

Simplifying Complexity: Know Thyself...and Others

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In her recent book “Critical lessons: What our schools should teach”, Nel Noddings (2006) reminds us of the ancient “Know Thyself” principle as the necessary, albeit more often than not disregarded, goal of education. It was the quest for meanings and evaluation of experience – an examined vs. unexamined life – that Socrates was calling for. Noddings (2006) is adamant about the importance of self-knowledge as the very core of education: “when we claim to *educate*, we must take Socrates seriously. Unexamined lives may well be valuable and worth living, but an *education* that does not invite such examination may not be worthy of the label education” (Noddings 2006: 10, italics in original). Importantly, Noddings does not differentiate between critical and reflective thinking: it is by using self-reflection in the context of personal beliefs and decision making that every domain of human interactions becomes critically examined because no meaning can be given *a priori*. The structure and dynamics of critical lessons that Noddings proposes specifically for schools cannot be taken in isolation from real *life* with its multiplicity of experiences and relations with others. All events constituting our practical experience become precisely those *critical lessons* from which we can and should learn. This paper introduces an interpretive, evaluative, practice as a specific method, which is usually considered esoteric and *ipso facto* unscientific. It is the practice of Tarot readings that this paper posits in terms of critical lessons embedded in our experience. By addressing this practice in the framework of complexity theory, the paper will de-mystify the often misunderstood realm of Tarot and will assert its value for education as one of the means to “Know Thyself”; thus it can be considered an

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educational tool contributing to our learning and, respectively, the evolution of the human mind situated in the larger, both cultural and natural, context.

Back in 1975, general systems theorist Erich Jantsch included Tarot in his systematic overview of approaches and techniques of what he called the “inner way” to knowledge, placing Tarot at the mythological level among genealogical approaches, yet acknowledging the relation of such a mythological level to the level identified as evolutionary. Jantsch claims that it is at this particular level where the human mind becomes potentially capable of “tuning in ... to the evolutionary wave-form [and] developing a consciousness capable of relating to a four-dimensional [that is, three dimensions of space plus a dimension of time] reality” (1975: 150, brackets mine). Pointing out that the organization of systems proceeds through self-realizing and self-balancing processes, Jantsch envisaged that the “Tarot cards...may be seen as embodying [and] mapping out the field of potential human response” (1975: 163).

Let me first acquaint the readers with some opaque terminology and, in doing so, make it less esoteric and more transparent: What is the Tarot system? It is a deck of 78 pictorial cards, 22 of which are called the Major Arcana. Their pictorial images may be considered to symbolically represent the archetypes of the collective unconscious posited by Carl Gustav Jung as the memory pool “recording” the collective experiences of humankind across times, places, and cultures. The archetypes may be considered *memes* (called such in contemporary philosophy of consciousness discourse), that is, complex ideas or habitual patterns that replicate themselves as they pass on via culture and communication in human actions and history (cf. Dennett 1991). Arcanum (or arcana, plural) means a creative, yet missing, element that would have impelled one to cry “Eureka” at the birth of an idea. It is the ever present potential catalyst (akin to “virtual governor”, see Juarrero 1999) that, when actualized and brought to consciousness, elicit transformations at the levels of thoughts, affects, and actions so that an individual becomes fruitful and creative in his/her possible endeavours. If and when discovered – that is, made manifest at the level of conscious awareness – it becomes a powerful motivational force to facilitate a change for the better at the emotional, cognitive, and/or behavioral levels and thus to accomplish important educational and ethical objectives. The remaining 56 minor cards represent multiple patterns of typical human behaviors accompanied by the spectrum of feelings, emotions, desires, beliefs, and other psychodynamic processes and related affective and mental states.

Almost all of the pictures contain an image of a human figure as a symbol of both body and *psyche* (cf. Neville 2005) in its multimodal dimensions. And while a body goes through life, accomplishing various life tasks, the psyche goes through transformations, as instability and fluctuations comprising an individual life contribute, in Jungian terms, to the individuation of the self, or self-organization. While the psyche may encounter “everywhere... fluctuations, evolutions, diversifications” (Prigogine in Laszlo 1991), the chaotic state of it eventually becomes organized into order contingent on the effect of the acting principle of order through fluctuations. Indeed, Jungian archetypes have been equated with the structural form of the strange, or chaotic, attractors of the psyche (van Eenwyk 1991) that set forth the appearance of the “recognizable patterns [which]

represent the emergence of order from chaos and, if correctly interpreted [in the course of analysis], give insight into the status of the [as yet unconscious] process" (1991: 10; brackets mine). The complex task of interpretation requires a dynamic "communication mechanism, which is at work across the levels of perception, so that, for example 'insight' from the evolutionary level may be received in some other form at the mythological level, e.g., in the form of intuition, or dreams, or general vibrations felt as quality" (Jantsch 1975: 149). And the unusual communicative link capable of crossing the thresholds of perception across the levels of order is established because of the self-organizing dynamics based on the logic of the included third embodied in a Tarot layout.

