

The Metamorphoses of Philosophy II

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*An Account of Cognitive
Emergence in Philosophy
and Science*

By

Jürgen Lawrenz

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*Whatever is told us, and whatever we learn,
we should always remember, it is man who
delivers and man that receives: It is a mortal
hand that presents it, and a mortal hand that
receives it.*

MONTAIGNE

PREFATORY NOTE

This volume contains Books II and III of our four-part enquiry into cognitive emergence.

A good question for readers who may have gained the impression from the form of this work, that it proceeds in historical progression, would be: Why is the philosophy of the early Middle Ages passed over?

The answer is, that this work is devoted to a particular aspect of the perceptual and cognitive syzygy. This is not a continuous unbroken line, but (as we've already noted in the last portion of the preceding volume) apt to go through fits and starts; and the era in question was significantly poor in this respect, as theology tends to impose a three-fold limitation: the repression of input from the perceptual into the conceptual order, an obsession with self-referential concepts internal to theological doctrines, and a conception of truth that is non-negotiable to philosophical enquiry. Accordingly the first and last of these points leave us with nothing to say that could be of relevance to our context, whereas the first flutter of a scientific spirit seeking a valve for itself in the 10th century could be regarded as the first visible sign of a new horizon beckoning for philosophy to pursue its own native agenda.

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B O O K I I

Torchbearers of European Philosophy

*I have brought thee hither both by wit and art.
Take for thy guide thine own heart's pleasure ow.
Forth from the narrows, from the steeps, thou art.
Expect from me no word or signal more.
Thy will is upright, sound of tissue, free:
To disobey it were a fault; wherefore
Over thyself I crown and mitre thee.*

D A N T E

Scholasticism



I. A New Ascendance

I. *Bleak times.* It seems scarcely imaginable to us that in medieval times, general knowledge had regressed to a pre-Babylonian level. For example, textbooks on reckoning show nothing other than the four basic operations with integers, and as late as the 10th century, the writings of Gerbert (later Pope Sylvester II), an enlightened educationist, had only advanced to the inclusion of a handful of elementary geometrical propositions. The struggle to establish Christianity across the breadth of a continent which for upwards of 800 years was beset by warring invaders, drifting populations as well as internal ideological schisms absorbed the intellectual and practical energies of men to the full who, in the perspective of the present day, laid the foundation for the cultural unity called 'Christian Europe'. If it must be admitted therefore, that civilisation in medieval Europe found itself at a level of the utmost rudimentariness, barely adequate to justify the use of such an elevated term, there were also causes well beyond control.

The necessity to insist on this reflects an anachronistic tradition of writing about the Middle Ages on the part of authors who, mostly from a wish to gild that barren lily with a few seams of ancient gold, postulate a 'never completely broken' continuity with classical antiquity. But this claim rests entirely on premises re-exported into the medieval intellectual landscape by researchers completely familiar with antiquity, who detect and therefore *recognise* certain fragments and then jump to the erroneous conclusion that their existence vouches for a spread of familiarity, however thin. Yet, how then do we account for the single copy of Lucretius in Europe, that was hidden by a monk in a Spanish monastery? These are unforeseeable chances, of which no-one

can say what they mean, until they mean something to someone!

For an understanding of the re-emergence of philosophy in Europe, it is therefore crucial to acknowledge that its career was not launched in a tentative groping back to classical learning, but as a response to the sudden and explosive influx of a massive corpus of knowledge that had been cultivated by the Islamic civilisation for as many centuries as Europe remained a cultural backwater. Men of that age, Herbert Butterfield wrote, * “found themselves endowed with an explanation of the physical universe and the workings of Nature which had fallen upon them out of the blue” and could not have struck them as anything other than a *new and completely different vision* to their own, untainted by any notion of tradition, heritage or classicism, let alone affiliation to a supposedly related civilisation.

Greek learning, transmitted by Islam, flooded Europe like shiny coins newly struck by the Mint and elicited a remarkably exhilarated response. Inside 100 years, the complete Aristotle, Ptolemy, Euclid, Galen, a host of medical texts and a considerable bulk of Arabic science became available to scholars at Bologna, Paris and Oxford. The exhilaration consequent upon these discoveries explains one thing, namely the freshness of attitude brought to bear on those ideas. More pertinent to our context, however, is the avoidance of *engulfment*. Stand back for a moment and reflect on how easy, indeed self-explanatory, it might have been for medieval thinkers to be overwhelmed by the logical force and sheer sophistication that lights up on every page of Aristotle. The fact is, they *were*, but not to suffocation point. An autonomous ‘reserve’, a niche in their minds where something altogether different kept simmering away, can be seen every now and then to break out of hiding and inflect the inculcated doctrines: timorously at first, but like a torrent after 1277.†

This is not adequately explained by reference to external impingements nor even the clash with their Christian upbringing. But it is undoubtedly the case that the men who figure promi-

* Butterfield, Herbert: *Origins of Modern Science*. London, Bell 1950, Ch. I.

