Memory and wisdom: approaches to the elemental possibility of Utopia

Assuming that a common form of knowledge is generated by the conscious aspiration to dream of a better world, often geared by nostalgia for a lost paradise or hope for a brighter future, i.e. by the great temporal utopian impulses, this essay attempts to articulate the role of memory in representing the world as potentially better as it is. It will do so by resorting to Umberto Maturana and Francisco Varela’s theory of knowledge deployed in their *The Tree of Knowledge* (1984) and two relevant utopian examples.

At the beginning of the first chapter of *The Tree Of Knowledge* (1984), a book that has become a classic in the field of interdisciplinary research into the phenomenon of human knowledge, its authors Humberto Maturana and Francisco Varela, experts in cognitive science, present an original reading of a painting by Hieronymus Bosch, *Christ Mocked (The Crowning With Thorns)*. Of the four figures surrounding Christ, there is one who is holding firmly onto his cloak as if he wants to pull him down to the ground. According to the authors, this figure represents the temptation of certainty – that with which thoughts, ideological configurations, belief systems and scientific theories are articulated. This certainty seems to derive from the way we perceive and know the world, which outwardly appears to be composed of discreet phenomena bestowed with an intrinsic nature and solidly defined by their functional autonomy. What these two authors thus seek to demonstrate is that the world of certainty in which we live is founded on solid perceptual beliefs, i.e. the way we process our sensory experience is determined by our structure of knowledge. This observation is reversed in the following aphoristic formulation: “We do not see the ‘space’ of the world; we live [in] our visual field. We do not see the colours of the world; we live [in] our chromatic space” (Maturana and Varela 2007: 28).
In some ways the authors are echoing assumptions from an area of philosophy that has almost been consigned to oblivion, namely idealistic gnoseology, but they have reworked and developed it with contributions from several branches of science, particularly the biology of knowledge. Both authors strive in their book to point out what they consider to be the taboo, or “crying shame”, of Western culture, which is its choosing to ignore “knowing of knowing” and thus preferring to forget the basic fact that our experience of the world is validated by the functional structure of knowledge that we have of it. According to Maturana and Varela, “the inseparability between a particular way of being and how the world appears to us” (31) shows “that every act of knowing brings forth a world” (31-2), and their suggested means of making up for the deplorable ignorance and neglect of this fact is by recognizing the vertiginous circularity of their theoretical endeavour. This comes from the result of “using the instrument of analysis to analyze the instrument of analysis” (30), or, that is to say, it results from using human general knowledge, and the authors’ particular knowledge, biologically, socially and linguistically, to (scientifically) explain the biological, social and linguistic way in which knowledge is processed in general. Maturana and Varela thus recognize that the problems inherent in any method of inquiry into the fundamentals of human knowledge are intertwined with the psychosomatic constraints of our cognition and its tool, language – it is almost like wanting “an eye to see itself” (30). In outlining the conditions for explaining the phenomenon of knowledge, they define knowing as doing, i.e. as an action of living beings, following the hypothesis that the autonomous organization of this knowledge results from a series of interactions that allow their conservation and adaptation. The authors’ complex study into the origins and processing of knowledge includes three terms which we consider key in developing our argument about the equation linking memory and knowledge, namely, the notions of *autopoiesis*, *structural coupling* and *behavioural coordination*. The first of these notions corresponds to the idea that living systems are defined by their self-organization through which they ensure both the stability of their forms and the stability of their functioning patterns. It is based on the recognition that living systems, from the simplest unicellular to the most complex multicellular organisms, possess the ability to be self-producing and self-sustaining due to the network of interconnections established by the components which define them as biological units (the example given by the authors being the network of molecular interactions that determine the constitution and functional specificity of cells). *Autopoietic* organization is not only characterized by a
dynamic network of continuous interconnections between the molecular components constituting said biological units, but also sets a limit or establishes a boundary to the configuration of this network. In defining the architecture of the constituents of living matter and asserting their relative autonomy, the principle of self-organization involves, in some way, memory of the programming modes of the components making up the units considered, namely cell, organ, body, society, etc., so as to ensure their respective self-sustenance. Yet this self-sustenance, which uses functional memory to preserve the stability of being or the functioning pattern of the unit in question, cell, organ, body, society, etc, is inseparable from two other principles that govern manifestation of life: the principles of self-renewal and self-transcendence. Self-renewal corresponds to the continual reconstitution of biological entities. Consider, for example, the entity of the human body, which, like all living organisms, is constantly reconstituting itself in a continuous cycle, so that the cells of its various organs are continually being replaced by new cells. The principle of self-transcendence is ultimately the mark of creative dynamism in living systems, their evolution and ingenious ability to reinvent themselves. It is what oversees what Maturana and Varela call the ontogeny, or that is, the evolutionary changes to the initial structure of living beings, which, rather than making use of the memory inherent in the mechanisms underlying self-organization and self-renewal, demonstrate innovative knowledge in transforming their structural organization to better adapt to the changing needs determined by the environment. Autopoiesis, or self-creation processed within the limits that define biological entities, can be regarded as a manifestation of the principle of individuation of phenomena. Their functional autonomy does not mean, of course, that they are not connected or, in the words of the authors, that they are not “structurally coupled” to the environment and that their behaviour is not coordinated with other phenomena. Maturana and Varela’s detailed, albeit synthetic explanation, illustrated with appropriate examples and articulated in a philosophical form of conceptual language, about the process of establishing the tree of knowledge, or that is to say, the evolutionary path of living systems as increasingly more complex units, is based, in our view, on their hypothesis that the self-organization and operational closure inherent in the conservation of units, cell, organ, body, society, etc, is only possible because it is subsumed within a network of recurrent interactions. It is these networks of interactions that, manifested as social phenomena, led to different animal species developing their particular forms of behavioural coordination, their communicative behaviour, including the articulated
language that defines the social animal man, his increased awareness of the world and, to a varying and marked degree, his sophisticated awareness of himself. However, if what man has in common with other animals is his knowing the world through sensory and interactive means, what sets him apart from them is the extent to which the specificity of his language and the complex brain system processing it leads him, for example, to question and examine knowing. In other words, according to Maturana and Varela, asking how we know what we know necessarily involves a dual attitude: on the one hand, a kind of agnosticism and vigilance against the temptation of certainty, whereby we make a view of the world into the world view; and, on the other hand, an ethics whose key point is to “accept the biological and social structure of the human being and be aware of the equally central importance of the human being’s reflection on what he is capable of” (267). Ultimately, this means creatively updating memory and resorting to the potential of human knowledge. If preservation of life, as mentioned above, obeys relatively strict biological laws; if human history, with all its failures, follies and tragedies, as well as its successes, splendours and discoveries, is a manifestation of the forms and specifics of these laws; if living systems, in their different designs, are organized so as to generate regularities, it follows that operating within them implies a memory mechanism, giving stability to organization systems. At the same time, though, it is a sapiential, creative mechanism that can invent new means of reorganizing what is taken for granted and seen as definitive. This mechanism, at times counterintuitive, is an effect of the essential stability of its self-reproducing dynamics, establishing behaviour, values, ways of seeing and judging, and individual or group preferences. Our common biological heritage or memory, based on regularities, is the necessary condition determining that for “all human beings the sky is blue and the sun rises every day” (Maturana and Varela 2007: 246). However, it is also what enables differing linguistic heritages or memories to arise from diverse cultural traditions. These traditions are often a direct expression of a collective memory, a particular way of knowing the world with a structural history of what is “obvious”, “regular” or “stable”. Nevertheless, so as they do not potentially wither away, they require insightful recognition of their “blind spots”, those points in the visual system – specifically in the area of the retina where the optic nerve exits – which are not sensitive to light. Knowledge of the world by following parameters set by collective custom or personal habit leads to the exercise of tried and tested ways of seeing and acting, as well as ways of ignoring what is unknown, of hiding what one does not see because one does not
