientifically strong. The point is that the principle of inertia is a strong idea from the perspective of science, but a weak idea from the point of view of a philosophy endeavouring to rediscover its critical spirit. So it should be considered that any

critique always reflects backwards. No endeavour is ever an isolated, one-way street; the question certainly concerns inertia, but it also concerns the state of the mind producing it.

As with any idea, there is a need to create a dual form, much like the subject/object pattern, from which a detail draws its meaning from a generality. As a result, the principle of inertia provides a context from which particulars draw their meaning, in this case inert things, and these in turn are represented by letters or numbers which connect them to the context. Having reduced reality to the inert state, they are then made to appear to be alive, and the terms of expression of that appearance are then applied ad hoc to just about everything that exists, including ourselves. That is to say, a secondary programme comes into existence to establish a vocabulary with definite meanings that continue the extension of the inertia programme. The growth of a system built on such a premise reflects itself in every term of operation that emerges from it. From the principle of inertia come the laws of motion, and these in turn require a vocabulary of strict meanings, words that represent the first layer of application which are drawn from the principle. Mass, time, force, energy, space etc. are the key words that emerge from it, and in every case they rely upon inertia to give them meaning. These become the terms of the contextualisation programme as the inert thing begins its life in the inertial system.

But let us remind ourselves of Swedenborg's attitude to this:

In the animal kingdom there is nothing that corresponds to the force of inertia except sluggishness; otherwise it would be torpor, cold or death; but the subject here is correspondence with the living animal . . . for in things divine there is nothing corresponding to sluggishness, inertia . . . inaction; for properties that pertain rather to death are not predicable of pure and veriest life. (*Psych. Trans.* p. 166)

His objection is clear; it is not that inertia is wrong, but that it closes down correspondences, and since these are the source of any link with the divine, then it is plain that we also must express our opposition to it for the same reason. So when we consider Kant's objection to Swedenborg, we can now see that it has less to do with his spiritual claims and a great deal

more to do with his opposition to inertia, which was Kant's starting-point.

It is that self-same starting point that is the subject here, but in a more modern context. Here, the concern is the theory of relativity generally, but what we should be mindful of is that whether we are talking about the past or the present, both share the intention of nullifying correspondences, and more importantly raising the status of the singular mind insisting on its downward-tending way of seeing. This would be a good point at which to place Kant's and Einstein's statements side by side and see clearly the motivation that is driven by inertia, their shared starting points:

Kant: Before we were wandering like Democritus in empty space, where the butterfly-wings of metaphysics had lifted us, and conversing with spirit forms. Now that the styptic power of self-knowledge has folded these silken wings, we see ourselves back on the low ground of experience and common sense, happy if we regard it as our assigned place from which we may never depart with impunity and which contains everything that can satisfy us, so long as we stay with what is useful.²⁹

Einstein: Why is it necessary to drag down from the Olympian fields of Plato the fundamental ideas of thought in natural science, and to attempt to reveal their earthly lineage? Answer: In order to free these ideas from the taboo attached to them, and thus to achieve greater freedom in the formation of ideas and concepts.³⁰

We can see from this juxtaposition that the key influence of inertia as a principle of being is one that appears to be intellectually exhilarating, one in which the mind finds itself free to create whatever ideas are deemed necessary to reflect the sense of freedom such perception appears to afford it. This it is perfectly entitled to do. At the same time, while this entitlement is built into the very idea of freedom that is central to a New Church perspective, it is also clear that the view that gives precedence to an "earthly lineage" also represents an inversion of order. We should keep in

²⁹ Kant on Swedenborg. *Dreams of a Spirit-Seer and Other Writings*. (Translated by Gregory R. Johnson and Glenn Alexander Mageer. Swedenborg Foundation Publishers, 2002), 57.

³⁰ Einstein, Albert. *Relativity, The Special and the General Theory*. (Random House, 1961), 142.

mind that the use of this word “appearance” and “appears” has a specialised use in Swedenborg’s vocabulary and always refers to the effects of eating the fruit of the tree of knowledge rather than illusion in itself. It is a reality that restricts itself to a purely sensory awareness. This is built into this whole notion of “inversion of order” which subsequently ensues, in that what is seen upside down is taken to be the right way up. This in turn throws another layer of meaning into the notions of truth and falsity. It is no longer enough to define them in terms of what is right or wrong, by whatever definitions we might adopt, since these meanings are already determined implicitly by the point of view which is inverted. However, we should note that purely sensory awareness brings with it its own sense of expansiveness, for this is implied by the Serpent’s statement to Eve that we would be like Gods in becoming so enamoured. The operative word here is “like,” for it equates our acquisitive nature to that of the Divine itself. Furthermore, Eve herself is not so much representative of the feminine but of that very tendency of acquisitiveness that Swedenborg calls the proprium. Consequently, there is a sense in which what is true is that which has the appearance of expansiveness in thought alone, while what is false is that which restricts it. So with regard to these words “true” and “false,” we should develop the habit of thought in seeing them as representative of expansion and restriction with regard to the actual state of mind. Swedenborg often comments that even in the deepest layers of the eternal, angels themselves have barely begun to scratch the surface of wisdom, and that learning is an ever-increasing, ever-expanding process.

Inversion

When an idea has reached its limit of application, that idea can be thought of as restricted in its usefulness to the parameters of the system it applies to. At such a point, one either rests satisfied with the system, or the ideas are discarded or modified in order to expand its scope. This, however, is hardly ever an option. What tends to happen is very much like a deferent being added to an epicyclical structure in order to rescue the system, and preserve the ideas. This demonstrates in part why it is so important that the critical faculty be restored to philosophy in order to

allow that area of thought free rein to measure the degree in which ideas have become restricted (i.e. false), and also to suggest how they can be made more expansive (true). Consequently, we can see how the words, the “styptic self-empowerment of knowledge” relates to an overwhelming sense of expansiveness that inertia provided to the proprium (which, as just stated, mirrors it), and which it is only capable of doing by denying any other propensity within ourselves whose direction of perception is not so ground-based. By the denial of relevance to the latter’s way of seeing, what can be said immediately is that order has been inverted, and that our perception of reality is turned upside down.

This is a key idea in Swedenborg’s thought. Its repercussions in terms of biblical exegesis are well known; good is taken for evil, and evil for good. Crucifixion was reserved for the evil, and so from the inverted view of the Jewish perspective, Christ was evil. Yet from a New Church Christian perspective, Christ is the archetypal prophet, reflecting the world’s form in the mirror of Himself, in which by his crucifixion, He shows just how much the order of things had become inverted. The use of this image is deliberate, for it reflects the same inversion of order that abounds today. The spirit of the Egypt of Moses is with us again. Furthermore, it reflects the basis and the key with which to approach relativity.

But one should not imagine that the questions being raised here are alien to modern science, nor that practising scientists are somehow duped by their own thinking. There is a sense in which the questions posed in a New Church form find a counterpoint in certain anxieties amongst scientists who are aware of the philosophical difficulties their work presents to them, especially in areas that are called “cutting edge.” Consider, for instance, the view that there exists no counterpart of an inertial state that actually satisfies the conditions of a force-free environment anywhere in the universe. It follows that the words that are derived from this conception will also suffer a similar lack of connection. But what generally happens, since this is a largely philosophical perspective, is that this does not prevent such concepts from having a use since they are effectively operational concepts. Nonetheless, it is a matter of some disquiet for science to feel that the terms they use have only a limited correspondence with the reality they purport to describe.

What science is actually saying

As recently as the end of the 20th century, a paper written jointly by Professors Jeremy Butterfield and Chris Isham of Imperial College entitled “Spacetime and the Philosophical Challenge of Quantum Gravity” made the following assertion:

. . . philosophers of physics do in fact tend to endorse realist accounts of reference and truth. We suspect that the main cause of this is the powerful psychological tendency to take there to be real physical objects, corresponding to their properties and relations to the mathematical objects in mathematical models, especially when those models are very successful . . . The main example of this psychological urge will be the tendency to reify spacetime points . . .³¹

The problems they are dealing with in this paper are concerned with the relations between the very large and the very small, a problem that is proving extremely difficult to resolve. They discuss some of the directions taken to resolve these issues, and these are generally associated with string theory, which need not concern us here. What is of interest, however, is the suspicion that concepts that are largely operational are being treated as correspondential. This is the meaning of reification—the making into a real thing of an idea that is purely abstract. This was a point that was discussed at more length in “Footnotes,” and to save time I would suggest that a familiarity with it could be of some help here. It essentially makes the case that, with the demise of philosophy which always maintained a sceptical stance in order to prevent the rational mind being allured by its own creations, there is nothing to prevent this kind of intellectual enticement from occurring, and it is this that Professors Isham and Butterfield are pointing out. Nor are they the first to do this. In the early 1980s, Professor Roger S. Jones wrote a book aptly entitled *Physics as Metaphor* in which he also pointed out the circularity of many scientific concepts that never actually touch base with the things they purport to describe. From a

³¹ *Physics meets Philosophy at the Plank Scale*. (Editors: Callenden and Hugget. Cambridge University Press, 2001), 33–89.

philosophical perspective, this is bound to be the case for obvious reasons, but as stated, it is no longer obvious since that which existed to prevent this kind of rational collapse into objective physicalism has long disappeared with the ascent of such Kantian perspectives. Indeed, the philosopher Alfred North Whitehead warned of this tendency of taking the partial views of such ideas as the whole view and called it the fallacy of misplaced concreteness. This was early in the twentieth century, and this too has been largely ignored. As a result, the reality now is that the psychological urge described by Professors Isham and Butterfield have no restraints placed upon their excesses.

To their credit, Isham and Butterfield do suggest a way out, and apart from the lines of enquiry concerned with string theory, they also propose a fourth option in their paper which is the source of the title for this section:

Start ab initio with a radically new theory. The idea here is that both classical general relativity and standard quantum theory emerge from a theory that looks very different from both. Such a theory would indeed be radically new...very little is known about potential schemes of this type, let alone whether it is necessary to adopt such an iconoclastic position in order to solve the problem of quantum gravity . . . For the moment, we want just to emphasise the philosophical interest of this type of approach. For it is often motivated by the view that the basic ideas behind general relativity and quantum theory are so fundamentally incompatible that any complete reconciliation will necessitate a total rethinking of the central categories of space, time and matter. And as mentioned . . . we like to think that philosophy could have a role in that enterprise.³²

There is much in this passage that is intuitively expansive (i.e. true). Yes, it is necessary to start again from scratch, and yes it is necessary to take an iconoclastic position here, not so much to solve the problem of quantum gravity but to release the rational mind from the grip of inertia. To this end, it is necessary to actually totally rethink the central categories of space, time, and matter. And yet, as daunting as such a radical rethink

³² *Ibid.*, 33–89.

may appear to be, what simplifies the whole process is the fact that current concepts are unnecessarily complicated because they are burdened with ideas that have long since past their use by date.

The problem, however, is that while this may be a viable fourth option, unfortunately this will not be taken up by the scientific community since, as Professor Isham informed me at the turn of the century, he could not interest his peers in pursuing this direction.

Even so, this does not mean that the problems have gone away. In more recent times, and to bring it right up to date, Professor Lee Smolin wrote a book entitled *The Problem with Physics*. When published in paperback, the title appeared written upside down on the cover. Whether intentional or not, this is enough in itself to suggest the inverted order that has brought us to the current impasse that requires this fourth option. Professor Smolin analyses the main ideas that have been in the forefront of science for at least the last thirty years. His conclusions are not well received by the scientific community for they pose very difficult questions concerning the whole scientific enterprise. Nothing new has been discovered in any sense that can be called scientific in the last thirty years, and this is a problem. Despite the research programmes and the inordinate levels of investment, the results have been less than conclusive. After a detailed analysis of the main ideas in the forefront of physics, he concludes:

Whatever else one says about string theory, loop quantum gravity, and other approaches, they have not delivered on that front. The standard excuse has been that experiments on this scale are impossible to perform—but, as we've seen, such is not the case. So there must be another reason. I believe there is something basic we are all missing, some wrong assumption we are all making. If this is so, then we need to isolate the wrong assumption and replace it with a new idea.³³

This is precisely the point that is being made here. The wrong assumption (i.e. the restricted view) is the principle of inertia. What it is to be replaced

³³Smolin, Lee. *The Trouble With Physics*. (Allen Lane, an imprint of Penguin Books, 2007), 256.

with is a question that is premature at this stage, since it is necessary in the first place to strip out the inertial view, and only then to consider the situation anew. Even so, I believe that Smolin's intuition on this is entirely correct, since he then goes on to actually pinpoint the problem in more detail:

What could that wrong assumption be? My guess is that it involves two things: the foundations of quantum mechanics and the nature of time. We have already discussed the first; I find it hopeful that new ideas about quantum mechanics have been proposed recently, motivated by studies of quantum gravity. But I strongly suspect that the key is time. More and more, I have the feeling that quantum theory and general relativity are both deeply wrong about the nature of time. It is not enough to combine them. There is a deeper problem, perhaps going back to the origin of physics.³⁴

It is remarkable to think that what Smolin is suggesting here is something that goes totally against the grain of scientific thinking and closely borders on heresy with regard to the general scientific view. Recall the suspicion in Isham and Butterfield's paper that spacetime points may be no more than reifications. Here, in the view of another leading scientific thinker, is the self-same point restated in more detail:

Around the beginning of the seventeenth century, Descartes and Galileo both made a most wonderful discovery: You could draw a graph, with one axis being space and the other time. In this way, time is represented as if it were another dimension of space. Motion is frozen, and a whole history of constant motion and change is presented to us as something static and unchanging. If I had to guess (and guessing is what I do for a living), this is the scene of the crime.