† This year marked the point of no return for European civilisation on its forward march and, incidentally also for Islamic culture in the negative sense, as fundamentalists took power and throttled the progress of its civilisation to a higher plateau that was certainly achievable. See Sect. 2 *infra*.

nently in this chapter brought a native cognitive disposition to bear on Aristotelian thought that was shaped by altogether different factors than we might presuppose. With the shift of power to mainly northern and western races, the mental landscape also begins to reflect a shift, due to the influence of a changed physical environment, different climate, food, living habits and sediments of beliefs and perceptions gradually overlaid by a common value system, but by no means obliterated from memory. Before embarking on a study of the emergence of scholastic philosophy, it is therefore appropriate to insert here a brief restatement of the principles and issues partially dealt with in Book I and align them to the operative focus in this part of the book.

2. *The hidden gestalt.* The neuronal system comprises a gigantic tracery of nerve fibres throughout the body whose function is, *inter alia*, to remember life preserving and iterative aspects of their functioning. In those slow-moving ages which preceded the modern era, nerve cells had much more time to become structured and assembled in ways to maximise the survival and procreative opportunities of population segments whose mental and cultural habits had a long-enduring basis in their particular 'fitness landscape'. Hence a particular way of seeing and reacting to the world would confer clear benefit on a human organism that has little choice but to belong to the group into which it is born.* Once we have accommodated ourselves to this way of understanding natural selection, it becomes plain that the perceptual and cognitive constitution of individuals born into that culture would show an innate predisposition (through the specific organisation of neurons dedicated to these tasks, that must of necessity be different from those of other groups.

Now cognitive patterns, as already stated, are not a cause, but an *effect*—resultant of the specific perceptual and intuitive neuronal organisation that pertains to the populations in question. Therefore they also demonstrate the emergent properties of that specific type of organisation. Let me point to air, water, nutrition and the whole gamut of environmental factors as influences that can hardly be overstated, upon which the cultic or cultural prac-

* Acknowledged recently in pioneering studies by E. O. Wilson and Charles Lumsden, *Promethean Fire*, Harvard University Press 1983, who devised the coinage *epigenetic* for it.

tices in use among those populations ensue (for instance, those practices may involve certain alimentary habits with obvious outcomes to the composition of the blood).

Cognitive patterns then, confer a particular way of looking at problems, whether old or new; they allow light to fall upon these problems from a particular angle and illuminate some aspects rather than others. Although the outcome need not be anything other than a particular way of life, with or without culture, sophistication or philosophy. Certainly philosophy is not a necessary appendage to cognitive patterns, yet conversely no philosophy can be comprehended without recourse to its underlying cognitive patterns. Philosophy constitutes, as it were, an emergent value in the manner of a *potentiation* of cognitive patterns, or as the emergence into consciousness of processes of thinking that, having passed a certain threshold of expansionary complexity, make their way into the light, where they may collect old concept or bring new ones with them, gaining orientation on those problems in the light of these autochthonic patterns.

Cognitive patterns therefore predate both concepts and percepts but retain their effectiveness for the life of the culture which begot them, watching like an *eminence grise* over the proper nurturing of these juniors. With concepts and percepts the situation is a little more complicated. Speaking generally, percepts precede concepts, but this is not an invariant rule and in the main applicable only to advanced (articulate) phases of thinking such as are presupposed for philosophy. Percepts tend to assist in the validation of concepts along the lines of cognitive patterns, and if that connection fails, a concept may simply fade out. There are innumerable historical instances of concepts being proposed and failing to connect, and there must be many that never made their way into print. Finally cognitions themselves tend to be somewhat ambiguous: they rely on concepts, which are their articulations, while wholly successful and enduring cognitions are generally those which can additionally call upon a settled percept structure. By the same token, cognitions need not have any percept structure behind them at all—many metaphysical ideas dispense with it, which is one explanation why such ideas have a hard time maintaining themselves vis-à-vis common sense and the naive realism which is the mainstay of science.

In Greek philosophy, possibly owing to historical accident, we

can trace an exact and unquestioned topography of its cognitive course, including its beginning in the teachings of one very definite individual. Similarly there is no doubting the exact window in time when Chinese philosophy began. In contrast to this, the genesis of European philosophy cannot be fixed either in terms of time or personality. The only real help we can call upon is a juxtaposition of concepts.

Speaking of the Greeks, we saw how the initial idea of the *arche* of things betrayed an innate disposition for the *form* of things—a principle protected by the Greeks with unexampled tenacity and fidelity through to the elaboration of a *formed* cosmos. But no western thinker for almost a millennium cared a straw for the *archai* as an explanatory device for the autonomous (non-divine) complicity of matter in the generation of intelligible phenomena. Western philosophy *begins* with the totality of Creation and with an idea as unclassical as may be imagined, which arose from a re-definition of the term 'energy'. Its coherent intellectual elaboration was the work of those thinkers now referred to as 'scholastics'; but even though this new spirit required a preparatory 300 years, it did not spring up unannounced from a vacuum.