What is a Tarot layout? It is a particular pattern of the cards. Each position in a sequence has some specific connotations, the meanings of which become clear in the form of hermeneutical-historical (vs. strictly analytic) reasoning in the process of a developing dialogue between the subject and the reader¹. Who is a Tarot reader? A reader is an experienced person who has developed her sensitivity and intuition so as to secure readings of a high reliability. A reader functions as a "bilingual" interpreter converting the pictorial language of the unconscious into verbal expressions and facilitating the *trans-formation* of in-formation into consciousness. How can we define a Tarot reading? It is a session between the subject and the reader when the cards are shuffled and then spread in a particular layout. Their meanings are then narrated and interpreted by the reader who explores – "reads" – the information that, in a customarily astonishing way, becomes available to human consciousness.

The reason for such a customary astonishment is our deeply ingrained adherence to the *direct* cause-effect link as a reductive form of mechanistic causality and the absence of the latter in the seemingly random distribution of the cards. What takes place, however, is an *indirect*, mediated, connection akin to the acting principle of synchronicity posited by Jung in collaboration with famous physicist and Nobel laureate Wolfgang Pauli or, in other words, the action of the top-down causality and an ensured circular or auto-referential feedback as a feature of complexity and self-organization. Synchronicity addresses the problematic of meaningful patterns generated both in nature and in human experience, linking the concept of the unconscious to the notion of "'field' in physics [and extending] the old narrow idea of 'causality' ... to a more general form of 'connections' in nature" (Pauli 1994: 164). Pauli envisaged the development of theories of the unconscious as overgrowing their solely therapeutic applications by being eventually assimilated into natural sciences "as applied to vital phenomena" (1994: 164). In his 1952 letter to Jung, Pauli expressed his belief in the gradual discovery of a new, what he called "neutral", language that functions symbolically to describe an invisible, potential reality. This level of reality, while not being observed by senses, is nonetheless inferable indirectly – via mediation – through its observable effects. Such

¹ The hermeneutics of texts is not an exclusive prerogative of Tarot. The potential for "knowing thyself" belongs also to such "culturally loaded" texts as the Talmud, *The Name of the Rose*, and even *Blade Runner* (as Noel indeed pointed out in his review). However, the Tarot system is unique in that it combines the "culturally loaded" meanings with what in philosophy is called "natural law," ensuring the reciprocity – the relational dynamics – between culture and nature.

unorthodox language represents the means of communication crossing over the psycho-physical dualism². The inter-connections in nature ensure continuous, recursive and self-referential *relations* and enable the dynamics of the process which defies the absolute dichotomy between such binary opposites of modern discourse as objective reality and subjective experience, facts and fantasy, profane and sacred, private and public, thereby overcoming “a process-product, objective-subjective split” (Doll 1993: 13).

It is the self-reference of a system that makes it, in a way, self-transcending. Notably, Erich Jantsch has defined self-transcendence as “the creative overcoming of the status quo” (Jantsch 1981: 91). As recently noted by J.A. Scott Kelso and David A. Engstrom in their book “The Complementary Nature” (2006), “sentience and self-reference have been making trouble for philosophers for centuries” (2006: 253). Kelso and Engstrom use *tilde* “~” as a symbol for pinpointing the *relation* between what otherwise would have been considered dualistic opposites and assert that in “the case of human beings, complex nonlinear self-organizing [that is, self-referential] systems of energy-matter have managed to evolve to the point of organizing a sense of self~other” (2006: 253; brackets mine). A self-referential relation is what establishes the meaningful correlations between the levels of order so that each level as if “speaks” to each other, desperately trying to understand each other’s expressive “language”, thus to create shared *meanings* along the communicative link. As stated by Dennett (1997) in addressing the problem of consciousness, computational structures are just that, self-referential, that is, capable of self-understanding. It is a structural self-reference that generates a string of as though meaningless symbols that nonetheless acquire meanings when positioned in specific (importantly: evolving) *contexts*.

Indeed, whence meanings?

Let me at this point employ a computer metaphor³ borrowed from Nobel Prize winner Herbert A. Simon: “Computers were originally invented to process patterns denoting numbers, but they are not limited to that use. The patterns stored in them can denote numbers, or words, or lizards, or thunderstorms, or the idea of justice. If you open a computer and look inside, you will not find numbers (or bits, for that matter); you will find patterns of electromagnetism” (Simon, 1995, p. 31). We do not know what we may find if we ever “open” a human mind and look inside: mind is an intangible “thing” after all. But we may find something if we consider human psychology in its *projective* aspect (Abt & Bellak 1959) and, respectively, consider mind (as *Nous*, in Aristotelian terms) as *projected* through quite tangible properties of the cards with their picturesque images that embody powerful symbolic meanings. Citing Simon again, “a

² See *Atom and Archetype: The Pauli/Jung Letters 1932-1958*. Edited by C.A. Meier, with a preface by Beverley Zabriskie (2001, Princeton University Press). This particular letter is designated in the book as 56P, pp. 81-83. See also my 2006 article “The language of signs: Semiosis and the memories of the future”, *SOPHIA: International Journal for philosophy of religion, metaphysical theology and ethics*, Vol 45, No.1 pp. 95-116.