know. Habit, tradition, individual and collective memory necessarily exist for biological, social and cultural reasons. Within them, however, there are cognitive “blind spots” which prevent us from seeing what we cannot see and which we do not realize we ignore. They barely give us any certainty about what we have seen or known, but instead restrict our knowledge of self-transcendence, of our discovery of what is different, new and other. Therefore, it is “only when some interaction takes us away from the obvious – for example, when we are suddenly transported to a different cultural environment – and we are able to reflect, that we then notice the immense number of relationships that we have taken for granted” (Maturana and Varela 2007: 264). Maturana and Varela thus express the idea that the essence of knowledge involves recognising that literally “we do not see what we do not see; we do not perceive what we ignore” (264). For example, we take for granted a world of objective forms and ignore what we actively contribute mentally towards our knowledge of it. Semir Zeki, in his Splendors and Miseries of The Brain. Love, Creativity and the Quest for Human Happiness, which follows in the wake of Maturana and Varela’s study, explains in detail how colour is not an objective property of things, but rather the effect of the brain’s ability to conceptualize. He develops the idea of Maturana and Varela’s above quoted statement “we do not see the colours of the world, we live in our colour space”(28). In line with the thinking of Kant and Schopenhauer, but relying on experimental data and scientific evidence, Zeki distinguishes between what he calls “inherited concepts”, which are universal, determinant,unchanging and relatively autonomous, and “acquired concepts”, whose formation depends on experience and which, as such, are relatively changeable. Both concepts operate as regulators of the knowledge acquisition system, the main function of the brain. However, while inherited concepts serve to order sensory data and generate perceptions of the world, acquired concepts generate abstract categories from these perceptions. According to Zeki, this conceptualizing predisposition of the brain is what gives rise to the different types of cells making up the cortex, which, besides the specific roles they play in the activity of perception, consciousness, language, and memory, also share the ability to abstract. This ability is essential to generate “perceptual constancy”, and Zeki presents several case studies about how conceptual activity, whether inherited or acquired, functions so that, for example, we can establish the definition of a colour (organizing property of inherited concepts) or so that we are able to identify the general characteristics of objects, (of a tree or of a house), as an effect of applying concepts acquired from
sensory experience of the phenomenal world. These latter concepts have the particularity of being formed by the “superior” centres of the brain involved in recognizing past experiences, memory, and thus also judicial comparison of these experiences with those being processed. The example Zeki gives, for instance, of the acquired concept of the aeroplane has changed greatly since this means of transport was invented and will certainly go on changing with the development of technology. What is somewhat surprising about Zeki’s explanation is his attempt to demonstrate how the brain, with its complex anatomical architecture, is equipped with the organic and biological resources to abstract, or even, idealize sensory and intellectual knowledge of the world. Therefore, if inherited concepts are one of the necessary conditions of experience, of visual identification in the visual system, and also of beauty and love (chapter IV of Zeki’s book bearing the title “Brain Concepts of Love”), acquired concepts function as a condition of creativity and the search for perfection. Some comparison can be made between this inherited and acquired conceptual activity of the brain, this involvement of organizing principles in signs or sensory data, and two of the regulating principles of life in general put forward by Maturana and Varela, namely those of autopoiesis, or self-organization, and auto-transcendence. Zeki thus believes artistic creativity and pursuit of perfection to be largely the result of mental activity regulated by synthetic acquired concepts that tend towards abstraction. The operational use of comparative and judicial memory shows that they are involved in idealizing a work of art or in defining behavioural criteria or models of love, but are rarely realized depending on the image conceived. There thus arises a dialectical argument in which the idealization of creative mental activity is counteracted by its unfulfilled projection in the real world. According to the author, it is this dialectic that not only drives the artistic gesture, contained in a huge range of art, from painting to literature, some of which in its incompleteness bears the mark of this discontinuity between what is ideal and what is real, but also prompts the search for the ideal object of love. It is no coincidence that Zeki compares the trace of ideality in these synthetic concepts with the theory of Plato’s ideas, in order to identify the common element from which knowledge generally derives from the ability to abstract. But unlike the Platonic system, which held that true knowledge could only be gained through the intellectual apprehension of supersensory universal ideals – immutable abstract entities representing universal values – Zeki, a neurobiologist, believes that abstract and ideal knowledge has an obvious sensory and empirical basis. In other words, for Plato the Ideas of justice, beauty and love remain
outside man’s sphere of common sensory knowledge, only being accessible to wise philosophers through an effort of abstract intellec tion. For Zeki, on the other hand, these Ideas do, indeed, stem from processes of abstraction, but from sensory data in the formation of concepts acquired by the common human brain. These acquired concepts, being synthetic, are formed based on individual experiences, and as such are changeable, but tend to be idealizing in the sense that they are induced by operations of comparative abstraction from memory of these experiences: “By viewing many houses, I am likely to have not only the concept of a house, but also of an ideal house” (Zeki 2009: 47). According to Zeki, it is this trace of ideality from the acquired concept which is the source not only of artistic conceptions and the ontological quest for perfection, but also of their attempt to be realized. The non-conformity between the idealized concept and the realized work, or the dissatisfaction caused by this inconsistency is what drives the dynamics of creativity: “One of the factors determining creativity is the attempt to satisfy the brain concept. Hence, a permanent dissatisfaction is one of the most powerful ingredients driving creativity” (Zeki 2009: 57). What was postulated by Platonic idealism and proved by modern neurobiology is that the human being is condemned to idealize. It could indeed be said, paraphrasing Maturana and Varela, that there are cognitive “blind spots” that prevent us from recognizing that we do not perceive what we idealize and that one possible way of dealing wisely with the “splendours and miseries” – to use Zeki’s terms – of human brain activity is to recognize this common propensity to idealize. Moreover, if on the one hand such activity is responsible for the efficient formation of concepts and of a complex knowledge acquisition system, on the other hand, this efficiency is, ironically, the source not only of the dissatisfaction resulting from the nonconformity of living with these ideals on the ethical-axiological plane, or of realizing them on the artistic plane, but also of the levels of distortion that may affect perception and objective apprehension of the real world. Literature, whether of an aesthetic, philosophical or religious nature, at least as it emerged and developed in the West, sets up a vast field of knowledge of the splendours and miseries of the brain in the generation of memory representations and aspirations to wisdom. It is thus in this field of knowledge that the coming of utopianism constituted a paradigmatic example. Commonly regarded as another place, superior to the present one, Utopia has been shaped by a long and complex history intertwined with the quadruple Hebrew-Christian, Greco-Roman genesis of western civilization. It may take the form of nostalgia for the lost paradise, whereby this archetypal propensity exposes a trace memory.
Alternatively, it may be the representation of an ideal society according to a model of Platonic origin, conforming to a concept of ethical-philosophical wisdom. Then again, it may be the configuration of an existential future condition based on the hope of human perfectibility. These three possibilities, among others, represent recurring literary themes inspired by the coming of utopianism. For us to refocus our argument, we have selected two texts which, though not strictly part of the canon of utopian literature, are, nevertheless, marked by an ideal type of conceptualization that we consider worthy of attention in conjunction with the issue of memory and wisdom.