We have to find a way to *unfreeze time*—to represent time without turning it into space. I have no idea how to do this. I can't conceive of a mathematics that doesn't represent a world as if it were frozen in eternity.

³⁴Ibid., 256.

It's terribly hard to represent time, and that's why there's a good chance that this representation is the missing piece.³⁵

What, then, is the fourth option? Clearly, it has something to do with time. But in order to do what science is unable to do, we must recognise that what Smolin is saying from our perspective is that the mind-set of science is trapped in a snare of its own making, and is constrained by its own assumptions.

There are two reasons why these views from Isham, Butterfield, and Smolin have been presented here. Firstly, it is to dispel the notion that science is an enemy. In an age of dogmatism, being critical of science is somehow seen as being anti-scientific. Yet the problems within science may well be the result of its own evolved dogmatism by assuming that string theory is the only game in town, something that many in the scientific community find abhorrent and against the whole spirit of true critical thinking. But more importantly, while the views being presented here can in no way be called scientific, they are nonetheless foreseen as necessary by science itself. Secondly, these calls for a new direction from within science itself help a great deal in softening up the apparent impenetrability of science, and reveal that it is possessed of difficulties requiring a radical rethink. Clearly the problems they bring to light cannot be resolved from within the traditional boundaries of science since the kinds of terms and concepts necessary for such an enterprise are not a part of its conceptual tool-box.

One can put it another way. One should see the last statement by Lee Smolin as a cry for help: "I have no idea how to do this." But New Church thinking is not constrained by the assumptions of science. In fact, it operates precisely because its views of the natural world do not begin with inertia. Consequently, it is armed with the ability to explore this fourth option because it does have an idea how it can be done.

Special relativity

It should be emphasised that the special theory of relativity begins by taking a philosophical position, which means that it questions the existing

³⁵ *Ibid.*, 256.

concepts of its day. This is its strength, for it is the philosophical position to seek out weaknesses and to look for ways of expanding parameters. Notice, therefore, Einstein's use of the word "limited," and how it parallels the sense of "truth and falsity" as "restricted and expanded":

For the present we shall assume the "truth" of the geometrical propositions, then at a later stage . . . we shall see that this "truth" is limited, and we shall consider the extent of its limitations.³⁶

While this enterprise was clearly an advance on what went before it, we should keep in mind that the aim here is not to consider relativity in its traditional scientific form, but to consider how it reflects on the attitude of an "earthly lineage," and how this in itself is the restricted view. In other words, the aim is to look at this theory from an entirely different perspective in which the means of perception is not restricted by the "earthly" view.

This is not as difficult as it seems, and depends entirely upon the confidence with which one carries the notion that in the absence of an acknowledgement that we are born with an ability to perceive in two directions simultaneously, then what we see will be an inverted image. Where science begins with inertia, so also we must begin from the assumption of inversion, and from the hypothesis that the picture of reality that is presented by relativity theory is one that is upside down. Even so, this should not take away from the point that Einstein's achievement was a direct result of philosophical thinking; he more or less takes the traditional stand of a philosopher in which he recognises that the use of the word "true" is one that had arisen from constant practice of certain ideas, when in fact it would have been more appropriate to use the word "valid," in that the apparent truth of the ideas was not much more than logical consistency. This awareness in itself helps to free up the mind to explore other directions.

This is in part the attitude of mind that needs to be fostered here. Much of what we consider as possessed of some kind of truth content is determined by constant usage in which validity is taken for truth. After a

³⁶ Einstein, Albert. *Relativity, The Special and the General Theory*. (Random House 1961), 4.

time, it becomes so ingrained that it passes for common sense, so that it becomes incomprehensible to picture what it means to say that our view of reality is inverted. How so? Surely it is as plain as the nose on one's face that what we see, we see. How does this apply to the special theory of relativity in any case? We may fool ourselves, but our measurements do not lie, and they tell us exactly what this theory predicted. Can it be so wrong, even if one takes that wrongness to mean restricted?

These are not trivial objections, so one must begin by saying something about the special theory of relativity. It is a theory concerned with the relativity of motion in the sense understood by Galileo and which is formally contained in Newton's laws of motion, and secondly, it is concerned with the speed of light and how the latter impinges upon the former. These are its two areas of concern: relative motion and the speed of light. Since this is crucial to what follows, let this be said again: relativity begins by setting the scene with an analysis of relative motion, and then it incorporates the speed of light. This is the order in which relativity deals with its concerns—first motion, and then light. That is really where the problem begins, for the point of view being expressed here is that these two aspects of relativity are dealt with in the wrong order. One might imagine that the order makes little difference, except that it is a case of understanding the latter through the former so that in effect, it is a non-commutative arrangement, to use a term from mathematics. We might be able to add and multiply numbers in any order, but this is not true of subtraction and division. Imagine the word "and" in the phrase "relative motion *and* the speed of light" to be indicative of a division sign. It then follows that the picture that emerges from starting with one and then applying its conclusions to the other would be entirely different if the operation were performed the other way round.

Yet while we are in the habit of thinking of the laws of motion as objective facts about nature, and not reflections of a type of mind, it is quite difficult to begin to reflect on these matters in any other way. While we may be extremely well-versed in the uses of the laws of motion in their application to the world, very little is ever said about the kind of mind that these laws reflect, so perhaps that would be a good place at which to start.

I walk into a room looking for someone wearing a red hat, but everybody is wearing a red hat so I cannot find them. If on the other hand I am

looking for someone with a blue hat, the problem disappears since I would quickly find him. In other words, when there is nothing to notice, then there is no action.

“Nothing noticed” gives the rational mind nothing to do, and so it acts as a default position, one that is perfectly suited, in coining the principle of inertia, as expressing something of its own nature. The principle of inertia then projects outwards from its own natural state in reason, and interprets all that it sees in terms suited to that way of seeing. That is to say, the laws of motion which issue from it follow much like any logical development. In a default position, there is nothing to notice. But when a change occurs, reason at that point leaps into action, as something presents itself as a change of state. However, in order to make that interpretation, it must develop a concept system that is derived from the principle of inertia as its founding principle. What this means effectively is that every concept that then issues forth carries within itself its own founding principle. It makes the assertion that whatever has caused the change from the principle state was not effected by the thing changed but by an external agency that is not the thing itself. The name given to this agency is ‘force’, defining the agent of change as a “cause.” The “thing in itself” however, is deemed inert.

This is a cumbersome way of doing business, so that one already sees the process of reduction working even further still by referring to that force as “f,” and the entity acted upon as a “mass” which further becomes “m.” That is to say that all of reality then becomes subject to the way of perceiving known as mathematics. In due time, and in the light of success, the same mind then begins to speculate that the “true” language of the universe is mathematics. In this way, an abstracted world becomes a concrete world, and when the terms of reference enter the common vocabulary, it then becomes extremely difficult to speak of reality in any other way, least of all to speak of it in terms of correspondence, and that is precisely the point that Swedenborg is making when he asserts that there can be no correspondence with the principle of inertia.

To save time, and to put it briefly, the scientific view that we have is designed to be entirely non-correspondential, and as far as we are concerned, that is the key point. It reflects a form of reason that has its own quiescence as a default position, from which it is only shaken awake by

something external to itself. When this occurs, questions arise that are equivalent to saying "What has awakened me?"

To answer this question "What has awakened me?" the default position of inertia provides the terms of reference that will determine the appropriate answer. Consequently, there is a backwards and forwards flow of information between the principle and experience, and with each movement there is no escaping the parameters of operation. It should be noticed therefore that far from being a reductive process, science appears to be bridging a gap between synthesis and analysis. Yet because the principle of inertia is the principle towards which all analysis is steered, to reflect the preferred mind-state, what passes for an explanation is one that returns the mind to its state of quiescence which can be termed the limit of its satisfaction, and which was earlier defined by Kant as the marker stones of thought. Swedenborg has interesting things to say on this, but it may be more appropriate to return to this at a later time when the current analysis of relativity has reached its own conclusions. But for now, it is enough to show how the principle of inertia reflects the mind-state that produced it.

Inertia and unification

Now because of the success in application of these operational concepts, it soon became apparent that advances were being made as a result of many things gathering beneath a single idea that could categorise them. Of these, and with regard to inertia, it was clear that the state of rest and uniform motion were equivalent in meaning, so that where two states had previously existed, now there would be only the one state. This was a pattern that was seen to repeat itself over time until, in reaching the modern era, four basic forces were identified of which all other forces fell into one category or another, and the modern aim became one determined to discover the singular unifying force from which these four were derived. This way of thinking quite naturally emerges from an inertia principle, in which it acts as the synthesising idea. Yet because this principle is essentially static in nature, that very stasis prevents the seeing of a quite different series of patterns in which what is interpreted as essentialism is

seen as a duality in which the essentialism plays a less prominent role initially. As a result, both this unifying view as well as inertia represents the two sticking points that need to be addressed at some point. After all, it is exactly these two principles that we have become entrenched in, and it is these two that largely represent the inverted view that a different perspective will see differently.

So now, when we look at the theory of special relativity, we find in the opening remarks on relative motion an adherence to the principle of inertia in that it quite correctly assumes that there is no single point that acts as a benchmark for any motion which can be regarded as a fixed point. It is this that led to the idea that a falling stone describes a straight line to someone dropping it on a train, but that it describes a parabola to someone on an embankment. By a suitable choice of translatory co-ordinates, they could both be regarded in equivalent terms. In this way, the inertial reference frame dominates as a central tenet. The key point then becomes the addition of velocities, that a person walking up the corridor of a train is moving at the speed of the train plus their walking speed, but only experienced as walking speed by the walker to whom the train is not moving, relatively speaking.

However, what happens when the means of observing all this is taken into consideration is that light itself then becomes described in exactly the same terms of reference as those describing relative motions. A beam of light passes between two points, and is thought of initially in exactly the same terms that describe a train moving between stations, over a given period. By dividing the distance travelled by the time taken, it is found to be moving at 300,000 kilometres a second. In other words, the method used is the one that was specifically designed and suited to relative motions, concepts it should be remembered that are enthused with inertia. It is in this way that light is deemed to have a characteristic speed. (Keep in mind that the laws of motion and the principle of inertia from which they emerged were suited to describing relatively low speeds.) Furthermore, as a result of observations of double stars by De Sitter, and of experiments carried out by Michelson-Morley, it was found to be moving at a speed that was unaffected by its source. It is this property that leads to some of the strange and wonderful effects that are characteristics of relativity. Without looking at these in detail and for the purposes of this paper, there

are two that come to mind: 1) Any moving thing slows in time and 2) increases in mass.