JOHN SCOTUS ERIGENA

3. *Aurora borealis*. As a harbinger of things to come, let us consider a truly extraordinary maverick. As his name indicates, he was a son of Ireland, where owing to certain bizarre historical accidents a handful of monastic enclaves of Greek language and philosophy persisted while Europe had long forgotten that once there was such a thing.

This is indicated by the opening salvo of his treatise on *Predestination*, which he had written as an invited arbiter between two continental ecclesiastics who had disputed on the matter:

*In earnestly investigating and attempting to discover the reason of all things, every means of attaining to a pious and perfect doctrine lies in that science and discipline which the Greeks called philosophy.**

* Quoted in Durant, Will: *The Age of Faith*. Simon & Schuster, New York 1950, p. 477.

This was worse than the dispute he was called upon to settle and promptly resulted in condemnation by two Church councils, who demanded his extradition for trial. But Charles the Bald, at whose Palatinate School Erigena was retained, protected him from such untoward consequences; and thus encouraged, John proceeded to his major opus, *De divisione naturae* (867), according to Father Copleston a “philosophical system which stands out like a lofty rock in the midst of a plain.”*

What is unusual and completely uncharacteristic for its age is, firstly, that it is a *philosophical* system and secondly, a *system* of philosophy, nor (as the ensuing will show) overshadowed by its roots in theology. Thus in spite of innumerable appeals to precedent and orthodoxy, nuances are discernible in this text which seem decidedly more attuned to ‘what is to come’ than to ‘what has been’. Copleston (despite his own leanings on precedent) seems himself to have felt the impact of novelty, for he writes: “One can scarcely avoid the impression . . . that one is watching a vigorous, profound and original mind struggling with the categories and modes of thought and ideas which former writers had bequeathed to him [and] moulding them into a system and impregnating the whole with an atmosphere, a colour and a tone peculiar to himself.”†

Many things about this book are quite unprecedented and its intellectual isolation strikes us like a resonance across the centuries of another maverick’s system, that of Lucretius, even though each vibrates in a mutually exclusive frequency range. Where the former intones its message in the dim and desperate auburn of an Indian summer, the latter sports all the silvery clangour of new hope and of a warming of the blood in frostbitten brains. But like Lucretius, Erigena embraces all of Nature in his text—Nature clearly understood as the plenum of the phenomenal and spiritual worlds.

Noteworthy from the outset is the fact that the book comprises throughout a searching theory of knowledge. It is in its very conception an *epistemology*, an analysis of the concepts we fashion vis-à-vis God and Nature and of their reliability in terms

* Copleston, Frederick: *History of Philosophy*. Vol. 2, Pt. II, ‘Medieval Philosophy’. Doubleday, New York 1962, p. 129.

† Ibid.

of the semantics to which we entrust a defining role. This investigation yields startling results, which are perhaps best understood from the perspective that Erigena's system of Nature is not concerned with the description of a cosmos, but a *universe*. For although it is offered in the context of the Pseudo-Dionysius (whom he had previously translated), the departures from neo-Platonism cannot be missed, and these are precisely the issues to be moved into the foreground here.

In emphasising this altered relation—*cosmos vs universe*—I am bringing into coincidence with its *philosophical* origins a concept that arose spontaneously as a *religious* symbolism, passed through several phases of philosophical formulation towards a firm cognitive modelling and acquired exclusive currency in *science* as a result of the elaboration of its percept structure in the works of Kant and Laplace. Throughout this cognitive evolutionary continuum, it persisted as a visible thread in all western cosmologies, defining itself as an open dynamic system in opposition to the closed Euclidean structure of the Greek cosmos. Many writers may all say the same thing and use the same words, but their *meanings* may differ on account of the presuppositions they bring into their context. This is the point here. The Pseudo-Dionysius (let alone older systems of Nature) could not possibly be misconstrued as displaying the same slant on cosmos and universe as we attribute to Erigena. On the contrary, it strikes us that in the tangle between Hebrew, disparate early Christian conceptions and Neoplatonic cosmologies, the notion of *transcendence* seems to hold the centre, of which it is more or less indifferent whether or not a correlate in actuality goes with it, because it is not crucial to the idea.

Similarly with his theory of knowledge. Some of the nuances of which I spoke are not at all overt; one has to seek them out; and in this behest it may be advantageous—once all due allowance has been made for his sundry borrowings—to adopt the position of the 'innocent eye'.