We refer above to Zeki’s theory about the brain’s predisposition to generate an acquired concept of ideal beauty, which has some affinity with the Platonic theory of the universal idea of beauty. Appearing to anticipate Zeki’s theory by seventeen centuries, the neo-Platonist Plotinus, in the third century, attributes a value of ideal/conceptual knowledge to the creative action of the artist that shapes his work of art, not according to the mimetic model of reality, but to the form generated by his intellect. Specifically in “Treaty VIII” of *Ennead V*, entitled “About Intellectual Beauty”, Plotinus, in contrast to Plato, who understood art as the ambiguous duplication of the world of appearances, argued that art in general is a means of approximating true wisdom. The artist, subordinating the material of his work to the idea of beauty, makes it comply with a new form which, according to Plotinus’s philosophy, approaches the unfathomable, unknowable and absolutely single Oneness, the foundation of the visible world. What we wish to stress is that Plotinus’s philosophical thought seems to establish a link between the type of knowledge that is gained by intellectual vision or mental view of this Oneness, which in Platonic language corresponds to the moment of contemplating eternal forms, the perennial truths about reality – virtue, justice, beauty –, and a more tempered form of knowledge or intellectual vision that assists the artist in the creation of his work. This form of knowledge that arises in the mind, which is generated by the artist’s intellect, is defined by Plotinus as “natural wisdom” and is characterized as being intuitive and non-discursive:

No doubt the wisdom of the artist may be the guide of the work: it is sufficient explanation of the wisdom exhibited in the arts: but the artist himself goes back after all to that wisdom in nature which is embodied in himself: and this is not a wisdom built up of theorems but one totality, not a wisdom consisting of manifold detail coordinated into a unity but rather a unity working out in detail (Plotinus 1992: 102).
The creation of a work of art, which in itself realizes the universal value of beauty, is, therefore, for Plotinus an approximation to the ideal plane of fundamental unity of being, the single absolute Oneness, essential support to the myriad of outward appearances with which it is consubstantial. The creative gesture is one of wisdom led by a contemplative mental activity that elevates the artist’s being to the world of eternal forms reuniting it with the Oneness of which he himself is part, yet without so knowing or remembering. For Plotinus, this wise materialization of art forms, the embodiment of beauty, was a kind of rapture or contemplative transportation to the ideal, super-sensory plane of eternal forms. If the fundamental activity of all being is the intellectual vision of the artist, then moulding shapeless matter into the form of his own idea is transforming knowledge of this vision into the creation of something beautiful as a natural and rational principle. “The beauty is not in the concrete object, is manifest from the beauty there is […] in soul or mind” (Plotinus 1992: 101). Being aware of this mental beauty which plays a part in the idea of universal ideal beauty is, however, also an act that involves memory: “you, if you are conscious of beauty within, remember” (101). Memory and wisdom combine in generating an existential condition and a state of exceptional knowledge associated with the process of artistic creation, raising it to a rarefied plane of intellection of the ideal, intelligible world, the world inhabited by the gods, of whom Plotinus provides a detailed description. It is a heavenly world, and its representation, subscribing to Plotinus’s dualistic thought system as an illustration of the intellectual beauty of the world of ideal forms, sets up a pro-utopia to which he ascribes the term “There”.