I began by saying that relative motion and the speed of light are treated in an order that is non-commutative. What this means is that in the order presented, the concepts that spring from an inertial view are inevitably the same concepts that are applied to light itself. It is this that is the source of the difficulty and which is at the heart of a contradiction. As far as I know, this contradiction was first cited in a New Church journal published by the General Conference of the New Church in London in 1974, and called simply "The New Church Magazine." In edition number 667 from volume 93, Herbert Dingle, Professor Emeritus of the history and philosophy of science in the University of London makes some interesting observations about relativity which are quite correct, although probably for the wrong reasons. Those observations appeared in his book called *Science at the Crossroads*, and this book is the subject of lengthy comments in this magazine by Alfred Heron. This is the key criticism that Heron identifies in his own words:

1. According to the postulate of relativity, if two bodies (for example, two identical clocks) separate and re-unite, there is no observable phenomenon that will show in an absolute sense that one rather than the other has moved. 2. If on reunion one clock were retarded by a quantity depending on their relative motion, and the other not, that phenomenon would show that the first had moved and not the second. 3. Hence, if the postulate of relativity is true, the clocks must be retarded equally or not at all; in either case, their readings will agree on re-union if they agreed at separation.³⁷

Of course, they do not, so one can put the case this way. Relative motions only hold where the speed of light is not a consideration, and do not hold where they are. Consequently, he argues a case for me without knowing it. What he is inferring is that the incorporation of light in the calculation of relative motions reveals the restricted range of the principle of inertia. Should we be surprised? Not at all. The idea of inertia was not

³⁷ *New Church Magazine*. "Can Two Clocks Run More Slowly than Each Other?" (General Conference of the New Church, 1970).

conceived originally for this purpose. From my point of view, it shows how the concepts of space and time, enthused with inertia, are unsuited for perceptions that involve light. (If I might add as a preparatory remark, the same also applies to spacetime, for the problem does not go away by reconfiguring the same concepts, as I will argue later.) But ultimately, such a contradiction points towards a way of seeing that requires us to dispense with the inertial view as fundamental. Needless to say, neither Einstein nor any scientist for that matter is able to do this because their thinking itself is defined by the inertia principle. But then again, this is no real criticism. It is the business of philosophy to question assumptions, but it is not the business of scientists to do so since they are actually immersed in the work of applying concepts they find ready-made. Furthermore, the contradiction does not have any effect on that working practice, so it does not even arise as a problem for science. Yet it is a fundamental problem and points towards a need to re-invigorate philosophy where such issues can be resolved. I might add again (for it cannot be over-emphasised) that science has a strictly earthly heritage, and therefore cannot look at reality in any other way.

What is motion?

Professor Dingle also raises another issue which, while a little confused in its logic, nonetheless has a strong bearing on what is to follow. Alfred Heron comments on it as follows:

There is no doubt that Einstein declared the hypothesis of a lumeniferous ether to be superfluous as his theory did not require an 'absolutely stationary empty space' in which electromagnetic processes take place. This was, says Professor Dingle, a direct contradiction of Maxwell's and Lorentz's basic axiom, that there does exist an ether, with respect to which the velocity of light has a definite, and in principle measurable value . . . What Einstein was proposing, therefore, was to retain the definite velocity of light without the existence of any standard with respect to which that velocity had a meaning.³⁸

³⁸ Ibid.

It may seem outmoded that Professor Dingle should be defending the notion of an ether so late in the day, and to some extent this was because Swedenborg refers to it, although what it meant in his time was entirely different to the technical notion developed during the nineteenth century. Even so, it should be noted that while motion is something that can be determined with reference to an inertial reference frame, Dingle raises the issue that light does not have such a reference frame in the absence of an ether. So what does it mean to say that light is moving at all? Indeed, what does it mean to say that anything at all is moving? That, too, is an issue.

This is hardly the end of the matter, but I think that this is enough to point towards the need for a different order of seeing. I have to say at the outset that to do this, it should be realised that it is necessary to develop a different vocabulary reflecting a different concept structure, one that is freed from the strictures of inertia. In a way, this is all that is required. But what would an inertia free zone of thought look like?

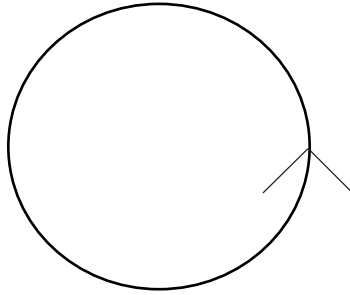
In order to do this, it should be repeated that there is not a single philosopher in the history of the subject who has not pointed out that the questioning of assumptions is in many ways a case of raising issues about what is to most people both common sense and obvious. It becomes a target of ridicule and the performance of this work is entirely thankless. To challenge what we know (or assume we know) is often to challenge that upon which whole eras have been built and which are cherished as hard won from older dogmas, without often realising that those same ways of knowing have led to their own dogmas. Philosophy, in other words, does not make friends, and the changes it suggests are nearly always unwelcome.

To introduce a different idea or ideas requires a great deal of preparation, and also a lot of practice in "undoing." We do not have to be intimately aware of the assumptions of a system to become familiar with the concepts that ensue from them. Nobody talks about the principle of inertia in their everyday language, but everyone uses the words "force," "energy," "time," "space," "mass" etc as if they are fully understood. Indeed, if we look at Heidegger's *Being and Time*, we find that he makes exactly the same point about "being," that everybody uses the verb 'to be' in everyday discourse without ever asking what it means. But it is that very familiarity that makes it so difficult to introduce something different.

The mention of Heidegger is deliberate, for it means that it will be necessary to adopt unfamiliar meanings, especially with regard to “being,” since part of the problem concerns the cavalier manner in which “being” itself is understood in purely existential terms that can see no further than the limits imposed by sensory concerns.

The preceding pages have attempted to prepare the ground in order to show that there is a real task before us. In order to pursue it, I suggest playing a game of sorts. Imagine that we do not have any scientific concepts. This would leave a gap, and we would soon find it necessary to produce some kind of structured thought to rationalise experience. We encounter the world, and feel the need to order the experience of that encounter, but how? The concepts of space and time are gone, and so has inertia. These are no longer available to us as fundamental concepts, but use can be made of them as operational concepts in order to perform a kind of translation. This means that the ideas presented can only be speculative in the first instance, even metaphysical in its traditional sense, but which may have some bearing on experience. There are therefore two quite distinct elements to this. Firstly, suggest specific ideas and give them a formal expression that is mathematics-free, and secondly, set them against the special theory of relativity to see how they compare. I should also add that for readers who may not be familiar with what appear to be purely philosophical concerns, that there may be a difficulty in following the reasoning that appears to be purely linguistic. However, it is not necessary to take it on board at this instance, and one could skip to the later section that begins to deal with an actual difference of view between traditional special relativity and the form that becomes modified as a result of these speculative explorations.

Rotational and static existence



I imagine a circle with an arrow on its perimeter. This represents rotation. This rotation is occurring to the thing rotating such that its only property is that it is rotating. Therefore, it is called a rotational existent. It is not a rotating thing. This seems to suggest that if it stops rotating, it ceases to exist. Not so, for then it ceases to be a rotational existent and becomes static existence. Notice already that we can talk of a *thing* called a rotational existent, but not a *thing* that is static existence. The latter is therefore a state, a state of existence whose property is that it is non-rotational. Consequently, static existence is not non-existence, but rather that it is static existence, i.e. non-rotational. A problem here is that the word “is” is being employed in two different ways. There “is” rotational existence, (meaning existents that rotate) and there “is” static existence (meaning a form of existence that is non-rotational). Therefore, it should be noted that the meaning of “is” is entirely modal, and is determined by the form of existence to which it refers. In other words, its meaning is enfolded in the form of existence. Consequently, there are two kinds of being, rotational and static. An immediate difference with traditional thought along these lines should suggest itself, which is that whatever these two things/states might eventually become, they must nonetheless be tangible and therefore they both exist. Notice, therefore, that this in itself is a third kind of existence associated with the word ‘being’ that has no status in this view, and all that counts are these two modes of existence.

These opening remarks are the beginnings of a chain of reasoning that extends to several more implications, but this is enough for the moment.

So now allow reality to switch on and seep into the game. We might at first imagine that whatever a rotational existent might represent, it is something that exists in a tangible form, and that static existence represents its passing away, or death, or non-existence. But these are old habits of thought kicking in, (based on the assumptions of existence as perceived through inertia) and it is to go down the wrong road. Instead, let the image carry itself towards something that is almost obvious. A circle with an arrow signifying rotation is almost suggestive of a clock. Let that suggestion hold tentatively, but not forcefully. What, then, is static existence? It is a state in which there will be found no clocks, no ticking, no time. Can such a state be found in the experience of reality? The answer is yes it can, for it is the characteristic property of the speed of light.

But here is the problem. I said *speed* of light, when in fact the only thing I can legitimately say is that however I choose to refer to it, I cannot suddenly adopt the traditional language of velocity. That is to invoke the old formula of distance (space) divided by time (clock). This is the reason why I said that a rotational existent is not a clock, but only something that resembles a clock in that it has the appearance of rhythm built into it. But “like” is not “is.” How, therefore, can it be referred to?

Here is the question in the form that has no relation to the rotational/static state: In relation to what is light moving? Answer: in relation to 1) the ether or 2) empty space. But there is no ether. In a sense, therefore, one must side with Einstein. But one must pursue the logic further. With nothing to measure against, it follows that light is unmoving. Since this is so crucial a point, I will emphasise it again. If we surmise that light is unmoving, it follows that it then becomes a benchmark by which to measure other things. Just as inertia represents the mind-frame which perceives nothing-happening as a natural state, so in a reverse order light dons the mantle of a state of nothing-happening as a natural state. Consequently, its apparent motion becomes non-motion because it is the fixed point equivalent of inertia, but in an entirely different order in the perception. It cannot be assumed that rotation and the lack of it refer to motion and the lack of it. After all, why should these remarks reflect an interest in the usual concepts whose function is ultimately to quantify reality? The aims are entirely indifferent to such an enterprise which is adequately achieved by science anyway. That is its function. What needs to be noted is

that a similar state to inertia, i.e. static existence, (a state of nothing happening) by being attached to what is referred to as the speed of light, is beginning to reverse the polarity of the concerns in special relativity which attach the same state to an inertial view prior to any mention of light. Here, light is given the priority before any mention of anything else.

Here we see the importance of re-establishing the critical spirit of philosophy that is so essential to understanding. One can have in mind the image of Descartes who saw that the distant round tower is actually a square building close up, and that is the point. Things taken for granted become distant, and another position must be found to see them differently and to take the old order to task. It is therefore an essential prerequisite that we seek to see things anew, or be forced to continue living in a system of contradictions, held together by a flimsy familiarity that provides no new vision. A re-vision of light (qua static existence) reveals the limits of application of the inertial view. But in so doing we are forced to think about motion itself as something not captured by the notion of change of position with time. What I am suggesting is that in the process of doing this, we actually find ourselves seeking the same thing as Einstein, by freeing ideas from the taboos attached to them. So the question is if this is the motivation, where can such ideas lead? If it is a change in the form of words only, it is a fruitless enquiry. Therefore, the task before us is to find another way of referring to light in such a way that its motion from the inertial perspective turns into something more amenable to the current search.

Cognoscience

This may seem like a cumbersome word, but earlier it was mentioned that science referred to a way of thinking that was limited to the form of knowing captured in the Latin infinitive "scire" which means to know "about" or to know "that." "Cognoscere" refers to a way of knowing akin to knowing people, of a closeness of association. The English language is relatively exceptional for using a single word where other languages have two, like "connaître" and "savoir" in French, or "wissen" and "kennen" in German. Cognoscience is therefore a word that aims to combine these two ways of knowing, and it is in the attempt to do this that an exclusive way

of knowing such as science presents means that in some respects it closely corresponds to what Swedenborg often refers to with respect to certain peoples like the Philistines whose way of knowing was also like this, a faith separated from that emotive heart from which it originally derived. It is mentioned here because it is becoming cumbersome to constantly refer to “this perspective” or “current point of view.” Consequently, it helps to identify the methodology being employed here as something more specific, and for this purpose, it seems to me that the word “cognoscience” fits the bill, since it identifies an aim. So far, for instance, we can say that in the absence of a cognoscientific view, we are left only with a scientific one, and by its separation from any other way of knowing, it inverts how we see, and this it has been able to do by its adherence to inertia which has no place in a “cognoscere” way of knowing.

Relative existents

Static existence is existence without rotation, yet by thinking of any rotational existent, we can easily imagine it increasing or decreasing in rotation. However, as such a rotation slows, what can be said about it? That it is approaching ever closer to the nature of static existence. This gives us a means of perceiving a relation between static existence and rotational existence. The degree of rotation is an expression of a relation existing between the rotational existent and static existence. Consequently, one should put it this way: the rotation of a rotational existent may vary from one existent to another, so for the sake of brevity, any rotational existent can be called a relative existent, in order to distinguish between them, while at the same time equating all as relative existents distinct from static existence. Static existence, by being a different order of existence, nonetheless relates to relative existence in this way—since the rotation of relative existence can vary, the degree of difference from existent to existent is a measure of an approach to static existence. Consequently, there exists an influence between static and relative existence, and this influence is best expressed with the word “participation.”