³ The computational approach needs qualification. At the cutting edge of philosophy of mind and cognitive science computers are understood as dynamical systems that indeed manipulate “bits”, but these units of information are not reducible to what in physics would be called particles. They are moments in the flow represented by analog (and not digital) information and defined as “bits” within a certain context only, that is, always as parts-of-the-whole. Cf. W. Teed Rockwell, 2007.

symbol is simply the pattern, made of any substance whatsoever that is used to denote, or point to, some other symbol, or object or relation between objects. The thing it points to is called its *meaning*" (1995: 31). Full of such implicit (that is, "existing" only in *potential*) – and in need of mediation – meanings, pictures can be used to make abductive inferences, so as to create an actual narrative as an explicit meaning for the images. Especially if they can denote (as Simon indeed pointed out) the idea of justice – and "Justice" happens to be the major card number XI; or "Strength" – the card number VIII; or "Temperance" – the card number XIV; and so on.

Sure enough, pictures possess a surplus of meanings and are worth more than many thousands of words. Jerome Bruner's (1986) classical empirical study in the field of cognitive psychology is important in this respect. When the subjects of the experimental study were presented with a set of cards for the purpose of the so-called concept attainment task, the result of the experiment was surprising and the findings did not match experimenters' expectations. Indeed, lovely cards were in due course interpreted by the subjects, but not according to the logic anticipated by experimenters. In fact, as a result of the experiment, subjects were proclaimed to be "plainly involved in forming 'dramatic hypotheses' ...They...were not 'processing' the cards in the analytic way. ... They were constructing narratives and, like good literary critics, looking for metaphoric kinship between them" (Bruner 1986: 92). Such apparently non-rational interpretation was a way of "constructing realities, even of building categories" (1986: 92) hence creating the meaning for – making sense of – the lived experience. Psychological processes have been shown to be an underlying foundation for people's relationship with the world at large. Recent cross-disciplinary research also acknowledges the value of the concepts of mathematics of complexity and addresses their applicability to psychology (Barton 1994), including the exploration of the relationship between non-linear dynamics of the complex systems and Jungian analysis (Abraham, Abraham & Shaw 1990). Ludwig Von Bertalanffy, a founder of general systems theory, problematized the existing models and acknowledged the insufficiency of analytical procedures of classical science based solely on linear causality; rather, knowledge is not reduced to given facts but becomes a function of dynamic transactions "between knower and known" (1972: xix). A collaborative ground-breaking work by Thelen and Smith (1995), based on the wealth of empirical data, contributed to establishing a perspective of dynamic systems approach to the development of cognition and action.

In the framework of complexity science, Tarot layout as an assemblage of images and symbols represents a singularity of a dynamic regime – a current encoded state of a dynamic system⁴ waiting to be decoded, that is, read and interpreted. When combined

⁴ I have addressed Tarot as a dynamic self-organizing system in a number of my earlier publications that I acknowledge here with gratitude: 1998, "On the Nature of Tarot", section "Invited Opinions", *Frontier Perspectives*, Vol.7 (1), Center for Frontier Sciences, Temple University, PA, pp. 58-66; 2000, "The End of a Semiotic Fallacy," *SEMIOTICA* 130-3/4, Berlin, New York: Mouton de Gruyter, pp.283-300; 2001, "Signs in action: Tarot as a self-organized system", *Cybernetics & Human Knowing*, special issue on Peirce and Spencer-Brown, vol. 8, no. 1-2, Imprint Academic, UK, pp. 111-132; 2001, "Self-Organization in Tarot Semiotics", in Schmitz, W. (Ed.): *Sign Processes in Complex Systems*. Proceedings of the 7th International Congress of the IASS-AIS, ISBN:3-933592- 21- 6, Dresden: Thelem; 2003, "The Magician's autopoietic action, or Eros contained and uncontained", *Trickster's Way*, Volume 2, Issue 3 <http://www.trinity.edu/org/tricksters/TrixWay>.

in a layout, the cards form a symbol-system that may be “read” like any other “text”, that is, its patterns recognized providing of course that both syntax and semantics that parallel some semiotic “code” (cf. Noth 1995) as the expressive meta-language (Semetsky 2006a) of Tarot symbolism, are known to an expert reader. As noticed by Markoš (2004) with regard to the concept of *semiosphere* posited by Russian cultural theorist Yury Lotman (1990) as the symbolic analog to the *biosphere* of organic life, it is a specific meta-language that ensures a relative identity of codes when it performs a function of transmitting a message. The images render themselves interpretable, and interpretation itself is based on *analogical* reasoning so that the meanings – at the level of their expression in verbal language – appear to be created anew. Tarot archetypal images therefore are what in today’s parlance would be called a machinic (meta) language equivalent to the taking of habits (as Charles Sanders Peirce would have said) as canonical codes (cf. Markoš 2004). In this sense, the archetypes represented in images cannot be taken just as random parochial combinations.