For all There is heaven; earth is heaven, and sea heaven; and animal and plant and man; all is the heavenly content of that heaven. […] To “live at ease” is There. […] for all is transparent, nothing dark, nothing resistant; every being is lucid to every other, in breadth and depth; light runs through light. And each of them contains all within itself, and at the same time sees all in every other, so that everywhere there is all, and all is all and each all, and infinite the glory. […] Life, pure, is never a burden: how then could there be weariness There where the living is most noble? That very life is wisdom, not a wisdom built up by reasonings but complete from the beginning, suffering no lack which could set it inquiring, a wisdom primal, unborrowed, not something added to the being, but its very essence. […] The greatness and the power of the wisdom There we may know from this, that it embraces all the real beings, and has made all and all follow it, and yet that it is itself those beings, which sprang into being with it, so that all is one and the essence There is wisdom (Plotinus 1992: 101-102).
This description of the ideal place – the “There” – seems to combine the representation of an essentially mythical-literary Golden Age with an illustration of the Platonic-philosophical theory of ideal forms, and in Plotinus’s argument it precedes the characterization of the artist’s intuitively wise manner of knowledge, as if this form of knowledge were a mitigated version of the condition of ideal knowledge experienced by divine beings. At the same time, Plotinus’s “There”, a consubstantial place of being and the embodiment of “wisdom”, is a figuration of the idealizing potential of the human mind, in this case the human philosophical mind, which, by means of abstracting sensory data, tends not only to represent the given world conceptually, but also to transform it into an ideally perfect, or utopian world. That this world, as part of a Platonic system, may be identified with perfect wisdom, or a form of non-discursive knowledge – “not a wisdom built up by reasonings” – is a way of recognizing that such knowledge is not of this world, or that, in the common register of nostalgic type ideal thinking, it is knowledge that has already been experienced and can thus only be recalled in memory, and represented in elegiac form, lamenting its passing.