Participation is an extremely important word, so it is important to emphasise what it means when a relative existent slows in rotation, it begins an approach, by its degree of slowing, towards the nature of static

existence, and it is this approach that is called participation. But in so doing, it reveals a dynamic relation which can only be possible if the two types of existence share an essential relation. In other words, whatever static existence is, it is relative existence in static form, and whatever relative existence is, it is static existence in relative form. Dynamically they are different, but essentially they are the same. This is what was meant earlier by saying that essentialism was a weak perspective on its own. The business end is the dynamic relation between static and relative existence. That is not to say that essentialism is without relevance. The point is to arrive at a point when this does become relevant, and at the moment we are hardly out of the speculative mode.

But is this nothing more than another way of saying something with which we have already a more familiar terminology, and which is already present in the terms of science? Indeed, is there any need to adopt what might appear to be a convoluted way of saying the same thing? After all does it not sound like the equivalence of mass and energy? Besides, is static existence anything more than another way of saying the speed of light? Is relative existence nothing more than a metaphysical way of saying "mass"?

The answer is that it is not the same thing at all, nor can such a translation of terms exhaust the meaning. It is why I have been saying that there is a *resemblance*, but it is a superficial one. In actual fact, a proper translation of terms reveals that it differs from the classical view in some very crucial ways. I began by suggesting that relative existence has a tentative resemblance to time, so that it might appear that a relative existent could be represented by a clock. But now I hope I can show why such translation can only be tentative.

How time is treated in this inertia free zone is entirely different from its current understanding in science. Julian Barbour, in his book *The End of Time*, would rid thought of time altogether, and create a purely no-time zone, which is effectively spatial. In a very restricted sense he may be correct in that, as I said earlier (and why I refer to a "tentative" resemblance) time is not a clock at all, and is not even symbolised by it. Yet we find in light a ready-made no-time zone, and what needs to be removed is not time but motion. That is to say, what is described by motion (change of position with time) is actually in the cognoscientific dispensation de-

scribed as participation (change of state with respect to no-time). Participation therefore is not simply a change of state (such as position with time) but an expression of a relationship between itself as time and that which is no-time. In a different vocabulary, one that appears more familiar, it is a way of seeing a relationship between the temporal and atemporal (that is, the eternal), yet seen in an entirely physical context. (Can one not already hear the beginnings of a different kind of correspondence emerging from just these words?)

In some ways this is already encapsulated in the mathematics of relativity in that change of state, both of time and mass are already expressed when these are calculated using the velocity of a particular mass divided by light speed (v/c). It is with the use of a formula containing this equation that the apparent peculiarities of high velocities reveal the restrictions of a purely Newtonian view. By the application of this formula, we can see that as the velocity of a particular mass approaches light speed, the time for that mass slows down. Put in the new terms of cognoscience, a relative existent, by participating in the nature of static existence, measures the degree of its participation by slowing in rotation. However, Einstein's formula and that interpretation give great emphasis to spatial, not temporal considerations. That in itself is a source of discussion, which will no doubt reappear at some later time. But for the time being, given the unfamiliarity with this way of thinking in purely temporal (and non-temporal) terms alone, perhaps I can be forgiven for repeating myself in order to establish a certain line of thought. I began by saying that a rotational existent is one that rotates essentially, which is to say that it is a thing which rotates. We have a language, and by using words we often get into the habit of thinking that two different words actually represent two entirely different things. "Rotational existent" is just such a phrase. There is a "thing" (possibly a mass) and it exhibits rotation (possibly a clock). But that would be to defer to the inertial view and would be a crude and incorrect association and translation, when in fact it is a means of comparison rather than equivalence. It is clearly the case that we cannot think of rotation without something that is rotating, but we can think of a thing that may or may not be rotating. However, that would be a grave mistake. A rotational existence in the cognoscientific view is an existent

purely because it is rotating. If it ceases to rotate, it is no longer an existent, but passes into static existence. Therefore by slowing in rotation, it is effectively participating. What, then, could participation become in ordinary terms? Answer: it is time, but of an entirely different order to that associated with science. There it is a measuring device, but here it is the essential component of being a real thing.

Rotation is not to be represented by a watch strapped to a wrist. It is the wrist itself, and the body to which it is attached, and the actual fabric of all that lies around it. Everything "is" time. That is why a clock is only a tentative resemblance. It is not what it is doing (measuring time) that is important, but its rotation that is a clue for a correspondential association. In other words, time represents itself in aspectual form, and cannot be represented as a real, separate entity. A clock may be a device for measuring states of change, (measurement being a necessary scientific function and concern), but rotation is representative of change itself, and there is nothing that is not changing. Notice here that the history of philosophy has always been concerned with change, or flux as Heraclitus put it. So note how our own ways of thinking, rooted as they are in inertia, have somehow subverted this subject into seeing change from a position of no-change. What I am proposing is an alternative state of no-change which is not inertia, which gives back to change something of its original character.

But where does this apparently abstract way of thinking lead? After all, it seems as if relativity, by incorporating light in its calculations (although it does not alter its actual inertial conceptual framework) seems to come to conclusions not so different from those I have proposed. Is there any point in pursuing this direction if there is so much agreement?

The answer is that there is actually very little agreement. Is that a surprise? Would one not expect a difference if the starting points are diametrically opposed? So it is vital to look at that disagreement, and look at Einstein's conclusions in his own words:

Let us now consider a seconds-clock which is permanently situated at the origin ($x'=0$) of K' . $t'=0$ and $t'=1$ are two successive ticks of this

clock. The first and fourth equations of the Lorentz transformation give for these two ticks:

$$t=0$$

and

$$t = \frac{1}{\sqrt{1 - v^2/c^2}}$$

As judged from clock K, the clock is moving with the velocity v ; as judged from this reference-body, the time which elapses between two strokes of the clock is not one second, but $\frac{1}{\sqrt{1 - v^2/c^2}}$

$$\sqrt{1 - v^2/c^2}$$

seconds. I.e. a somewhat larger time. As a consequence of its motion the clock goes more slowly than when at rest. Here also the velocity c plays the part of an unattainable limiting velocity.³⁹

Notice two immediate differences: light is seen as moving, and the change is attached to an actual clock. The language is through and through inertia-based. But exactly the same changes are seen to occur to mass when these become Einstein's consideration:

If a body takes up an amount of energy E_0 , then its inertial mass increases by an amount E_0/c^2 ; the inertial mass of a body is not constant, but varies according to the change in the energy of the body.⁴⁰

Consequently, we see that Einstein is dealing with mass quite separately from time, and this is where the difference lies. From the point of view of cognoscience which begins with the nature of light as non-temporal, it emerges (by attempting a translation into familiar terms of a rotational existent) that it is quite impossible to see these two, time and mass, as really separate entities. They are the same thing in two aspects. Any relative existent in a state of participation becomes, in a translated form in

³⁹ Einstein, Albert. *Relativity, The Special and the General Theory*. (Random House 1961), 36.

⁴⁰ *Ibid.*, 47.

familiar language, any moving thing. But the “moving” is not spatial in this conception, and the “thing” is not substantive separately from the “moving.” Time and mass *are* one thing. They both change at exactly the same time and in the same place. The slower rotation means that there is an increase in mass, and the increase in mass means that there is a decrease in time. They are the same thing.

Mass-time versus space-time

So now we arrive at an extremely crucial point. Why was it necessary in the relativistic view to separate time and mass and turn them into quite distinct concepts, as though this word “distinct” related to real and separate qualities? The answer is both simple and complex. In a separated form, and given the predilection in science for a geometric form of perception, it became possible to create an entirely different formula. Here we must remember that the concepts of science are all imbued with the inertia principle. In order to maintain this position, by separating mass and time, it then became possible to fuse together time and space. It is from this fusion that the concept of spacetime and the spacetime continuum emerged, and eventually became a real thing. But what made it possible was nothing more than a habit of thought, drawn towards measurement as though it were the secret of true understanding. It was the means of measurement that then became the real thing, and the real thing turned into an inert state to make it possible. It is, in short, an inversion.

But this is a little too generalised. Looked at more philosophically, the habitual use of the terms “space,” “time” and “mass” (earlier described as operational concepts) creates a sense that they must surely describe real things, when in fact they are largely abstract and mathematised, descriptive of a certain behaviour found in things or states, but treated as though disembodied spirits that were the essence of reality. When thinking of mass, it is rarely the mass of a real existent, but rather a measure of a quantity in reacting to another quantity. Instead of asking “What is time?” which invokes images of clocks and other measuring devices, one should rather be asking “What is it for a thing to be ageing?” The answer to this is that it is to be a relative existent, for that is quite literally how a “relative

existent” translates into familiar words. But notice this also—when asking “What does it mean for a thing to have mass?” the answer is surely becoming clear; it is to be aware of being a thing that is ageing. Taking this one stage further, it is to say that time and mass, in a cognoscientific perspective, are actually indistinguishable, for it is impossible to speak of anything that we can think of as substantive that is not at the same time temporal.

But one should not imagine that this is a new view. Rather, it is a perspective on reality that sees itself differently when it removes the spectacles and filters of a three hundred year old way of seeing, and instead of becoming blind as we are led to believe, we see something disfigured and indistinct because we do not have the means to recognise it distinctly, and are sorely tempted to reach for our old glasses. Yet a different way of seeing has always been there. For instance, in 1926, Oswald Spengler wrote the following in *The Decline of the West*, words that capture concisely the spirit of what is being presented here:

For primitive man time can have no meaning. All of us are conscious as being ‘aware’ of space only, and not of time. Time is a discovery which is only made by thinking. We create it as an idea and do not begin till much late to suspect that *we* ourselves are Time, inasmuch as we live. What one actually feels at the sound of this word ‘time,’ which is clearer in music than in language, has an organic essence as it is bound up with the living and the irreversible. Only the higher Cultures, whose ideas have reached the stage of a mechanical Nature, are capable of deriving from the idea of a measurable and comprehensible spatial, a projected image of time, the phantom time, which satisfies their need of measuring and explaining all things. What is merely thought, not felt and experienced, necessarily takes a spatial form and this explains why no systematic philosopher has been able to make anything of the mystery-clouded, far-echoing, sound symbols ‘Past’ and ‘Future’. The invention of a time that is knowable and spatially representable within causality is really wizard’s gear whereby our personal soul attempts to conjure alien powers. Goethe speaks of ‘the principle of reasonable order that we bear within ourselves, and would impress as the seal of our powers upon everything that we touch...It is

easy enough to come to a scientific understanding about space...treatment of time on the same lines breaks down utterly.⁴¹

The relevant point here is that not only do we find the re-attachment of time to matter, but that the reverse of this, its separation in our cultural atmosphere, is largely due to the separation of thought from the felt or experienced state. It has the capacity to create an artificial time (i.e. clock time) about which it then becomes possible to speculate concerning its mode of existence as a separate, real thing, but which cannot possibly correspond to natural time which is felt and experienced. This is a further reason why the term “cognoscience” is an appropriate context for mass-time, since it is the cognitive element of knowing that actually touches on the felt state, and for which mass-time is a far more natural way of speaking and thinking since it is inclusive of more than the notion of a time that exists purely for measuring purposes. At that point which Spengler recognises as “much later,” when there is a realisation that we ourselves *are* time (and not only “we” but everything else) and that this is a fundamental characteristic of being, it is at that point that artificial time breaks down, and inertia-based thought made superfluous. It is true that we measure, but we are not born as measuring tapes.