I agree with systems theorist Erwin Laszlo who asserted that the “phenomena of ‘cultural synchronicity’ require a naturalistic interpretation of the notion of archetypes... Archetypes, and the collective unconscious that frames them, are not just ‘in the mind’: they are ‘in nature’” (Laszlo 1995: 135). The pragmatic aspect inherent in Tarot is a function of the ordering of information and the potential organization of it at a higher level, that is, of the epistemology which is future-oriented and forward-looking, because when the “patterns are perceived in a process, there is the possibility of extrapolation. Whatever the nature of the pattern, it provides a handle for grasping something about the way it will unfold in the future. ... This vision is not a prediction. The nonequilibrium crystal ball does not foretell what will, only what is likely, to happen” (Laszlo 1991: 50). In other words, what can be predicted is the likelihood of the event to occur (that is, determinism as the identity of probabilities) therefore creating new momentary boundary conditions for an otherwise open-ended process described as “determined but unpredictable” (Doll 1993: 72). The reading process is based on a reader’s ability for pattern-recognition so as to be able to “translate” the information available in the form of images and pictures into a spoken word. Similar thought processes were at the core of Simon’s research; he described such an unorthodox inference in terms of the recognition of features that would have given an experienced person some reliable cues of how to interpret it.

Simon suggested that “these recognition capabilities account for experts’ abilities to respond to many situations ‘intuitively’ [and not] to hypothesize additional mechanism to explain intuition or insight” (Simon 1995: 35). In their book “Awakening the Inner eye: Intuition in Education”, which has been considered in the discipline as an educational classic, Noddings and Shore (1984) present intuition as a particular way of knowing and list four specific features to roughly distinguish intuition from the analytic, or conceptual, activity of the mind. The relation between the two remains complementary as “it is impossible to isolate the two meticulously and discretely” (Noddings and Shore 1984: 69). Developing one’s intuition is a challenge for a Tarot reader, and the information from the collective unconscious, outside the *Cogito*, widens

the boundaries of individual consciousness, contributing to the organization of the latter at a higher level of complexity. In Tarot, intuition functions in accordance with its literal meaning, that is learning from within (*in-tuit*), from the very depth of the psyche, in the form of “communication...across the...levels of perceptions” (Jantsch 1975: 145). Access to knowledge then, “and this is a crucial point, is available within ourselves” (Jantsch 1975: 146) – in the form of inner knowledge enriched with what Jung would have called a feeling-tone – as much as without! Intuition represents a communication of a particular type: “This is the very fast-acting neural communication...In this way, symbolic expression becomes possible, first in the form of self-representation...and later as a symbolic reconstruction of the external reality and its active design” (Jantsch 1980/1989: 14).

Active design presupposes a creative process. Noddings notices how Poincare, in his discussions of mathematical creativity, affirmed the role of a special sensitivity leading to an intuitive ability to “bring [new concepts and meanings] into consciousness” (Noddings and Shore 1984: 66). The four aspects characterizing the intuitive modes involve an almost immediate contact with object when the subject becomes affected or seized by the object. This requires a tension between certainty and uncertainty at both subjective and objective levels, as well as commitment and receptivity, that is, letting the object act upon the subject. It is the irresistible quest for meanings that becomes realized precisely in such awakening of the inner eye capable of “creating a picture in our mind, understanding” (Noddings and Shore 1984: 81), and insight. The evolving meanings find their expression in the archetypal symbols of transformation. A symbol, sure enough, “points beyond itself to a meaning that is ...still beyond our grasp, and cannot be adequately expressed in the familiar words of our language” (Jung in Noth 1995: 119) *a priori*, but always needs a medium for its very expression. Jung pointed to the interpretation of dreams and the method of active imagination; as for contemporary post-Jungians, they indeed acknowledge the role of “systems such as that of the *I Ching*, Tarot and astrology” (Samuels 1985: 123) as important resources in analysis. Jung himself is viewed as a systems-theorist, and “a systemic ... view implies that ...inner and outer, ...interpersonal and intrapsychic can be seen to be [a] seamless field of references” (Samuels 1985: 266) that unite in a holistic manner the otherwise binary opposites of mind and matter, the knower and the known. In the self-organizing process “characterizing the system and its relationship with the environment ...mind... is no longer the opposite of matter, but...co-ordinates the space-time structure of matter” (Jantsch 1980/1989:14).

So what are those images and pictures representing the seamless field of references and “located” at the level of the unconscious mind available only to Noddings’ “inner eye”; yet, potentially capable of re-cognition and having acquired meanings by virtue of being “altered by becoming conscious and by being perceived” (Jung in Pauli 1994: 159) when embodied in its material representations due to co-ordination? The first major card is called “The Fool” (Fig. 1):



Figure 1.