Knowledge, Erigena says, has two forms of expression, respectively the positive and negative. Affirming that 'things are' represents the positive pole; such statements define phenomenality and assert perceptual properties. This gives rise, however, to the problem of how one can adequately convey such a notion as (e.g.) "God is wisdom". For in doing so, we are borrowing labels that

apply to *created* things which have attributes. God does not; accordingly the label expresses a falsehood, which is forgivable only *metaphorice* or *translative*. God, a transcendental Being, is *beyond* wisdom, is 'super wisdom'; hence it is logical and indeed imperative to use the negative to express this wisdom. God is *not* wisdom, as indeed 'knowledge is *not* wisdom' to the extent that it reflects empirical acquisitions, and in this juxtaposition we can discern relevance of this demarcation.

Yet the dilemma is not so easily resolved. In fashioning the idea of a 'super wisdom', is not the mind inadvertently positing a *via affirmativa*? Not so, says Erigena, for the expression has *no content*. It does not countermand the need for the negative. In due course the same train of argument leads to an interdict on the term 'essence'; and once again it is illicit to say, "God is essence", for to suppose otherwise would invite us to conceive of him as substantial, quantifiable and imbued with dimensionality, all which can *not* be predicated on the supreme Being (all predicates have opposites; God does not). Moreover, the category 'relation', as applied to the Trinity, is likewise an illicit phenomenological comparison.

One can savour the paradox of these analyses even today and in the absence of any religious belief. I remind the reader that we are confronting a difficulty also faced by Plato in his *Parmenides*. For ineluctably the question puts itself: what contact can we have with such a super reality and conversely, how can this super reality (God) firstly create and secondly maintain contact with us? If God does not move because he is movement-in-itself; if he does not act because he is action-in-itself; and if he does not create because he is Being-in-itself, where does this leave *ex nihilo* creation, the cornerstone of Christian theology?

We must not assume, Erigena replies, that God existed before the world was made, because this would place him in a temporal frame. Hence the only possibility is that God and Nature are co-eternal, therefore God subsists in all things, is the essence of all things, and all things that are, are God. *Creating* must then must be understood on the level of metaphor; and this constant reminder of the inadequacies of our commonly employed articulation of such notions at last elicits from him a dictum that must have sent his readers home shivering: "Reason precedes authority," he writes, "for all authority that is not approved by

true reason seems weak. But true reason, since it rests on its own strength, needs no reinforcement by authority."* Applied to the scriptures, this demands from us an appropriate discrimination of textual reading. The expressions occurring therein are addressed to all men, including the untutored; they are therefore couched in metaphors which it behoves the intelligent student to recognise. He points to the frequent use of "and God made" in *Genesis*, which must not be confused with human 'making', for in God substance and essence, as well as creation, are ontologically indistinguishable.

Yet this world *is* created. Erigena refers us to primordial causes (*prototypa*), existing as ideas of the world's manifold in the divine mind; but in spite of their resemblance to Platonic ideas, they are conceived as existent in logical rather than ontological phase. Generation is thus not a temporal, but a *continuous* process, somewhat like precipitation of matter by the agency of God's will. All created matter plays a participatory role in this process, wisdom (for example) precipitating from its prototypical wisdom-in-itself. Creation is by individuation of the ideas into monads of matter, from there to speciation. These monads represent a kind of intermediate tier in the process towards physical reality; feature- and characterless in themselves, they acquire properties in their translation into actuality.

A modern reader might (legitimately) understand this in terms of a *flow of energy* through the universe, perhaps as the uncompression of the divine super essence and enlist support from Erigena who quotes the example of a spring bubbling out of a mountainside and eventually issuing in a mighty stream. This finds him redefining *ex nihilo* creation. Although *nihil* must be understood as the negation or absence of created reality, it does not mean the negation of the ultimate essence of things. Creation, as the image of flow conveys, can be interpreted as a theophany, as *the self-manifestation of God in his creation*. "God does not know himself what he is, because he is not 'what'. In certain respects he is incomprehensible to himself"; hence God makes himself known to himself in his creation.

All creation is thus a vast outflow of the divine spirit into consciousness in his creatures, converting essence into matter.

* *De Div. Nat.* i, 69.

Necessarily this will be answered in time by an inward surge and re-contraction of all matter in God.* Erigena also denies the existence of good and evil except as attributes; this (logically) entails a repudiation of the concept of eternal punishment for unrepentant sinners. In the recontraction, sin and evil are left behind, leaving nothing and no-one to punish. It is of a piece with this doctrine that Eden and Hell are not localities, but states of empirical being.

Erigena's book is showcase of tremendous erudition. But that's not the main purpose of our preoccupation with it. Something new is tentatively, gingerly rising to the surface and *transforms* some of the thought patterns bequeathed to him; and our discussion has concentrated on those in which the displacement of focus seems most in evidence; where the vision seems, as it were, unbolted from the platform that purports to be its conveyance.