Nonetheless, there is a problem to overcome here before the notions of cognoscience can properly become part of the fabric of our ways of perceiving reality more comprehensively. One can argue a case for the limitations of spacetime as a concept, but it is not argument that has made it so powerful a concept. Our minds are captivated not by complex mathematics, but by the imagery that is invoked to flesh it out. The abstract mind, in an effort to make realisable the objects of its concepts, must communicate to us its notion of a geometric essence. Consequently, we are invited to actually visualise measurement, as though a ruler in performing its function were counting off some real thing. So notice how the problem is always concerned with the realisable, precisely the cause of anxiety in Isham and Butterfield’s paper: Is spacetime possibly nothing more than reification? From the point of view of science, it has to be real. Space-time

⁴¹ Spengler, Oswald. *The Decline of the West*. (Oxford University Press, 1991), 77.

is a real fabric, and has often been described metaphorically as a rubber sheet which becomes dented by the presence of mass. In his book *The Fabric of the Cosmos*, Brian Greene describes it in the following way:

Einstein dismantled the rigid, absolute structures that Newton had erected, and built his own tower, synthesising space and time in a manner that was completely unanticipated. When he was done, time had become so enmeshed with space that the reality of one could no longer be pondered separately from the other. And so, by the third decade of the twentieth century the question of the corporeality of space was outmoded; its Einsteinian reframing . . . became: Is spacetime a something? With that seemingly slight modification, our understanding of reality's arena became transformed.⁴²

And again:

Twirling in the back of the mind, [spacetime] has provided a simple and quiet test for whether the invisible, the abstract, the untouchable stuff of space – and spacetime, more generally – is substantial enough to provide the ultimate reference for motion. The verdict? Although the issue is still debated . . . the most straightforward reading of Einstein and his general relativity is that spacetime can provide such a benchmark: *spacetime is a something*.⁴³

Yet given the remarks earlier by Lee Smolin, it is precisely this that stands in the way of actually locating the difficulties in science which concern what Smolin described as the unfreezing of time. Clearly, by wresting time from space and returning it to mass, this begins the process. But in so doing, by inverting the order of things as they are dealt with in relativity theory, there is a casualty and it is the supposed reality of the spacetime continuum, or the fabric of space as it has been called.

Even so, it may not be clear whether spacetime and mass-time are really all that different. Relativity tells us that in any acceleration, the space

⁴² Greene, Brian. *The Fabric of the Cosmos*. (Penguin Books, 2005), 39

⁴³ *Ibid.*, 75.

component and the mass component of a moving thing are altered. Does it really make a difference to say these are the same thing, and that they are altered simultaneously? The answer to this question would require more space and a more detailed examination of the implications of mass-time in general relativity. There, it will be found that spacetime was always prefigured as a means of dealing with the problem of gravity. That picture is altered, however, simply because spacetime is not available as a concept in cognoscience, and quite a different picture emerges from the application of a mass-time concept. However, that does not mean that we are unable at this point to offer some insight into what mass-time actually implies.

When relativity was young, the physicist John Wheeler was asked to explain relativity in a short sentence. His reply was this: Space commands, matter acts. Actually it would have been more accurate to say that spacetime commands and matter acts, for that was the implication. But what exactly does that mean? Precisely what was assumed in the first place, that matter is inert, and that it is given a semblance of activity by outside forces, which in this case become transmuted into spacetime. Seen from the other way round, time is ripped away from matter and artificially attached to space in order to conclude what had been assumed all along. So here we are now, back where we started, with the assumption, because it is never nor has ever been brought to task, that we are more firmly entrenched in the inertial frame, raised to a different power, in which the principle of inertia re-invents itself to conclude precisely what it assumed in the first place, making it even more difficult to penetrate philosophically.

But even here, it should be noticed that the principle of inversion with which this began also applies to John Wheeler's statement. Where his statement implies that space commands and matter acts, the inverse of this is that matter commands and space acts. What can this mean? The contrast of statements tells its own story: in either case, whether time is affiliated to space or to mass, it is quite clear that time itself is the activating propensity. By attaching it to space, matter is forced to reflect its inert state to conform to the earth-bound expectations of a way of seeing that finds any alternative as taboo, and that whatever impels matter, it is to be found in space which is activated by its alliance to time. But now, if this time (clearly not clock-time) is reconnected to mass, the implication is that

matter is motivated. That, in a nutshell, is where the real problems begin. What does it mean to say that matter is motivated?

By attaching time to space, the character of time becomes spatialised. In cognoscience, this is an impossible fusion because what is meant by space is completely different from the character of scientific space, and which defines the whole scientific enterprise. Bearing in mind that cognoscience is concerned with the relation of two states, that of static and relative existence, the class of state commonly known as space is actually the concept of static existence. Since the approximate translation of such a state was given as the no-time nature of light, then we should endeavour to lose the habit of thought which perceives light as that which fills space, but which sees them as the same thing. In this way, there is no benchmark, either an ether or space, against which light is conceived of as moving, so that its apparent motion in the usual sense is actually an expression of its no-time nature. In effect, space becomes static existence becomes light. It is totally illogical from a cognoscientific perspective to imagine that the relationship between static and relative existence is one in which they can simply be welded together to form a time/no-time state. Such a union completely destroys reality since it does away with the role of participation which reflects an approach by one to the other by degrees. That destruction is the achievement of science, for it is unable to see any kind of self-compulsion in matter. It is all forced action, and all determinable. Yet even an atheistic philosopher like Sartre could recognise the illogicality of the scientific programme from an existentialist point of view, since he wrote the following in his book *Being and Nothingness*:

The paradox is not that there are 'self-activated' existences but that there is no other kind. What is truly unthinkable is passive existence; that is, existence which perpetuates itself without having the force either to produce itself or preserve itself. *From this point of view there is nothing more incomprehensible than the principle of inertia.* (Added emphasis)⁴⁴

Yet here is a clue to the meaning of what it means to say that mass-time commands, as opposed to the scientific dictum that it is spacetime

⁴⁴ Sartre, Jean-Paul. *Being and Nothingness*. (Routledge, 2000), XXXII.

that commands. It is, to borrow from Sartre, self-activating. Without needing to add any new or forced conception, the participative state implies an approach by degrees to the nature of static existence. What this means is that all relative existents 'feel' the compulsion to attain to a static state. Because the word "feel" is so highly charged, then one must certainly see why it was necessary to coin the term cognoscience, for unlike science per se, it must also reflect something of our emotive states, where our feelings can find an appropriate schema to be woven into the fabric of reality. Perhaps a more appropriate word would be desire. That is to say, mass-time "wants." This conclusion is forced upon us simply by the terms of reference. It may appear absurd at first glance, because like the principle of inertia, we carry the assumption within us that we know what it means. In cognoscience, desire is a process inherent in the participative state, but it has a complex meaning impossible to consider in any detail here, except to say that without it there would be no life and no variety. Life and desire are equivalent terms.

If we consider desire in its most basic form, we find it associated with hunger, and indeed with thirst. It is an inbuilt antenna of something missing, and the whole being is driven towards its satisfaction. In other words, it finds expression as "appetite." This in turn becomes an informing agent to other levels of desire within us for which we are prepared by appetite. At the same time, this in itself is a knowledge that was once extant but which was lost to us by the rise of science which could only advance by the overlaying and hence destruction of the emotive perspective. Swedenborg constantly refers to the tripartite reflection of all things in reality of the nature of the Divine. Yet in so doing, he is merely attempting to keep alive what had been known by man since most ancient times. The philosopher Borna Bebek discusses just this ancient tradition in his book *The Third City*, in which layers of desire were seen to inform all those layers simultaneously:

Thus, considered as a psychological quality, *Logistocon-Sattva* can be seen as that part of the soul concerned with thought and reflection in the epistemological dimension called knowing (*Noesis*); ontologically, it corresponds to the realm of being. *Thumos-Rajas* is that executive element of

the soul concerned with activity, and hence with the realm of time and extension; it corresponds to becoming. The third element, *Epithumia-Tamas* has no negative connotations: it is defined by *Proclus* as ‘a tendency or appetite to be filled with something present, to be disposed according to some sensitive energy’, hence it corresponds to the psychological dimension of grasping. The grasping soul apprehends immediately: it is filled with impressions without the intermediate function of opinion or thought.⁴⁵

What we find in our own time is a separation of these three levels that yet again reflect the kind of thought that Swedenborg refers to as faith without charity. Either the higher functions are completely severed from the lower lever of pure appetition, in which event there emerges a groundless perspective, or the order is inverted, as in our culture, in which the summation is actually the satisfaction of desire, in which event, as Bebek put it, our whole age is symbolised by grasping, and therefore by an uncontrolled greed. It is the result of an inverted view, it is the world we find ourselves in and in which such a state of things passes for normality, and most significant of all, it is actually inscribed in the Bible, in a correspondential form:

If you do not obey me . . . and you break my covenant . . . you shall sow your seed in vain . . . and though you eat, you shall not be satisfied.
(Leviticus 26: 26)

Traditional exegesis fails to perceive the representative form of correspondential writing that this text presents us with, and will not recognise that the reference to eating represents the manner in which we make our own all that we take in at every level. Nor also does it recognise that this is not a statement by a God that threatens to punish if he is not obeyed. It should be seen here that what is not being said is that people will starve. On the contrary, it is saying that satisfaction will be out of reach in a form of approach to reality that makes sensory awareness the

⁴⁵ Bebek, Borna. *The Third City*. (Routledge & Kegan Paul Ltd. 1982), 112.

prime directive. What gives satisfaction is what expansive truth can be derived from what we make our own, and according to Leviticus, in an inverted order there is barely any such satisfaction. An inverted order is one in which we never grow out of the purely appetitive acquisitiveness that defines the proprium. Yet in science, by giving no thought at all to such a structure, we are made prone to the grasping nature with which we begin our lives as though this were of some merit. Yet ultimately, we can see that not only is there no correspondence between spacetime, inertia and reality, for it truly is a reification, the far greater price that we are paying for such a dominant viewpoint is that we do not see that it leaves us prone to primitive acquisitiveness and appetite which is expected in the newborn, but a tragedy for a civilisation if it continues in the same unevolved state throughout life. It is where reality begins, no doubt, and we cannot pretend to turn it off as though life can continue without it, yet in science we have created a view of reality that pretends that it can do so.

CONCLUSION

This paper began with a statement concerning the limits of knowledge with which, according to Kant, we are to be satisfied. The cost of that satisfaction has been a high price to pay, for we have truly made ourselves wingless for the sake of a pottage of lentils, much like Esau. Yet nothing of what I have said here was unknown to Swedenborg in essence. As a man of his time, he was acutely aware of the spirit of materialism that was being sown in his own times. In *Harmony Between Soul and Body*, he quite clearly recognises the Kantian enterprise at large in his world. He sees in it the deliberate exclusion of that which animates the whole of reality in order to perceive it dead, and to be satisfied with that. Of this spirit of Enlightenment, as it chose to call itself, he writes:

Whithersoever the mind turns, she sees some occult quality opposing her path. Thus she is prohibited from knowing anything beyond what she chances to know experimentally. On whatsoever arena or shore you stand there is presented before you as it were an abyss, at which you shudder in horror as at a yawning sea. Thus mocking, as it were, the

system assures us that the soul, with all her rationality, perception and light, will be lost in occult qualities as in dense darkneses, and will suffer shipwreck as it were, if she spread her sails and leave the port; and, as is the way with those in themselves who are without oars, it dissuades everyone from attempting the deep. (*Psych. Trans.* p. 33)

Here we can imagine Swedenborg responding to Kant's exhortation to be satisfied with less: *on the low ground of experience and common sense, happy if we regard it as our assigned place from which we may never depart with impunity and which contains everything that can satisfy us.*

His response is a telling statement of his awareness of what was to come:

But if the streams be thus closed, and we straightway take refuge in ignorance as in a safe asylum, then all philosophy and rational psychology must stop; nor will it move one step beyond that visible world which is obvious to the external senses. It will lose all hope of ever borrowing any light from the sciences and from its own experiments, and of penetrating into causes, that is, of becoming wise. And thus it will be put under the yoke of authority and be adjudged to slavery, so that it will hardly be aware that itself breathes a freer, purer and heavenly aura. (*Ibid.*, p. 34)

Consider the thesis, that the principle of inertia acts as a synthetic statement that attracts all thought to itself and which it serves. Its products, like spacetime, emerge from it, and all of reality eventually subscribe to it as though a truth of the highest order. Yet with regard to the status of such synthetic assertions, Swedenborg writes:

Whenever affirmative reasoning is applied to a preconception, an infinity of particulars, all voting the same way, fly to its assistance,—both the decrees of ratiocative philosophy, and the phenomena of the world, laid hold of in the fallacious light of the senses...but all things have their day...they are conceived, they are born, they grow to maturity, they grow old, at last they die. But from the ashes of each new ones rise; and every

hydra head that is lopped off by the youthful Hercules, produces hundreds of others; whence spectres of similar brood prevail for ages, and, like enchantresses, distract the human mind perennially. (SD 9)

Perhaps we are alive today at the tail-end of such distraction. Even so, be that as it may, Swedenborg was there before us and read the signs of the time. Because the rise of the exclusive intellect in opposition to faith had set itself up as the new way of thinking about things, Swedenborg set himself an enormous task—to study all things and to use every means at his disposal to produce a counter position:

Nor do I think we ought to wait any longer, lest haply experimental knowledge should be overtaken by age, night, and oblivion; and the arts and sciences be carried to the tomb; *for unless I mistake the signs of the times, the world's destinies are tending thitherwards.* (Added emphasis) (Ibid., 14)

He was not wrong. This paper has been an attempt in part to present a view of reality that is inverted, and which yet passes itself off as the apex of modern thought. The conclusions have been sketched to a limited degree, but hopefully enough to instil in us that there is a serious problem, but one which is not insurmountable, especially to a church whose key ideas already prefigure these issues. Our world is one that, as T. S. Eliot put it in *Four Quartets* is one that moves on its metalled ways in appetency. Yet Dylan Thomas also wrote something which equated the feeling states within us to those found as indifferent forces outside of us:

The force that through the green fuse drives the flower
Drives my green age; that blasts the roots of trees
Is my destroyer.
And I am dumb to tell the crooked rose
My youth is bent by the same wintry fever.