This is the symbolic child within many of us, the archetypal *puer aeternus*, symbolizing new beginnings, the potentiality of life, novelty itself. The very first picture in the major Arcana of Tarot deck depicts a youth projecting the image of wide-eyed innocence, curiosity, and a trusting heart. She is standing at the edge of the cliff, but with her head high in clouds, The Fool doesn't seem to notice the uneven road or the possibility of falling down. The Fool's child-like topological perception of the world, in accord with Piaget's developmental theory, is not restricted by conventional Euclidean geometry; conversely, its world is not conceptualized merely in terms of rigid syllogisms of formal logic. The world ahead is full of encounters and experiences, of which The Fool has no (cognitive) knowledge yet, but independently of that, the phenomenal world is here in the picture, symbolized by the abyss just a step away, and has always already been here even before the youth approached the edge. The Fool's youthfulness, bordering on infantile carelessness, expresses a sense of connection that is present in a small child's perception of the world as an undifferentiated totality, in which inner and outer realities are movable and transient. Only venturing into a novel and as yet unknown territory might bring a relative order into chaotic flux of experiences. And the free choice – even if not a rational choice because formal logic is as yet beyond a child's grasp – of coming to a decision of “making a step forward” that would have separated oneself from the present but enabled one to leap forward into the future in search for authentic experience and individuation, is transmitted by this card's imagery.

The wandering Fool is always on the road, always learning from experience. She carries her sack on the wand as the universal symbol of vagabonds and minstrels and is pictured subsisting in a fleeting moment of having stopped at a pivotal point on the edge between order and chaos, between knowledge and ignorance – as though putting into practice Dewey's creed that the task of education always involves more education. We create meanings in our very experience because of “construct[ing] logic from the basic intuitive act ... [(so, we might say, 'intuitive') that we scarcely notice when it is being used] ... of making a distinction and two fundamental arithmetical acts: (1) making a mark to signify the distinction and (2) repeating the mark” (Noddings and

Shore 1984: 51; cf. Peat 1987⁵). The creative act of enhanced perception is necessary for reorganizing experience by making it meaningful, that is, producing order out of initial perceptual chaos so as to understand its implicate yet logical (semiotic) structure, to make sense out of it. A creative (abductive) act precedes the drawing of dyadic propositional conclusions because human experience and the whole culture, including past heritage and future possibilities embedded in the “collective unconscious”, act as the included third between what otherwise appears to be the two disparate Cartesian substances, mind and matter.

It is the multiple bracketing {...{...}...} that represents the construction of meanings (that nevertheless always already subsist in their otherwise imperceptible potential form) analogous to the number series as illustrated by Fig. 2:

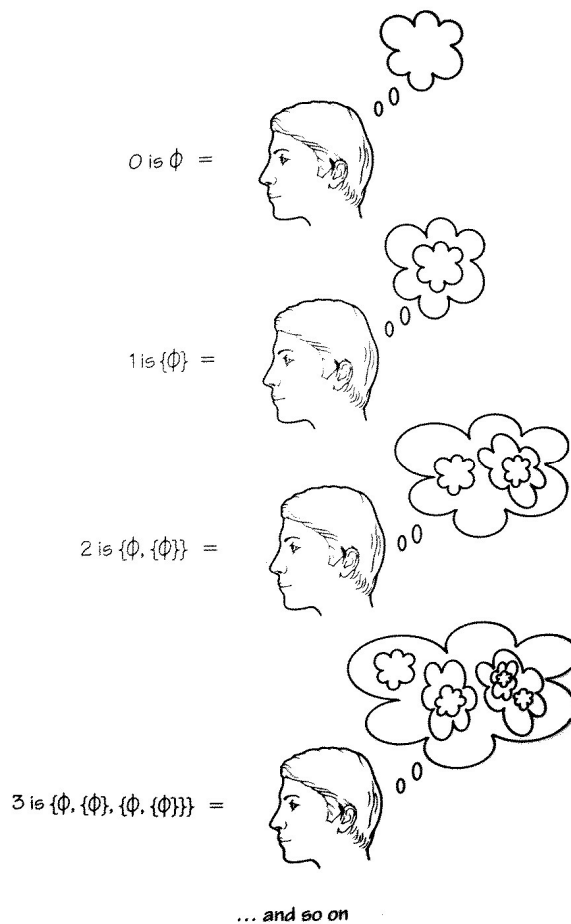


Figure 2. (from Barrow 2000, p. 160, Figure 5.6; cf. R. Rucker, *Infinity and The Mind*, 1982, p. 40).

⁵ David Peat, as well as Noddings and Shore (1984), refers to the system developed by the logician G. Spencer-Brown in his *Laws of Form* (1979). This system can be equally applied to the symbolic structure of both the universe and the mind as the creation of order out of undifferentiated background by means of the primary act of distinction (which also may be called an initial symmetry-breaking).