For example: Whose first thought on hearing about monads would not be of Demokritos (or Epikuros/Lucretius) on one side and Leibniz on the other? Are the prototypes Plato's or Kant's intellectual property? Is the divine totality of his pantheistic doctrine indebted to Parmenides or Spinoza? Does the spirit fusing with matter stem from Anaxagoras or Hegel? Is that cloud of Being which precipitates into differentiated phenomena an echo of Anaximander or a pre-echo of Laplace? And finally the theophany, so reminiscent of respiration and inspiration: residue of Eastern (Indian?) lore or anticipation of 20th century cosmic anthropism?

The mere possibility of raising these oppositions should alert the reader to an incompatibility which is revealed, admittedly, only to a retrospective gaze. It is that in each of these pairs the percepts *derive* from a static, atomistic, geometrical, Euclidean intuition, but they are here denatured from their models and *inflected with a fluid imagery* of which the immensity of the creation scenario is the most characteristic exemplification. Fluidity, a principle of dynamic transformation and restlessness, removes concepts from numerability and tends to blur outlines, but we have only to look forward the 'sfumato' haze of stained glass windows of St Denis, to see exactly the same spirit prevailing in an authentically north-European architectural style. Abbot Suger

* *Ibid*, v, 3.

took the same decision as Erigena, albeit overtly and deliberately, of emphasising the *fluidity* of light in his cathedral, exploiting the Sun's rotation to effect a ceaseless change in the devotional moods. It was, if you like, indication of a tendency to mystical idealisation, yet at the same time an implicit utterance of the belief that God is myriad causes *correlated* to the one, single uncaused cause of his Being.

Erigena's fluid images, whether hints or precursors, depict similar flowing streams of divine energy through a cosmos to be filled with the spirit's essence throughout its limitless extent, likewise of a mind embracing that totality of Being in an act of self-created consciousness that is on one level of understanding an eternal diffusion and precipitation, on another respiration and inhalation of time itself, so as to make intelligible and discriminable the identity of time's passing and eternity's stillness.

These are the nuances that came into being not only in Erigena's writings, but in the world to which he belonged. Philosophically his book is an embryo, child of hyperborean parents whose gaze was formed by the limitless horizon of the 'true ocean' and the grey, foggy light sweeping down from the polar regions. Twenty degrees parallel make a lot of difference to the light, and we are creatures of the eye. An epistemology of vision still needs to be written, but among its first finds would be that *all cognitions arise ultimately from vision*. A mind needs *percepts* to start thinking; logically the way percepts are perceived reflect the constitution of visual intuition; and this in turn shapes the cognitions we formulate. This is not a scientific law as such, but by the same token there is no question that the philosophical system of Erigena is bathed in a specific and unique kind of light which reappears in the intuitions of his contemporaries in their *view* of gods, world and men.

ADDITIONAL NOTE: The comparison offered above with Suger is apt insofar as we see similar novelties springing up in many places at this time. Reference is made by Erigena to the practice of *diaphonia cantilena*, singing in harmony, which apparently originated with Welsh choristers, but became widespread in north-western Europe by the 10th century. The similarity to Suger's chromaticisation of his cathedral interior is palpable. Again, the

Carolingian alphabet, devised by Alcuin of York, proceeded from a (correct) intuition that the geometric shapes of Roman letters retard the reading *flow*: his designs facilitated the *blending* of letters and thus stamped western reading patterns according to these desiderata (you are reading his letters now). Indeed a good argument could be made that in the years ensuing after Charlemagne's death, the first seeds of a new way of looking at, and understanding the world, began to take shape. The example of the Vikings is the most compelling evidence of a spirit of adventure seeking an outlet, that seemed to be so full of energy that their oars did not come to rest until they reached Canada and the Caspian Sea on opposite sides of the world—a harbinger of the future, that would see their kinsmen 500 years down the track take complete possession of the terrestrial globe.

METAPHYSICAL REBELLION

4. *The School of Chartres*. Beginning with roughly the 11th century, a new philosophical temper swept across Europe. Undoubtedly the hard-won political stability was instrumental in instilling a new sense of confidence. From Plato's *Timaios*, the scholastic thinkers derived a vision of a rational cosmos, of a world governed by intelligible causes and structured by a divine mind so as to portray itself to the human student as an orderly, wholly integrated unity of matter and spirit. The influence of this doctrine was so pervasive as to infiltrate and modify even theological thinking and culminated in the 11th century in a wave of Platonic enthusiasm whose most noteworthy side effect was a new interest in Nature and the gradual disavowal of the image of worldly life as a little cloister garden (Augustine) which should be left to itself and the Lord's providential care. The re-interpretation of God's creation in the light of that resurgence, guided in the main by the idea that the Creator had not withdrawn from the world after the 6th day, but in fact saw to the continuing embellishment of his work, informed teaching at the highly influential School of Chartres, where under such luminaries as Thierry of Chartres and William of Conches this realignment of thinking was given powerful impulses. To these men it was self-evident that the God whose work was described with such profound rationality in the *Timaios* had not stooped to enlighten the simple rustics who wrote the Bible and accordingly "to seek

the reason of things and the laws of their origins is the great mission of the believer . . . [but] it is not the Bible's role to teach you the Nature of things, that is the domain of philosophy".*