The force that drives the water through the rocks
Drives my red blood; that dries the mouthing streams
Turns mine to wax.

And I am dumb to mouth unto my veins
How at the mountain spring the same mouth sucks.⁴⁶

From such poetry alone, is this not evidence of a kind that it is impossible to present a view of reality that is not essentially and initially derived from affection? In Dylan Thomas we see a sense of this. In Swedenborg, his whole work testifies to it, yet our own times denigrate it completely. Therefore, I think it is appropriate that this paper should end with a summary that is contained in poetic form. The poem, *Time And Motion Study*, concerns the thesis presented here.

Yet there is one thing further to add. The beginnings of this thesis are rooted in the principle of plundering the Egyptians, and all that this entails. We have seen, for instance, how the Egyptians correspond to natural knowledge. It is as if on the two sides of Christ's human life, there exists a pattern in which one side mirrors the other. In terms of the spiral or cyclic movement that patterns the beginnings and ends of the different churches, the release of the Israelites reflects a sense of something greater among them than can be incorporated or reflected in the Egyptian way of life, which had corrupted to a point where there was no spiritual presence at all. The parallels need not be overworked with our own times. Yet interestingly enough, the Ancient Church, or the Noadic church, is one that represents the remnants of the celestial Very Ancient Church of Adam. What made this church distinct was the form of the new mind, one in which thought and feeling became separated and which were reformed to form conscience, where the feeling state only came to the fore when the intellect had produced ideas of a type that resonated with it. The reason this is interesting is that cognoscience is more or less the same as conscience which may well be its contracted form. One of the first things Noah did after the flood was to build a vineyard and get drunk. The point about this is simply that it is an attempt to get back to one's celestial roots but in an inverted way. The spiritual church is an inversion of the celestial and cannot be approached in that manner. Even so, there was clearly a sense of something missing in the Ancient Church. Cognoscience can therefore be taken as a mirror image of that point in past time when it was necessary to

⁴⁶ Collected poems 1934–1953. London: Phoenix 2003.

construct something new for the sake of the greater spiritual evolution that begins in the appetitive springs of natural life. Yet we are currently faced with the problems presented by the cravings for altered states of mind produced by drink and drugs and the pursuit of thrills. Like the Noadic Church, could these themselves be signs of a deeper longing that the physical urges, though denying them, represent nonetheless?

Time and motion study

Here is a lesson in relativity:

What once was unchanging has turned into plastic;
Time alters with movement, possessed with ductility
Suggesting that time has become more elastic.
It has something to do with a light/ not-light relation
Transmuting time and motion through participation.

It indicates that we can no longer think
Of time as separate, absolute, abstract
But connected via a more intimate link
To the stuff that is mass. As a matter of fact
That alters with movement too, so much so
That the faster it moves, the more it will grow.

For mass is an energy, locked as potential
As motion (a fraction of light-speed) increases.
Reversing it also revealed the eventual
Power of the sun that an atom releases.
One man challenged what we thought, and dared,
And came up with $E = mc^2$

To explain it, but still it is some cause of wonder
Since though, after all, we run, drive and fly
We simply don't feel it, time torn asunder
Nor add not one ounce as the miles goes by.

We think too slowly; we think in miles per hour –
Light speed makes it so, raised to the second power.

The lesson is simple: the mind should be critical
Of all the most obvious, matters of fact
And scrutinise what is familiar, be sceptical,
Leave no stone unturned, no concept intact
Especially thought of the dogmatic kind
That offers resistance, ignores the curious mind.

Which is why, when it comes to the general view
Where what is called gravity jumps to the fore
You find that the thinking goes slightly askew
And what was just said is thrown out of the door
In order to make an accommodation
To Newtonian space in accumulation.

Think about it, how the movement of matter,
How an increase in bulk is accompanied by
A decrease in time, so both former and latter
Are joined at the hip. So the question is why
Does the special theory join them at the start
Only for the general view to tear them apart?

Let me be clear about this: the perspective
Of one thing possessed of a double aspect
Is forced here to follow a certain directive
So that matter and time can be seen, in effect,
As separate. Thus the ground is set, made prime
For quite a different alliance: space and time.

So let me be frivolous, slightly poetic:
A groom in the stall is awaiting his bride
On the arm of her father, but being frenetic
She walked on his left arm which was the wrong side.

The vicar was blind, pronounced the holy word,
Married the groom to the father—Absurd!

Consider it further, that once it is said
The decision must stand since his word is the law
And forces them into the marital bed;
“Don’t dawdle,” he says. “It’s what marriage is for.”
It is a fruitless union, enforcing their compliance
And thrust down upon them in the name of science.

And so it was swallowed, and someone explained
The fabric of space-time commanded, dictated
That matter should follow its lead, be enchained
For the sake of inertia it incorporated.
Thus Newton was safely ensconced in the modern view
Which all looks progressive while saying nothing new.

Or you may consider that this is all talk
Since whether it’s space-time or mass-time, whatever:
“Such abstract conceptions just don’t pop my cork
And I’m really not bothered, not being that clever...”
Precisely the echo of the old dogmatic way
When the unholy alliance of church and state held sway.

To make it more relevant, think of it thus,
The temporal being the active ingredient
And how objectivity displaces us;
It then becomes simpler, meaning expedient
To represent nature as being mostly dead
And what we call “animate” is only in the head.

Transposing this “active ingredient” to matter
Is nothing like strapping a watch to the wrist—
It gives it an urge, it wants to get fatter,
And also it wants to be liked, to be kissed.

In short, it wants, is filled with rage of it and fire.
Another name for this you know: desire!

Yes, it is certainly Aristotelian
And certainly anthropomorphic a view.
Ambiguous nature? Of course, a chameleon
And rainbowed in any particular hue.
But space-time reduces to cold, geometric, ideal,
What mass-time infuses, and favours the felt in the real.

So think what it means to say “all is connected”
From galaxies, stars down to persons and stones;
Include yourself in it, for nothing’s rejected
But wired in the core you can feel in your bones.
Excluded, and become a prey to winds that blow
And think what everyone else will have you know.

So the lesson is simple: the mind is poetic
In which nothing is just a matter of fact
And will not rest satisfied till the noetic
Can levitate stones and leave nothing intact
To form some next-best thing in which to reside—
It is restless, and hungers and never satisfied.

THE LAST WORD

In the scheme of things, a book begins and ends. Every end, however, is a germ for another beginning, and so no book really ends. It is a preparation for other things inevitably, like a ball of wool containing many loose ends. It has already been suggested that the next port of call may be general relativity, but that in itself is somewhat incidental. It is more the case that while the focal point has rested upon inversion and time, their treatment here may still appear to be some distance removed from the ordinary experience for which these speculations may not appear to be immediately relevant. And yet it is of fundamental importance to show

that this really is not the case, and that important ideas, however abstract they may appear to be, always impinge upon our lives and how we choose to live them.

The roots of the ideas being proposed here are driven by the fact that the general direction inherently part of the logic of ideas rarely allows such a pursuit to travel across domains of expertise which define the categories of thought. Science is science, religion is religion, and so on. Each has developed its own language and defined its own territory of application to the exclusion of others. The aim here has been in part to formulate a language for ideas that are not subject to such artificial restrictions, in whose context such boundaries become superfluous. However, because they do not “belong” to any particular system of thought, the impression may well be that the language is essentially too abstract for the modern mind which finds itself entrenched and defined by categorial thought. It is as if an idea without a categorial context is in danger of floating away as though it has no mooring on which to lash its ropes. This may be a natural reaction to some extent, but it is a reaction to that which is unfamiliar, and not to something abstract. We do not think of a foreign language as abstract, simply because we do not understand it. We could learn it, and would do so in order to make it easier to travel or live in the country of its speakers.

Even so, it may still not be clear what these ideas are really touching upon, but that is because they are ideas still in the process of being formed, and are therefore still somewhat unfamiliar. But what exactly does that entail?

In many ways, however, the problem could actually be the inversion of this—it may have more to do with seeing that these ideas are already present in the nature of reality, and that categorial thinking has created in us a myopia that makes them invisible. One of the chief problems to contend with here concerns the process of correspondences (the chief means of perception in the simultaneous view of the rational mind), which has been effectively overlaid by the processes that support a purely evidence-based perspective in support of a single-minded rationalism that is entirely ground-based. In order to buck the trend, it becomes necessary to stun the mind somehow, to give it a sort of shock to wake it from the complacency that has set in with categorial thinking which allows for the

presence in reality of no other kind of thought. Therefore, the language of cognoscience may only appear to be somewhat abstract, and even though its expressions are only half-formed so far, it provides the basis for a comparison and contrast with the language of science without reference to reality, and from it has emerged a restriction in the latter's thought which requires the actual creation of a counterpart to the theoretical concept of spacetime as part of the fabric of its reality. In terms of cognoscience (or "conscience" language) it is mass-time that is imbued with just as great a measure of realism, to which our own bodies and our own experience with them testifies.

But to the great majority of people, it will still not be clear why this is an important issue. To make this a little more direct and transparent, it would be useful to consider some of the correspondential terms of expression that are particularly pertinent to our age which is now more than ever before thickly shrouded in the miasma of secularism on the one hand, and the literalist gropings of the religious tradition on the other which rarely extend further than metaphor. For all its appearance, metaphor is not correspondence, and is unable to carry the depth of spiritual meaning. A correspondential form remains coherent and consistent throughout the Bible, and retains its power of meaning through this consistency. There are certain passages that come to mind at this point. In particular, the tower of Babel comes to mind, as do the remarks made by Pharaoh in refusing to release the Israelites. One should also keep in mind that when we hear the word "Egypt" in the Bible, the modern mind should attune itself to hearing at the same time "natural thinking," or knowledge that contains no spiritual element, which exactly mirrors the modern notions of a secular science.

In recent times, there has been a great deal of attention given over to the arguments and debates that have centred upon the apparent contention between science and religion. However, concealed beneath the arguments, and rarely given any attention lies the view that the rational mind is either attuned in a manner that serves the purely secular domain, which is the perspective of science, or that it is capable of perceiving in two directions at the same time, which is the position that is being defended here. The former view is associated with science for reasons that need not be restated, and are symbolised by Kant's marker stones. At the same time,

one should keep in mind that this boundary condition also represents a level of intellectual satisfaction which carries in tow the notion that any other kind of thinking is superfluous. Such a rational mind assumes itself unaided by any other form of influx than that provided by the senses and their technological extensions. It is this raw data that is then taken to be the raw material of model construction that represents reality subsequently. The correspondential term here is "construction" for it is this process of self-determination (i.e. with no apparent influx from a non-physical source) that is represented dramatically by the brick in the Bible. This self-determination is first of all represented by a movement away from any spiritual interest, and is represented biblically by a movement away from the east.