This sense of loss of primeval wisdom is not because of any failure to achieve an intellectual contemplation of ideal forms in some celestial and purely intelligible “There”, in the manner of Plotinus, but because such knowledge, prior to discursive knowledge, would be congenial to an Edenic condition of humanity. Such a sense of loss appears repeatedly celebrated in the utopian myth of the golden age, and is the theme of an exemplary poem by Thomas Hardy, “Before Life and After”, included in the collection \textit{Time’s Laughingstocks} (1909). This is appropriately the second example that we have briefly called upon here to illustrate our argument on the idealizing propensity of human consciousness, in this case through looking back on a mythical, pre-historic past whose memory is preserved only in highly probable conjecture – “A time there was, as one may guess” – or archaeological evidence – “And as indeed, earth’s testimonies tell” – that, among human creatures, there prevailed a kind of learned ignorance regarding a state of absolute grace – “Before the birth of consciousness / When all went well” (Hardy 2002: 260). It is, therefore, a poem of four verses which, in line with the meaning of its title – “Before Life and After” – allude to an existential condition prior to and following life governed by the principle of reason or discursive thought. Its theme is constructed in a circular fashion, and the first verse expresses the recognition that originally “the innocence of mere knowing” (2007: 267) – to use Maturana and Varela’s expression – was in abundance, and this is resumed in
the last verse, though as an expectation, a yearning for undefined fulfilment. It is a poem that mournfully celebrates a prelapsarian time when the fullness of life is mingled with the essential enjoyment of a kind of eternal present and “None suffered sickness, love, or loss, / None knew regret, starved hope, or heart-burnings: / None cared whatever crash or cross / Brought wrack to things” (Hardy 2002: 260). It does not represent an ethereal “There”, a dwelling place of translucent abstraction, of intellectual evanescence, of contemplation of ideal forms, but a “Here” governed by the law of the impermanence of life, yet without the painful awareness of its finitude, unaware of its own transience, without the grief and sorrow of the sense of loss, of inevitable decline, of the twilight of the forms of nature, without the bitterness of death. “If something ceased, no tongue bewailed, / If something winced and waned, no heart was wrung; / If brightness dimmed, and dark prevailed, / No sense was stung” (Hardy 2002: 260). This just and happy human condition, with no severity or weight prior to the origin of self-awareness, before, to use again the expression of neurobiologists Maturana and Varela, the “ontogenic structural drift” (256), and identified in the poem with the origin of emotional awareness, this golden age will, however, fall into a miserable condition of error and depression, will give way to an age of iron, which it is known will set the pace of history, devoid of the essential wisdom of simply being free from the anxiety of knowing, and which a vague nostalgic memory recalls as having been a state of supreme happiness: “But the disease of feeling germed, / And primal rightness took the tinct of wrong” (Hardy 2002: 260). Hence the question in the final couplet, which reintroduces the idea that the state prior to the origin of consciousness, in this context expressed with a positive semantic value as “nescience”, is that which coincides with the ultimate fate of existence, the return to scholarly ignorance. “Ere nescience shall be reaffirmed / How long, how long?” (Hardy 2002: 260). The question implies that this return to origins, to the paradise of simply being, is the wisest way of updating the memory of distant human experience, converted conceptually into a nostalgic ideal. It is a question which, aware that its fulfilment will be postponed indefinitely, is guaranteed freedom from the temptation of certainty and the blind spots of a knowing that is unaware that the world’s becoming is not independent of the capacity whereby we know it and the elemental knowledge that “we have only the world that we can bring forth with others”. (Maturana and Varela 2007: 270)
An explanation is always a proposition that reformulates or recreates the observations of a phenomenon, in a system of acceptable concepts for a group of people who share a validation criterion. Magic, for instance, is just as explanatory to those who accept it as science is to those who adopt it. The specific difference between magical and scientific explanation lies in the fact that the explanatory scientific system generated is, in fact, its criterion of validation.” (Maturana and Varela 2007: 34)

At the beginning of the book under analysis, Maturana and Varela ask the reader to do a number of brief eye movements which allow him to directly appreciate and understand blind spots, so that he can realize that there is a zone of discontinuity in the visual system i.e. that we do not see what we do not see.

“ Colour may be accurately described as the result of a comparison, undertaken by the brain, of the amount of light of different wavebands reflected from a surface and from its surrounds. This comparison leads to a ratio, and that ratio never changes. The concept that the brain applies to generating colour is thus ratio-taking” (Zeki 2009: 29).

“If my ability to identify a house as a house depended upon a particular house only, then I would soon be in trouble when confronted with another house. One way of overcoming this difficulty is to generate a concept of a house. When the brain acquires a concept of a house, the point of view, the precise shape, the distance, the setting, the size and all else ceases to matter for the purpose of identification of the house as a house” (Zeki 2009: 24).

 “[The acquired concept] is therefore a concept that is governed by two sets of comparisons: one inherent in the inherent organizing principle that dictates that such comparisons should occur; and another that is the result of comparing the input at one given moment with past inputs belonging to the same category, and stored in memory, and adding to the stored memory and thus modifying it” (Zeki 2009: 44).

Works cited