Each number in Fig. 2 is akin to a sequentially ordered Arcanum: The Fool (unnumbered, “Zero”, card – see Fig. 2) becomes the Magician (card number I) and, in a continuous experiential process, goes on learning its intellectual, moral and spiritual lessons. The dynamics of making the unconscious conscious is akin to the actualization of the potentialities that constitute the Jungian individuation process equivalent to learning from experience. The card number IX called “The Hermit” (Fig. 3) embodies the very “Know Thyself” principle with which I started approaching this topic:

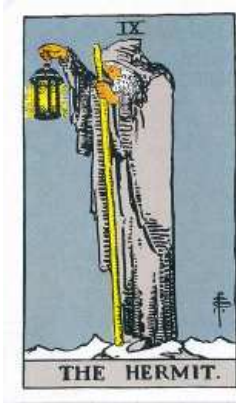


Fig. 3.

That's where – at the beginning of the “mid-life” cycle of the individuation process – the examination and self-reflection produce an examined vs. unexamined (read: lacking meaning) life! That is, the authentic experiences reach their critical mass when The Fool has to symbolically stop so as to reflect back on them, to reflect on one-self: the lantern in the picture symbolizes this search, via inward knowledge, for the ethics of authenticity (cf. Taylor 1991). In the journey through subsequent experiences embedded in the pictures, The Fool's very identity will be contested and will reappear under the guise of the names of other major cards in a deck. The human psyche is typically marked by tensions or bifurcations which signify “a fundamental characteristic in the behavior of complex systems when exposed to high constraint and stress” (Laszlo 1991: 4). During readings, a particular constellation of images in the Tarot layout may indicate to the reader the presence of a highly unstable situation in the subject's life or a vulnerable state of mind even as the mind itself, at the conscious level, may be quite unaware of its own situation but still *feel* the latter's emotional impact or be in a certain *affective* state.

The outcomes of such a tension imposed on a system will vary: similar to the bifurcations classified according to their degree of manifestation, as well as the dynamic regime in which a system will potentially settle, various major cards are signs of either subtle (e.g. “The Wheel of Fortune”), catastrophic (e.g. “The Death”), or even explosive (e.g. “The Tower”; Semetsky 2000) bifurcations. The present psychic structure – or the subject's current level of self-knowledge – tends to some instability threshold. Indeed, the transcendent function of integrating the unconscious material into consciousness “is not continuous but rather marked by the kind of discontinuities and phase transitions associated with complexity theory, as formulated, for example by Thelen and Smith” (Muller 2000: 59). The evolution of consciousness as an “eventual function” (Dewey

1925/1958: 308) of learning from experience is inscribed in the images of all 22 Major cards in a deck and culminates in “The World”, also called “The Universe” (Fig. 4):



Fig. 4.

This picture is a symbol of the Self that finally overcomes the dualistic split between itself and the material world and embodies a greater numinous, spiritual, dimension. In Dewey's words, the Universe is precisely the “name for the totality of conditions with which the self is connected” (Dewey 1934/Hickman and Alexander, 1998, 1, p. 407). The circular shape on the World picture represents a continuum, that is, the never-ending search for meanings in the changing circumstances of experience. “The World” represents the ideally individuated Self, that is, an integrated personality as inseparable from its life-world. As Dewey emphasized “the unification of the self through the ceaseless flux of what it does, suffers and achieves, cannot be attained in terms of itself. The self is always directed toward something beyond itself and so its own unification depends upon the idea of the integration of the shifting scenes of the world into that imaginative totality we call the Universe” (Dewey 1934/Hickman and Alexander, 1998, 1, p. 407). The ever expanding and varying multitude of experiential situations and events always presents new challenges towards discovery of meaning in experience.

Still, during the experiential journey from “The Fool” to “The World”, the limited world available to physical observation expands so that we ourselves and the World become a unified whole. The culmination of a particular stage in the dynamic process as embodied in the picture of “The World” represents the existential lesson of accepting an ethical responsibility *in* the world and *for* the world. It is our participation in the world – that is, taking a responsibility for others, both human and non-human – which is a crucial element in Nel Noddings' ethics of care (Noddings 1984) as an integral part of education. Care theorists turn upside down the abstractions of moral philosophy, insisting that universal experiences are grounded in concrete human conditions described as “the commonalities of birth, death, physical and emotional needs, and the longing to be cared for. This last – whether it is manifested as a need for love, physical care, respect or mere recognition – is the fundamental starting point for the ethics of care” (Noddings 1998: 188). During the interpretive process, the pictures are being narrated thereby creating an adventure story describing an experimental journey through concrete life experiences. Indeed, a “story is the most adequate, maybe the only way, of storing experience” (Markoš 2004: 324). Different positions denote both external

situations and internal mental or emotional states and thus provide a rich context within which each particular image is to be “read” and interpreted. While each position of the layout indicates a part of both inner and outer world experienced by the subject, they however can be read only in totality of the whole layout and only in the context of the subject’s current, here-and-now, problematic situation (as Dewey would have called it). Thoughts, emotions, hopes, fears, interpersonal relationships, intrapsychic conflicts, immediate environment, desires and wishes – in short, the whole phenomenology of the subject’s life-world, of which however the subject might not yet be aware at a conscious level, is being projected into the layout – the symbolic representation of the said life-world. But the subject becomes aware of oneself because of the possibility of *transforming* itself and, in a self-organizing manner, being able to perceive its own responses as new stimuli in the self-referential relation, the significance of which was anticipated as long ago as 1925 by Russian psychologist and educator Lev Vygotsky⁶.