By means of these bold intellectual forays, the scholastic mind in a manner of speaking 'prepared itself' for the impending culture shock associated with the rediscovery of Aristotle and the abundance of knowledge and wisdom pouring in from the borders of Europe with Islam. The fresh breath of spring felt to be wafting through the lecture halls at Chartres and other sites of learning instilled in these men and their students a confidence that their God-given reason was an instrument *intended* by the Creator to be used in the exploration of his designs. So intensely this challenge must have been felt that in their daring many of these scholastic thinkers took unconscionable risks in promoting their inquiries and pursued their truths and suffered the sometimes direful consequences as fervently as any martyr of early Christendom. It is easy to see how the scientific pursuit of later times took its charter from this first flurry of an anti-transcendental revolt.

ABÉLARD

5. *Disputatiousness.* Abélard would seem to be an early and trendsetting witness to this ferment. His book *Sic et Non* of 1122 is full of disputations for and against all manner of topics and sets quotations from many different authorities—including the Bible and the Church Fathers—against each other, so that they are shown up as contradictory opinions; but generally he refuses to commit himself one way or another, allowing the quotations to make their own effect. One cannot but suspect that sheer love of argumentation and the exercise of his own ingenuity (and possibly showing up the ignorance of others) was a strong motivation.

This is not said in dismissal of him as a merely opinionated casuist. The intent was honourable, whatever its method; for that "truth which in search of itself has no enemies" might yet encounter numberless enemies with contrary vested interests bar-

* William of Conches, *Philosophia mundi*, i.23, quoted in Chenu, M. D: *Nature, Man and Society in the 12th Century*. Chicago University Press 1968, p. 11.

ring the searcher's way—as all of us know only too well. Hence Abélard deserves credit for having brought to light the first faint tremors of a proper philosophical epistemology in his work, for the opinions which he lampooned were in their majority based on rubbery concepts or else mere verbal expedients appealing to 'higher' meanings which generally elude clear enunciation. There is much force in the following exhortation, easily comprehended irrespective of its context, for were he alive today, he would scarcely need to change much of his actual wording:

*Truth cannot be opposed to truth or good to good in the way that false can be found to set against false or evil set against evil. All things that are good are harmonious and congruent. All knowledge is good, even knowledge of evil . . . for the just man to be on guard against evil, it is necessary for him to have known in advance what evil is. . . . On these grounds therefore we prove that all knowledge, which is from God alone and proceeds from his gift, is good. Consequently it must be allowed too, that the study of all knowledge is good.**

6. *The meaning of meaning.* As a thinker endowed with a razor sharp intellect, Abélard sought to grasp the nettle of universals, which had in late medieval times acquired a certain patina grounded in a selective misreading of ancient authorities and secure from scratching only in virtue of the dogma in which it was framed. From his teacher Roscelin, the young student inherited a batch of corrosive propositions (he did not go along with all of them): principal among them that universals are after all nothing but words in the wind (*flatus vocis*), concepts of convenience by which we may identify and *name* a class, e.g. the class of all men is one such universal. But if names (*nomina*) can just as easily be affixed to *empty* sets (e.g. the class of all gryphons), then we are faced with the problem that the mind may evolve universals which refer to nothing.

The Church, however, had long laid claim to being regarded as one such universal and custodian to another, the Trinity, as the

* *Dialectica*, quoted in Haren, Michael: *Medieval Thought: The Western Intellectual Tradition from Antiquity to the Thirteenth Century*. St. Martin's Press, New York 1985, p. 106.

two eternal ideas of faith. In this dispute, therefore, her spiritual integrity was at stake. She could scarcely allow the challenge or the even more disastrous affront to the Trinity to go down unanswered. If only individuals really exist, the latter must logically be a class of three individuals and where then are we except with polytheism? Hence her veto.

The Church did find an ally in Anselm with his assertion that there must be two classes of universals, namely *comparative* and *absolute*, the second furnishing the yardstick against which to measure the meaning of the first. He drew from this a purely propositional conclusion, i.e. that *absolute universals* must have existence.* Abélard dismissed it with a contemptuous snort. It is nonsense, he said, to speak of comparative and absolute universals; we do not predicate things but words; yet words not as things, but *meanings*. They are nothing other than *instruments of thought*. He gives as an example the idea of resemblance: now this is clearly a cognisable quality inherent in different objects (for instance twins), *but it is not a thing*. Yet this leaves us with the problem on our hands what content these *nomen universale* possess. Abélard gives a crisp illustration:

When I hear 'man', a certain figure arises in my mind which is so related to individual men that it is common to all and proper to none . . . When I consider this man only in the Nature of substance or of body, and not also of animal or of man or of grammarian, obviously I understand nothing except what is in that Nature, but I do not consider all that it has.†

In other words, the logical unity of a universal affects only the predicate, which is a name without obligation to be representative of any *res*, or individual specimen.