This is how it is described in Genesis 11: "And so it was that, when they travelled away from the east, that they found a valley in the land of Shinar." Here are the beginnings of the Kantian position, and our current Enlightenment conceptions. Valleys are always representative of obscurity and the purely external, but which are nonetheless taken as "enlightened" by those who reject the east and all that it represents. It is also clear that the purpose of this move is to create something that has the appearance of an equal stature with the perceived notions of a spiritual view (represented by the mountain). This similitude is what we should see in the construction of a tower that reaches right up to heaven. Furthermore, the means of achieving this are highly symbolic. The truths of the spiritual are represented at different times and places as rocks and stones, and generally speaking, these are not hewn or moulded by human hands. The brick, on the other hand, is entirely man-made, and has the same function as an unhewn stone as a foundation to be built upon. And it is this that is the chosen material from which to construct the tower. It is made of brick and slime, or bitumen as some texts translate it. In other words, the bricks represent our ownmost rational minds, while the slime which holds them together represents our ownmost will. There is nothing of the spiritual about this construction. It has the appearance of stone only, and so it is only an apparent truth, and not a real one. Here one should recall what has already been said concerning the principle of overlaying.

Now jump forward to the Egypt of Moses, and here again it is the symbology of the brick as a pretend truth that reappears. When Moses seeks to expand the boundaries of thought to include something that is of

spiritual significance, on might imagine that this in itself was no great thing. Yet we should be mindful of what the implications of the inclusion of a spiritual form of thought represents to the Egyptian mind, and our own as mirrors of it. It is a declaration of dissatisfaction with marker stones, the exclusive natural thought that Egypt represents and which is encapsulated in the principles of Enlightenment thinking that we find both in Kant and in the modern world. The notion of a rational mind that can perceive in both an earth- and a heavenward direction simultaneously is one that is perceived as a threat to the Egyptian view. And what was its response? It is in Exodus 5: That same day Pharaoh gave this order to the slave drivers and foremen in charge of the people:

You are no longer to supply the people with straw for making bricks; let them go and gather their own straw. But require them to make the same number of bricks as before; don't reduce the quota. They are lazy; that is why they are crying out, "Let us go and sacrifice to our God." Make the work harder for the men so that they keep working and pay no attention to lies.

It is the symbology of bricks that carry the meaning. They represent the working methods and the products of our own exclusive proprium, and as such the restrictive practices that compel the human mind in a single direction, removing every possibility of an aperture that could allow a spiritual perception to enter. The mere possibility of such an opening creates within the dominant natural mind the fear that not all the bases have been covered, or as Swedenborg put it, that the Israelites had not been sufficiently assaulted. The means of assaulting them further, and thus remove any further chance of a spiritual conception from entering the mind, was to increase the pressure on them to service the natural mind only which is represented yet again by the making of bricks. But now they are to seek the straw to make them. The implication of this is that the very basest material, the raw data, is to be sought by themselves. In this way, they would be made to feel that their compelled forms of thought stemmed from themselves to some extent, that they were participants in the construction of their own pretend truths which they serviced with their lives.

These interpretations are made in accord with a consistent theme that runs throughout the Bible which involves a constant confrontation between the meanings of freedom and compulsion, and how they emerge from between the limits of what we can discover for ourselves with the closed mind, and what more can be discovered through the recognition of those limitations when opened to deeper levels of thought. These are not academic considerations, but strike at the heart of our very being and existence, if for no better reason than this, that these two words, freedom and slavery, invert very quickly to their opposing senses when we close our minds to the simultaneous view, taking slavery for freedom and vice versa.

With this in mind, it is not easy to imagine that relativity and science as discussed so far has much to do with that existential life, nor is of great concern to how we live it. But this is an error.

The conception of time that has been discussed here is one that may seem abstract and a million miles away from any real concern with ordinary life. After all, what has relativity got to do with the price of bread? Yet that has not been the point, nor is it still. What we have found in science is a determination to keep the Enlightenment position alive, despite the fact that it has long ago reached the limit of its self-defined marker stones. That position has its own in-built irony which is to keep reality inert. Consequently, when applying "conscience" ideas, what we find in relativity is an attempt to ally the activating element of life (time) to an abstract entity (space) in order to keep matter (which includes ourselves) subject to compulsive motion with no hint of any kind of freedom emerging. In other words, time has become the modern equivalent of the brick. This is why it is an important concern for all those concerned with the promulgation and ongoing evolution of ideas as expressed in the ideas of the New Church with regard to the meaning of despoiling the Egyptians.

The fact is that science has become the archetypal model that has become inextricably linked to the body politic. As such, virtually every aspect of our lives is shrouded in categories that have been moulded from the higher model of scientific thinking and purely natural thought. The kind of time that remains to be allied to our very fabric (derived from a participatory relation of the temporal and the non-temporal) is still wait-

ing in the wings of thought, and instead we find ourselves prey to the artificial time of science whose watches we wear upon our wrists, and which subsequently shape the course of our lives. For just as science has allied time to space, so the practical world lower down has taken the same time and allied it to money, and made a principle of action from it. This is the straw that is used to make bricks in our time. There is virtually no time in any real sense that is part of the cultural pattern of behaviour that is not measurable, and therefore accountable in economic terms. We have become prey to the processes of accumulation, whether of money, or goods, and the status of realism they appear to endow us with as a result of ownership. To many people, the getting of straw has become exclusively meaningful, and the way to prevent the intrusion of anything of spiritual meaning is to increase the pressure on us to see that straw-getting as the purpose of life. In other words, no sooner do we get our necks above water than the price of everything increases. The increase in interest rates over the last two centuries is no accident, as the principles of accumulation have become more finely honed. Yet in so far as this may seem to be termed in conspiratorial terms, one should consider that there are no individual plans to point at, nor consciously formed agendas to bring this situation about, since it brings itself upon us purely by the exclusion of the spiritual dimension that is actually part of our critical minds. Indeed, I doubt very much that Lee Smolin could have imagined that these would be the results of despatialising time.

These things are mentioned here to finally bring these concerns to rest upon identifiable issues that are keenly felt by everybody, and to show that they are not new, but part of the very fabric of biblical concern, which is always that of freedom. In its absence, we have only its appearance, unaware that what passes for freedom is actually an imposed process of straw-getting that we imagine we have chosen, and so are in freedom of a sort. Yet that was exactly the thought Pharaoh wished to implant in the Israelites, so in a very real sense, there has been no real progress, and we continue to fool ourselves even more.

Therefore, while this is intended to open a front on the despatialising of time and all that this implies, it is at the same time an attempt to show how this touches upon the core of existence and what it means to be truly alive.

SOME ADDITIONAL FOOTNOTES

Preparation

It may not be that uncommon these days to find subject-matter that draws on as diverse areas such as science and religion as content in the same book. Perhaps the grip on the nature of reality by categorical forms of concepts is loosening up, or perhaps not. Even so, it would be easier to think of the nature of reality in terms of the single word "totality." Such a word makes it easier to see that any single view can only ever be concerned with a partial view built into its concepts.

However, these partial views have had the disastrous effect of influencing each other when any particular view of partiality has dominated thought. By their inevitable separation in modern ways of thinking, each collapses from the totality (which is not unlike the quantum notion of decoherence), but which in reaching for exclusivity becomes little more than a literalist view in all such domains. That is to say, while a scientific view may only represent an aspect of the totality, when it claims that totality to itself, it naturally excludes all other views as pertinent and collapses into a literalist view masquerading as Totality. Consequently, by such a view infiltrating all other aspects of thought, it is unsurprising that such an extreme rational perspective should declare that we could not have evolved in seven days, since it is incapable of the kind of perception that is at home with symbolism and representation. It becomes a comparison of literalism with literalism, and then falls on the side of science as a matter of choice. Yet both views are equally narrow; both views, religious or secular, pertain to intellectual perception with no emotive reference point, and both assume that the physical earth is the focal point of interest.

Consequently, the opening paragraph to this book, while brief, may still shock the casual reader, or at least cause a state of unease as cherished beliefs experience a change of meaning. Yet it follows that if a correction is required in the scientific perspective in order to increase its scope of perception, that very alteration in one apparently separate area of thought impinges upon the other since the two views are not actually separable, for they are conjoined by Totality. Here, then, is a longer statement with respect to that opening paragraph.

The opening line of the Bible which sets the tone or supreme motif of the whole Bible is usually translated as “In the beginning, God created the heavens and the earth.” For modern readers, this indicates a certain moment, something akin to the Big Bang, that is a beginning like the beginning of the physical universe, and before which there was nothing. In that way of reading, “created” generally means “to be formed from nothing.” Furthermore, given what follows, the thing “created” is logically taken to be the earth, since it says so. Taking these things together as the ideas coming to mind when these words are read, it is not surprising that we come to see this either as something true in its literal sense (being the Word), or as merely metaphorical as a creation myth, with no real explanation that is satisfactory given to the metaphor which might be read in countless ways, but which all point towards the creation of the earth. These are the kinds of ideas we hear of regularly these days in the public arena, especially with regard to a science / religion debate.

However, when we consider these words in their literal form, in the original Hebrew, quite another strand of thought is suggested. In Young’s literal translation of the Bible, we read, “In the beginning of God’s preparing of the heavens and the earth . . .” Consequently, we do not think of the beginning of time as above, but the beginnings of a state of preparation. This preparation has clearly something to do with a relation between the heavens and the earth prior to which, in the absence of a relation, there is only a state of darkness. Darkness precedes every new state or relation (called vastation) and so this major motif takes on an entirely different character. Consequently, we should think of this state of preparation as one that is intent upon forging some kind of connection between the heavens and the earth (in terms of the images of these within ourselves). It is this connection that forms the whole subject of the Bible, both Old and New Testaments. Indeed, it would be more accurate to define these books as the Old Covenant and the New Covenant, for the word “covenant” implies a connection. One can sense, therefore, that the word “preparation” is far more loaded than “created” in terms of meaning. When the New Covenant was in the process of being established, John the Baptist, echoing Isaiah, declares “*Prepare* the way of the Lord.” Zechariah his father, in Luke, also says, “And your child will be called prophet of the Most High, for you will go before the Lord to *prepare* his ways.” This, too,

is foreseen in Malachi 3:1: "See, I am sending my messenger to *prepare* the way before me.'

This state of preparation is like a first step in the process of regeneration, the means through which the Lord accommodates all human ways of knowing and gradually turns them around to higher things. In doing this, He himself says in John 14: 2-3: "In my Father's house there are many rooms. If it were not so, would I have told you that I go to *prepare* a place for you. And if I go to *prepare* a place for you, I will come again and take you to myself . . ."

So we can see a great deal more in spiritual terms through the use of single words like "preparation" as opposed to "creation," which sets up an entirely different stream of thought. It is in this context of the meaning of preparation that it becomes far easier to understand the deeper meanings in the text of the Bible as an intermediate step that then makes what Swedenborg writes far more readily accessible:

The beginning . . . embodies within it that first period when a person is being regenerated, for at that time he is being born anew and receiving life. Regeneration itself is therefore called a new creation of man. Almost everywhere in the prophetic sections, "to create," "to form" and "to make" mean "to regenerate," though each of these words has a different shade of meaning. (AC 16)

Needless to say, given the above references to preparation, it is clear that "earth" cannot mean the physical earth, since such an object cannot be the object of regeneration, but its embodiment as Mankind, and is indeed why Adam is so-called whose name means "ground" and is thus a reflection of that embodiment.

Of course, given the uproar with the Publication of Darwin's *Origin of Species*, it is clear that the literalist view had a stranglehold on interpretation by then, and not a single publication has come anywhere close to the kind of deeper meaning beneath the literal reading, albeit in translated forms, that actually counters the mindset ensconced in literalism. After all, who apart from Swedenborg in modern times has been capable of taking this more expansive view on the nature of regeneration, and that the Bible

is ultimately concerned with spiritual evolution and not natural evolution?