Functioning as a projection, the pattern laid down by the pictures presents itself as an expanded scope of space and time accessible to observations (cf. Jantsch 1980/1989; Semetsky 2006b): because of projection, the dimensionless realm of the collective unconscious (what Plato would have called the realm of the intelligible) is spatialized and rendered visible (what Plato would have called the realm of the sensible). The *static structure* of the layout is, sure enough, a projection, in the sense of projective geometry, or a snapshot of a *dynamic process*⁷. By its definition in psychology, the projective method is viewed as a structured interview or a dialogue, that is, an open and flexible arena for studying interpersonal and intrapsychic transactions. Projection also implies causality, albeit not in a customary linear manner but in a sense of a non-linear (a-causal or synchronistic) connection – thus demystifying the mystical realm of Tarot. As David F.

⁶ The Anonymous reviewer of this article, in his/her capacity as a clinical psychologist, pointed out that “Tarot reading does not have any evidence base in the scholarly literature”. I would like to contradict this statement by means of listing here several available references. My initial 1994 MA Thesis in the area of Human Development and Family Counselling under the auspices of the Board of Behavioural Science Examiners in California, USA was titled *Introduction of Tarot Readings into Clinical Psychotherapy: Naturalistic Inquiry* and is available at the library of Pacific Oaks College, Pasadena, California. Some of my earlier published studies (those mentioned in note 5 notwithstanding) are:

Semetsky, I (2005) “Integrating Tarot Readings into Counselling and Psychotherapy”, *Spirituality and Health International*, Whurr Publishers, UK, pp. 81-94. Semetsky, I. (2001) “Symbolism of the Tower as Abjection”, in John R. Morss, Hans V. Rappard, Niamh Stephenson (Eds.) *Theoretical Issues in Psychology*, Kluwer Academic Publishers, MA, pp. 393-407. Semetsky, I. (2004) “The complexity of Individuation,” *The International Journal of Applied Psychoanalytic Studies*, 1: 4, Whurr Publishers, UK, pp. 324-346. Semetsky, I. (2002). “Deleuze and Guattari’s A-signifying Semiotics and Cartographies of the Unconscious: Tarot Reconceptualized”, *Synthesis Philosophica*, 34 (2-2002), Zagreb, pp. 297-316 (abstracts in German, and French).

Yet, the Anonymous reviewer may still think that I am unfairly biased towards my own research and publications, so I also refer him/her to the following studies (thank you to Lance Storm for providing information in this regard):

Davidson, L. (2001). Foresight and insight: The art of the ancient tarot. *Journal of the American Academy of Psychoanalysis & Dynamic Psychiatry*, 29(3), 491-502. Piedilato, J. R. (2000). Iconography of the transcendent. An experiential hermeneutic method applied to personal development. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 60(7-B), 3555. Spector, R. (1986). Case study 3: Strategic tarot. *Family Therapy Networker*, 10(5), 36-37, 68-69. Rockville, MD: Family Therapy Inst. of Washington. Heeren, John W. and M. Mason (1984). Seeing and Believing: A study of contemporary spiritual readers. *Semiotica* 50-3/4, 191-211.

⁷ The computational space (see note 4, above) is expressible in multidimensional geometry which models knowledge that apparently “we know but cannot tell” (Rockwell 2007: 128). Significantly, we become capable of “telling” the otherwise untold story by means of Tarot readings.

Griffin, a process philosopher, says, causation will have included a vertical dimension: “from the bottom up (projection) and then from the top down (reinjection) ...So-called precognition would really involve only the resonance of an event that is explicate *now* with an event that is *later* – from the viewpoint of the explicate order, which orders events sequentially to become explicated” (1986: 129)⁸. The process of reading is itself a peak of fluctuation in the open-ended interaction: the content of one’s mind is as if “estranged” for a moment, creating the instability phase between the subject of the reading and the current level of his/her knowledge, this phase “in which novelty breaks in, the law of large numbers is rendered invalid and the fluctuations of consciousness prepare the decisions for the next autopoietic structure” (Jantsch 1980/1989: 308). An invisible realm acquires visibility and legibility, and in this respect pictorial text of a layout is a result of the self-organization in action (cf. Lloyd 2006). In other words, information, albeit conserved, is being *redistributed*, contributing to a new “construct” having appeared at a higher level of organization.