This may sound obvious to us today who have grappled with such problems and resolved them, but it must be allowed to be a

* From this ensued the notorious ontological proof: God is the most perfect Being conceivable to us, but perfection lacks one critical ingredient: being a universal it cannot exist. Accordingly there is a contradiction of meaning, which must be resolved as above. Hence God exists. It must be admitted that this feeble exercise met with immediate rebuttals, which made the point that the existence of perfect fish could be proved the same way.

† *Logica nostrorum petitioni sociorum*, quoted by Copleston, op. cit., pp. 171-2.

pretty good start to some real philosophy, the more so as it was the first crack in the wall of universals which had been too casually treated prior to this.

Most dangerously to himself, Abélard cultivated a form of 'Cartesian doubt' in an age when it was fraught with the risk of lethal consequences: "The first key to wisdom is assiduous and frequent questioning . . . for by doubting, we come to enquiry and from thence to truth." With his courage he set an example which the Paris University was to adopt as a policy of debate, so that a.o. Thomas Aquinas was later to propose his theories there without fear of reprisal. As for himself, Abélard suffered the usual pressures, having to recant and being eventually shunted out of the limelight. This is how most such disputes ended in the 'Age of Faith'.

"This man has no mind to believe what his reason has not previously argued," St. Bernard wrote to the consilium of bishops sitting in judgement. With that sentence he summed up the dilemma of philosophy not only for his contemporaries, but for the whole epoch. Why should we trust reason when faith provides so much the simpler answers? To that question a consummate answer was framed by a contemporary who suffered a similar fate, the aforementioned William of Conches; the quote might stand as a beacon of the unquenchable thirst for truth among men whose intelligence had gone to war against the easy gullibility inculcated by dogmatists and perceived that motivations other than faith account for it:

*Because they know not the forces of Nature, and in order that they may have comrades in their ignorance, they suffer not that others should search out anything, and would have us believe like rustics and ask no reason . . . Rejoicing not in the many but in the probity of the few, we toil for truth alone.**

The impact of Aristotle on scholars with such predilections was nonetheless amazing. They might have ignored him and his materialism, and carried on by simply augmenting his logical theories, of which a scratchy knowledge had been carried along the

* Thorndike, Lynn: *Science and Thought in the Fifteenth Century*, New York 1929, p. 50.

theological mainstream in virtue of Boethius' translation. Their enthusiasm in clutching Aristotelian science and philosophy to their bosom is not readily explicable from the point of view of any of the customary categories into which we might look; it is scarcely possible to maintain that the Church pushed them in that direction, nor that they flocked to him and left their own creed behind; and mere curiosity, no matter how feverish, hardly suffices to explain the advancement of Aristotelian studies to the top bracket in the universities. All these factors contributed indeed; but when (as occasionally we must do) our sights are adjusted to medieval culture as a whole and we have adequately assured ourselves of the priority and indubitable leadership of Islam, then plainly the puzzle confronts us why Arabic Aristotelianism declined almost coincidentally with its introduction into Europe. The answer to this will be found in *the creation of a new social entity in Europe*—essentially a shelter from authoritarian repression.

2. Occupants of a Neutral Space

7. '*Body corporate*'. Lacking in the medieval intellectual environment was an element which we would identify as the freedom to speculate outside the confines of religious doctrine. Yet throughout the era a fairly sizeable neutral niche within this heavily sacerdotal society had been occupied by one branch of learning and profane interpretation, namely the *law*, which in many matters was permitted to jurisdect in an atmosphere of impartiality. This neutral intellectual space, simmering along for several centuries as a pendant to the dominant thought structures, flared up in the 12th century in the birth of a new social concept, "the legal and political principle of treating collective actors as a single entity—a *corporation*."^{*} It is a cause only rarely considered in its full weight—but the future of philosophy hung in the balance on this thin thread.

The notion of a 'body corporate' espoused by the law, together with a clear articulation of its legal implications, enabled men in the trades and professions to carve out enclaves for themselves

* Huff, T. E.: *The Rise of Early Modern Science*. Cambridge University Press 1993, p. 119.

which in due course were to bear the standard of internal accountability and independence from religious overlordship. In politics, the result was the eventual segregation of secular and ecclesiastical authority, which after some 200 years of arguments over the competence to collect taxes, dispose of deceased estates, invest vacant bishoprics etc. was resolved to a significant degree in favour of secular authorities. Implied in the idea of a collective enterprise was the principle that

a corporation (*universitas*) . . . possessed a juridical personality distinct from that of its particular members. A debt owed by a corporation was not owed by its members as individuals; an expression of the will of a corporation did not require the assent of each separate member but only of a majority. A corporation did not have to die; it remained the same legal entity even though the persons of the members changed.*