Rational thought

These days, and as a rule of thumb, the word “rational” is associated with science while “irrational” with religion. Superficially, the distinction hinges mostly on the use of evidence or the lack of it. In some ways, this reflects the success of the Enlightenment program that has restructured thought itself by determining the form of the kinds of concepts through which reality was to be interpreted and understood. Over time, however, the distinctions between rational thought and the kind of thought from which it is derived, (since all thought is anchored somewhere to experience), has become blurred, so that it has become impossible to distinguish between the concepts of rational thought and the more sensory equivalent that is natural thought. Yet this is such an important distinction—the whole discussion of reification earlier, whether there is something real that corresponds to a rational concept, hangs upon just this subtle distinction. In fact, without an awareness of this distinction, much of what is written by Swedenborg pales into obscurity since it is totally dependent upon this distinction. Consider just this one passage from the *Arcana Coelestia* as an example:

The rational, which is called the rational man, can be at variance with the natural, which is the natural man; indeed the rational man is able to see and perceive evil that is in the natural, and if it is a genuine rational, is able to correct it. Before these two have been joined together man is unable to be whole or to experience the serenity of peace, since the one is in conflict with the other . . . If in this conflict the rational prevails, the natural is placed in subjection, and the man is thus endowed with conscience; but if the natural prevails, he is not able to receive any conscience at all. If the rational prevails, his natural becomes as though it too was rational; but if the natural prevails, the rational becomes as though it too was natural. (AC 2183)

The lack of distinction in our own times bears witness to the fact that it is the latter form of rational thinking, natural thought masquerading as rational thought, that is currently dominant. One need only consider the current thesis, that there is something restrictive in thought with respect to the conception of gravitation either as a force or a field. Is this a reification, or is it something real? Yet given the ground-based view expressed earlier by Einstein, clearly the current rational mind is actually a natural mind with rational pretensions. It is almost an unconscious knee-jerk reaction that enquires for proof in order to establish a warrant of realism, yet that reaction also points to the natural as though it were rational in itself.

In a less superficial sense, the meaning of "rational" is contained in the sense of the word "ratio," or how very small things are reflections of principles operating on larger scales. This is effectively reflected in the quantum gravity issue, in that the current inability of science to solve this problem reflects the self-imposed limitations of narrow rationalism in a purely natural form, in the sense of being purely physical.

There is no doubt that it has such a function. We extrapolate generalities from instances, and it is these generalities that become the concepts that we think with. But if the form of thought excludes the so-called "irrational" from the outset, then the concepts in use take on an exclusively physical character, and it becomes virtually impossible to get them to carry any other kind of meaning.

The aim here is not to solve the quantum gravity problem, (or the macrocosm/microcosm interaction, or in Swedenborgian terms the relation of the Grand Man to the little heaven we each represent) but to show with respect to the "other" rational which seeks meaning in a more expansive perspective, that it is not a real problem. Our minds are certainly concerned with the natural forms of ordinary life, but they also possess other abilities and propensities which stretch far beyond the physical, but which are also fundamentally rooted in it. It is not possible to argue in the traditional way on its behalf, since that would be akin to persuasion by compulsive means. It is this kind of "spiritual" mind that is truly rational, but which needs to be nurtured in a non-compulsive way. This is precisely the form of mind we find prefigured within the structure of the Bible. All births that represent something new begin from a position of barrenness until an intermediate form is conceived. It is for this reason that ordinary

rationalism comes first, which is why Ishmael precedes Isaac, since an early form of thought as acquired in childhood gives way to a deeper kind of mind-state. Indeed, Swedenborg calls these two the “first rational” and the “Divine Rational,” just as John the Baptist himself is aware that he must decrease while the Lord must increase. That Lord is the real Divine Rational that Isaac prefigures. That is a far more expansive notion of a relation between natural thought and rational thought, nor can one have any kind of life till the other has reached its peak.

The fact that modern rationalism, now deeply rooted in science, will feel such a statement to be repugnant is not difficult to understand, for everything that is spiritual about us is experienced initially as an aversion in the purely rational mind. That aversion is actually the root and basis of spirituality, for without it, regeneration is meaningless. For this reason, the aversion is accounted for by the birth of the sons of Jacob as a preparation ultimately for the births of Joseph and Benjamin. It is still not recognised that in many ways, what made the Israelites the chosen race and fit-for-purpose was their total lack of an inner rationalism, and their aversion to it as a result.

This is a major topic, but one that I must assume Swedenborg readers are familiar with to some extent. We can feel something of that aversion simply by noting these biblical references in what appears to be a purely “rational” discourse. It has been my intention here to show how this applies in our times, for it is the intent of influx to bring some sense of accord within the natural, despite modern aversions, with the spiritual.

There are countless references to correspondences, but in all of them there is always a relation between spiritual and natural things, and the presence of the one in the other. Here is just one of them:

It is also an essential feature of Divine order that interior things should gather themselves into exterior ones, or what amounts to the same, prior things into posterior ones, so that finally everything prior should be gathered into what is last and lowest and co-exist with it. This is what happens in the entire natural creation. If this were not true, no-one could be fully regenerated. (AC 6004:4)

What we should note as a prime motive in Swedenborg's work is the constant reference to the importance of this natural life, and how it is the basis of all spiritual life.

Living forces and black boxes

I am attempting to re-open a debate long since assumed settled with regard to "living forces." The reason for this is that the language, and the ideas that language reflects in this post-enlightenment period, is a language suffused with ways of seeing and doing that are entirely oblivious to any notion of what "living forces" might actually mean. After all, since inertia is an assumption, and this assumption then informs the content of the concepts that grow out of it, it is impossible to come to any useful conclusion concerning the meaning of a living force from concepts that have come into existence opposed to any such view. Furthermore, such an assumption is not from the rational mind but the natural mind assuming the natural as a warrant of the rational. (A truly rational view pregnant with a spiritual intuition is one to which inertial views would naturally be averse.) As a result, the problem is not settled, but quietly shelved. Questions concerning the notion of what is meant by "living force" represent an attempt to rescue some kind of living force out of newly formed concepts by using the language of momentum—Kant and Newton as mass times velocity, and Leibnitz as mass times velocity squared. Quite frankly, it is hard to imagine how this could ever have been considered seriously unless one accepted that the speculative concepts concerning the nature of reality were actually regarded as real correspondences with nature. This could only be because the scientific program which itself was gathering momentum, must have been considered the only game in town.

The point is that the notion of inertial mass, (that is, will-less matter) has by this excision already defined "living force" out of existence, so that there never could be a realistic discussion or debate. The whole question of the material world was one in which representation had been lost, and it is in that loss that the very question becomes superfluous, since materialism is only effective when the questioner is defined out of the picture. The only representation left was that of mathematical symbology, and over time,

such representation came to be thought of as the “true” language of reality.

It is this that has ultimately led to the notion of a closed system, and which is meant by a “black box.” If there is to be a new view, one in which the new philosophy is able to breathe freely, it is of critical importance that these boxes are re-opened, which is after all the whole point of philosophy, to question what is assumed. It is one thing to design a system of thought and quite another to live in it. We have now been living in its shadow long enough for experience to tell us that it is wanting. Indeed, it is only because of that experience that this discussion can take place, which is why it must occur after the event of scientific revolutions, precisely because of the strident attempts of science to resist all attempts by others to give these matters closer attention.

With regard to the black box, there are actually two that need to be unpacked. The manner in which they are usually represented always implies that we live inside them and that we must infer what we can from that position. Consider, for instance, the first great unification which became the foundation-stone and the driving force of scientific thought and practice—the unification of rest and uniform motion. Seen from the perspective of a closed system the argument is that it is impossible to perform an experiment that is capable of distinguishing between them.

But this is an ideal black box; that is to say, it is created on the assumption that every extraneous influence can be switched off, and this is equivalent to saying that in the absence of forces, rest and uniform motion are effectively equivalent terms. In other words, an extraneous influence as a separate entity is implied by inertia since it cannot change itself and this is given the name “force.” Yet it is applied after the event as though it were a self-existent entity quite separate from inertia, when it is inertia that defines it. In so doing, it appears to support the case for inertia, which is precisely what it was intended to do since it grows out of it.

Simply by logical consequence, it follows that every acceleration must be due to a force, and since gravitation is an accelerative action, it is therefore a force. This is at best a syllogism, but one that is falsely derived, for in this instance all that can be legitimately claimed is that gravitation as force is a logical conclusion. Yet by its terms of operation that are philo-

sophically very careless, it does not follow that inertia describes a true state in nature, and so the conclusion is questionable.

However, where this becomes relevant is in the case of the second “black box” that developed at a much later stage, in the light of which the first became regarded as an approximation.

Einstein’s general theory of relativity is widely accepted as the best model of the macroscopic universe to date, the heart of which is the local equivalence principle. Every writer on this subject concurs with regard to the same “black box” principle which is that it is impossible to distinguish between accelerative and gravitational forces from within the confines of a black box, usually referred to as the lift experiment, that act upon it.

It had not been the intention to mention this here, since this would require a full-blown analysis prior to which an extension of the principles of cognoscience (or conscience) would be needed. Yet since this particular box is at the heart of gravity theory, and since this is supported by the concept of spacetime which has been called into question, perhaps it is enough at this point to indicate its weakness philosophically.

Here is how it is usually described: a box is either suspended over a planet or it is accelerating forward in a remote region of the universe. A person in the box releases a weight inside the box, observes it moving towards the floor, but is unable to perform an experiment that would be capable of distinguishing between these two states of acceleration and gravitation. (It should be noted that this is a negative image of the notion of equivalence between motion in space and free fall which is itself problematic, and so I am focussing on this second case with no reference to this for the time being.)

“Black box” thinking entirely dominates how we are to observe the macroscopic world. In fact, it has been so persuasive and successful that it is overlooked that the lift experiment is engineered in such a way that one is forced to conclude what is assumed, and the only person that came close to revealing this restriction to thought is Einstein himself.

This is how he describes the set-up of the lift experiment. A person fastens himself to the floor of a large chest in free space. He continues thus:

To the middle of the lid of the chest is fixed externally a hook with rope attached, and now a ‘being’ (what kind of being is immaterial to us)

begins pulling at this with a constant force. The chest together with the observer then begin to move ‘upwards’ with a uniformly accelerated motion....If he release a body which he previously had in his hand, the acceleration of the chest will no longer be transmitted to this body, and for this reason the body will approach the floor of the chest with an accelerated relative motion. The observer will further convince himself *that the acceleration of the body towards the floor of the chest is always of the same magnitude, whatever kind of body he may happen to use for the experiment.*⁴⁷

Via an equivalence, the italicized part is equated to the fact that all objects fall at the same rate.

It is not the intention here to cover all aspects of this theory, nor all that is implied by the local equivalence principle, but what I would suggest before proceeding is that the passage be read several times, for the fact is that it is engineered as a thought experiment to come to exactly this conclusion, for it has a guarantee built into it to achieve just this.

If we take any journey in a lift, what we notice is that however many or few people in it, it always ascends and descends at the same rate. The reason for this is simple, for it has built into it a regulator that maintains the same speed whatever the weight. This is exactly the case with this black box. Note carefully the following words: “and now a ‘being’ (*what kind of being is immaterial to us*) (added emphasis) . . .” In fact, it is absolutely necessary to make the accelerator (or the cause of change) immune to the weight of the box, in order that we fix our attention on what is happening within it. Clearly, if the accelerator were to play a participative role, as all accelerators in fact do, the outcome would be completely different, and the equivalence could not be maintained.

Putting the case more simply to illustrate this, imagine a balloon carrying a basket and person with some weights. In order to ascend, some weight would have to be dropped. Consequently, if Einstein’s chest were to involve the accelerator, then as soon as a weight is released, the person in the chest would experience an *increased* acceleration counter to Einstein’s expectations. But it is necessary to deflect the attention away from this in

⁴⁷ Einstein, Albert. *Relativity, The Special and the General Theory*. (Random House, 1961), 66.

order to consider the black box and the assumption of the closed universe, and so we are asked to ignore the accelerator.

It hardly seems possible that so simple an oversight has escaped attention for so long, yet this bears witness to the stranglehold that such closed thinking has on our minds, and that we go along with it with hardly a murmur. This is not to say that there is a conspiracy of silence, rather that for the sake of the edifice that has been built on inertia, there exists something of an unconscious spirit of denial, and it is this that makes such errors invisible.

There are many more problems to consider here, and there is also a simple way of resolving this anomaly, but this cannot be achieved while both the principle of inertia and the black box way of thinking are held in place in thought. In this book, I have already suggested that mass-time be employed to replace spacetime. In fact, it is entirely necessary to do so if the general theory is to be reformed. After all, the difference between Einstein and Newton is little more than a difference in range of application, since the notion of gravitation, as a force in one and a field in the other, are entirely related through the retention of the principle of inertia. This principle appeals solely to the downward-looking rational mind, as Swedenborg put it, and entirely pinches off the inner rational mind that, through concepts like mass-time (or desire) restore the need for a correspondential view. But this is a little way off, and these remarks are purely initial overtures.

There is little space to pursue this further here, but I hope enough is presented to suggest how far-ranging the implications of a new philosophy can go once it has developed its own conceptual framework. □