In this respect, Tarot functions in the two-fold manner of the second-order cybernetics: both as an amplifier by rendering the subtle aspects of one’s psyche vivid and substantial, and as a *positive* feedback that directs the amplified information back into an expanded system, thus equipping it with information (neg-entropy) by having made the latent unconscious contents manifest and rendering them meaningful. In this sense, active (creative) interpretation as the included middle between oneself and the world exceeds just a passive adaptation to one’s environment by virtue of the *negative* feedback represented by *compensation* that, as Jung noted, is a natural tendency of the unconscious to maintain balance and stay in a homeostasis with the conscious mind for the purpose of self-regulation. When *acting* on her acquired knowledge, the subject of the reading participates not in a one-sided decoding (that takes place when the cards are interpreted by the reader) but in a two-way communication (cf. Markoš 2004). Such a double contingency (cf. Luhmann 1995) embedded in Tarot’s self-organizing dynamics leads to a new level in a total system’s organization; and a surplus of information – because the collective unconscious always already exceeds the personal unconscious – leads to learning and an increase in a system’s complexity.

The double-folding is a feature of a non-linear evolutionary process. Indeed there is the double-cycle in communication: from Vernadsky’s (and Stuart Kauffman’s) concept of the biosphere of nature to the semiosphere of culture (Lotman 1990) and back to the semiosphere as a natural phenomenon albeit in a coded format of images; and vice versa from the cultural archetypes to the archetypes in nature projected into the layout in an array of pictures. The reciprocal presupposition (as Markoš says, communication of I-I type) between the *self-becoming-other* enables evolution, and from the systems-theoretical viewpoint, evolution is a circular process that “constitutes itself in reality... Every system that participates in interpenetration realizes the other within itself *as* the other’s difference between system and environment, without destroying its own system/environment difference” (Luhmann 1995: 216). This means that evolution must

⁸ Griffin refers here to the concept of the implicate order postulated by physicist David Bohm (Bohm and Peat 1987/2000).

proceed both vertically and horizontally (cf. Jantsch 1980) so as to act in a self-organizing manner across the levels of reality, the latter irreducible to a strictly physical world described by the laws of Newtonian physics. Only within such a transformative process do human subjects acquire greater and greater degrees of freedom, becoming indeed the authentic selves. Only by participating in multiple interactions and transactions, that indeed comprise the rich experience of human actions, the number of which tends toward infinity, can an individuation, or self-realization, constituting the aim of Jungian analysis, be achieved. Due to the mediating function of interpretation, the latent, unconscious, contents of the mind are rendered conscious, and the images which are brought to the level of awareness, that is, intensified and amplified up to the point of their integration into consciousness, are capable of creating a momentous feedback in the psychodynamic processes. The amplifying and feedback qualities of the Tarot system create meanings for the dynamic patterns existing, under the conditions of unity between knowledge and action, at the level of both mind and behavior (cf. Scott Kelso 1995). Tarot performs an instrumental function by means of which the mind becomes capable of looking into its own dynamics and making it accessible to consciousness (cf. Thelen and Smith 1995).

The ethical question arises of how to treat the information that becomes available as a result of readings and implies, by virtue of its being a motivational force behind the transformation of habits, a possibility of producing new modes of action in the social world. The interpenetration of epistemology, ontology, and psychology by default leads to ethical connotations. Noddings' ethics of care and the approach of a gentle action proposed by David Peat (in Rubik 1992) become a must. Back in 1992, Peat asserted that human actions qualified as gentle would have required an extraordinary quality of mind and perception based on love, respect and care. This type of action becomes especially important now, in our age of global conflicts, pluralistic values and the resulting breakdowns in communication and the alienation between "self" and "other." Such a caring attitude would respect also an apparent "anomaly" of Tarot, which habitually rests on mantic signs being interpreted as an index of some supernatural forces. Considering this paper's perspective of self-organization, our increased awareness of the identical dynamic patterns acting in nature, culture, and the human mind should now become both the necessary and sufficient condition for eliminating the prefix "super" from the "supernatural" (cf. Stapp 2003)⁹ But any theoretical innovation is only a part of the total challenge. At the level of *praxis*, we desperately need to develop alternative methods in an effort to continue what Charles Sanders Peirce called the search for the ultimate interpretant of reality. Dare we teach novel critical lessons? Dare we learn to create ethereal things?¹⁰

⁹ Henry Stapp, a physicist at The University of California, Berkeley, is adamant that "if causal anomalies actually do appear then ... we have been offered a glimpse of the deeper reality" (Stapp 2003: 183).

¹⁰ I deliberately conclude this paper by paraphrasing one of Jim Garrison's urgent questions: "Dare we teach children to create ethereal things?" (Garrison 2000: 117), especially keeping in mind that these things are ultimately "knowable if not known" (Dewey 1934/1980: 269).

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