We see at once where the word 'university' comes from and what its meaning implied in the case of learned congregations. Huff notes as important pointers to the future *election by consent, power of attorney* vested in designated individuals and, most importantly for the present context, the backbone of the theory, which revolves around accountability, viz. "the allegiance of the individual members was said to be to the corporation [and] these ideas served to create a foundation for a public versus private sphere of action and commitment."†

The catalyst in the intellectual sphere was the aforementioned introduction of Aristotle into curricula. This was powerful stuff to a young, burgeoning and still very naive Christian Europe. It had the effect of revamping almost overnight the seven liberal arts taught in the universities with completely new subject matters and novel methods of their treatment, and in particular a segregation of studies into rational, natural and moral faculties, of which the prime mover was Paris University. "The net effect of this educational innovation was to grant philosophy (including natural philosophy) an autonomy and independence within the university previously unavailable" and by implication new standards of research, which were to grow into a cast-iron ethic

* Tierney, Brian: *Growth of Constitutional Thought*. Cambridge University Press, New York 1982, p. 19.

† Huff, p. 147.

to be explicitly acknowledged as the '11th commandment' by institutional research from that day forth, viz.:

1. *Universalism*. Knowledge must be judged impersonally and in disregard of personal idiosyncrasies, ethnic or kinship ties or religious and national affiliation;
2. *Communalism*. The findings of research belong to the larger community.
3. *Disinterestedness*. Pursuit of the truth implies eschewal of personal aggrandisement and gain.
4. *Organised scepticism*. This institutional imperative enjoins detached scrutiny of beliefs and reliance on empirical methods of validation.*

8. *Fateful year*. Historically and intellectually, the aforementioned year 1277 figures as a 'pressure point' in the evolution of western thought. In the hue and cry over Aristotelian philosophy at Paris University, the hostile authorities who continued to exercise control over the curriculum came to a snap decision. The crucial theological issue was that Aristotle's view of an uncreated world could not be bent to suit one of Christinity's central themes, *ex nihilo* creation by an omnipotent God and its design as the theatre of an ultimate 'Judgement Day'. The philosopher was banned, all study of his work withdrawn.

A very unexpected result ensued from this decision. Aristotelian thought was by now nested in almost every branch of study; in effect therefore the condemnation acted as a creative catalyst of the greatest potency and stimulated the energies of thinkers to fill that void from their own resources. Suddenly those sharp-witted, almost excessively intelligent scholars were forced to turn their attention to possibilities beyond the realms of reality catered for in the Aristotelian universe and thus scattered ideas and principles into the wind that bear an uncanny family resemblance to their kin in centuries yet unborn. In those few years we seem to be witnessing a search beam ricocheting wildly through a randomised perceptual and intellectual terrain from which then emerged a wholesale clutch of cognitive patterns that might not have seen the light without this decretal interference.

In the event the condemnation could not be long maintained. The curriculum had been approved; therefore it could not legally

* *ibid*, p. 192.

be suffocated by objections even from above, as neither teachers nor student had transgressed beyond its terms. We observe parenthetically, that a secondary, but equally important problem for the authorities had been the substantial drift of students away from theology and towards Aristotelian studies. After a judicial decision re-legitimised them, the effect highlighted above led to an *irreversible* fanning out of inquiry, tantamount to the sudden discovery of an autonomous extra-Aristotelian realm of knowledge, which could be probed for its cogency not only by measuring up against the reinstated methodology but going beyond it into speculative regions where Aristotle's vision had remained solidly earthbound. Many new ideas in every branch of learning sprouted their seeds in which the philosophical adept cannot fail to recognise an agenda taking shape that was to inform western intellectual endeavour for almost a millennium to come.

These ideas, and the personalities associated with them, comprise a scintillating gallery. The roster is a selection; no comprehensiveness is intended. Western philosophy, partly owing to its historical and archaeological impetus, is richer by far than all previous and contemporaneous movements; but the point that has been made will forcefully impress itself without further prompting.

From now on ideas, intuitions, perceptions and conceptions of an empirical world almost unknown to the scholastics, suddenly began to grow up from their specific spiritual roots and linked up with a restless dynamic temperament quite unlike anything seen before. That yeasty sense of incipient adventure to be detected in the School of Chartres and among such independent minds as Abélard's is therefore a harbinger of the kind of *sensitivity to irritation* that is entirely characteristic of the western Mind.

3. Scirocco

LEONARDO FIBONACCI

9. *Double-ledger thinking*. Occasions of emergence strike where and when they list. Big, powerful ideas often enter the mainstream of thought as little rivulets, become playthings to marginal philosophers or find themselves re-routed by moralists anxious to keep the devil out of their game. If luck should strike, the idea may eventually encounter an adult-sized apprehension and change