

## The Calibrated Alphabet – Cipher for a Moment für Website 29.12.09

### Poetry and the Natural Sciences - A Revised Reading (1)

*Let us record the atoms as they fall upon the mind in the order in which they fall, let us trace the pattern, however disconnected and incoherent in appearance... [it is] a vision... focused on the impact of mind upon objects, an autonomous act, it creates not so much a fusion as an elevated awareness of their relations...* (Virginia Woolf, *On Being III*, 1930)

*In writing I seem to be discovering what belongs to what... From this I reach what I might call a philosophy...that behind the cotton wool is a hidden pattern; that we – I mean all human beings – are connected with this: that the whole world is a work of art, that we are parts of the work of art... we are the words; we are the music; we are the things itself.* (Virginia Woolf, *Moments of Being*, 1941) (2)

### The Calibrated Alphabet – Pattern-forming Processes as a Principle of Life

In poetry visual images are expressed in the human voice, in a way that the voice captures nature and the world in its immediacy. This immediacy could even be called the *first* nature of poetry where the focus lies in the experiential rather than in the analytical. In order to create this first nature of poetry memory chambers are sculpted in a compositionally associative fashion, they can trace hidden patterns with, as it were, the eye of the archaeologist. While memory and perception oscillate – between what is the voice experiencing in the moment and what might be remembered and what rejected - the individual poems are anchored as text corpora that also contain infinite associations.

The interaction of the strict form and the loosely strung together images form a kind of alternating current circuits. In nature pattern-forming processes shape the human hand as well as the voice. At the same time they also have an effect on the works that hand and voice are in the process of creating (3). That is why the constantly changing different forms and rhythms of existence obey an ordering principle that rest on principles of life.

There is a transcendence of the division between poetry, dream and reality, for example the fusion of sensory impressions and the shift from subject to object and vice versa. In poetry it is possible to reach a pivotal awareness of life in expressing the paradoxical understanding of emotions, be they deserted or sheltered in abandonment or affection and to partake in the infinite that determines life in an equilibrium that is only momentary, in measure and deviation, rhythm and variation (4).

## Asymmetrical Geometry - Poetry and The Natural Sciences

The question what can poetry do better than the sciences or the other way around might be fallacious and obsolete. Both are concerned with a deeper understanding of our place in the world. Ideally the proponents of the two are conscious of their own characteristic procedures, categories and semantic systems - a prerequisite for understanding one another. As a result both poetry and the sciences can become more aware of their potentials and limitations. In poetry the literal naming and describing of things can only produce an appropriate effect when the clearly subjective (5) view imbues them with a deeper sense. With exact observation and heightened senses and also by its capacity for irritation – poetry takes up the challenge of the human condition again and again, in its “Verhältnisspiel” (6), the „game of relations“ with the world. In other words, it calls for a consciousness that is aware that we are part of evolution, it calls for the knowledge of what we do as humans because we are humans.

By contrast specifically in the natural sciences we find images as metaphors in the description of scientific research (7) - such as the black hole, the white dwarf, the genetic code - where the thing described can only be experienced indirectly and is inaccessible to our senses. Often we are led to believe in certainties in which the limits of our cognitive capacities have, however, simply been shifted or even led astray. The astrophysicist, Hans-Peter Dürr (8) accepts these limitations when he says: “the probable is becoming ever more probable” presupposing that reality in its full potential exists. In further deliberation he touches upon a crucial truth in the sciences concerning the animate and inanimate: “We have taken matter further and further apart and have discovered that there is something left over that does not have the properties of inanimate matter but properties one would associate with living beings: It is not defined, it is spontaneous, creative, it comes into being and then fades.”

Both – the sciences and poetry - are concerned with perception that actively forms supposed correspondences and patterns. Within the sciences we observe that fields such as the biology of evolution, the convergent nanotechnology or neuroinformatics attempt to come to results by constructing models and only in retrospect ask about the consequences for people and the environment. Poetry on the other hand tries to give shape to what is essentially living from the outset (9). And the more indirectly the things described are experienced by our senses the greater the challenge to poetry becomes. The question is what is possible for poetry to react to this in a creative manner by the uniqueness of intuitive subjective perception; what can be expressed by the poetic voice, in what way including one’s own

nature, within the framework of physical laws and existential needs, against the backdrop of the wonders of nature and the silence of space? Together with the *first* nature of poetry - the experiential in its immediacy - poetry in its *second* nature as a place of self-reflection (10) captures the experience of the interplay of nature and culture. By dividing and sharing. Between power and powerlessness. And at the same time a game occurs in order to restore contexts in reaching out towards the infinite universal. Between sensations of the sublime, thoughts about ultimate questions and realisations of failure and having gone astray. To the laconic acceptance of and respect for the phenomena which we experience *and* investigate. In this sense poetry and the sciences in their respective ways of accessing reality meet in asymmetrical geometry.

### **Catch Hold of the Fleeting - Of the Law of Currency**

It is well-known that Pythagoras utilized the field of mathematics to unveil the structure of the world. Speculations about the unity of the universe dating back to antiquity share a common thread: the attempt to derive meaning of the unknown from nature. That is seen in the correspondence of music and alchemy, of numbers and words – and this still holds true today – from oracles to biochemical formulas. However, like in the case of the Möbius strip we only perceive the forms of circles that are twisted and turned inwards and outwards, so that, while these same circles continue to build infinitely interwoven chains, in turn we can only see individual partial links (11).

Poetry – by its *second* nature highly self-reflexive – plays consciously with paradoxes, phenomena and concepts without being bound by aim and purpose, while the world can be seen as a treasure house for metaphors. They aid in the search of moments of deeper understanding that can illuminate what belongs together and name what escapes the fleeting glance. To do this our imagination returns to archaic, romantic states of early existence with all the contradictions and compares history with the stages of life, from coming into being to decaying in stone, sand and dust. And more over the sublime gets both a scientific and an aesthetic signature. However, ultimately lines of poetry aspire to sound and music which help to sublimate and bear the polarities for a brief moment.

Poetry and the sciences share a common ground as well as differences, particularly with reference to time. Both want to suspend time. But whilst the sciences strive to conquer time, its effects, like sickness, death, decay and every form of entropy, poetry tries to step outside of time. As if a moratorium had been declared, where we conduct a dialogue with something called beauty in art, immeasurable, which does

not become anything but simply is - in broken and in powerful symmetries. And therein we can say that poetry and all art - out of void and abundant space (12) – correspond with a pattern that in continuous moments of equilibrium serves the law of all living beings.

It is remarkable that the mathematician Jules Henri Poincaré (13) (like many scientists who study nature in more specific and organized ways) offers a certain differentiated view of beauty when he writes: “The scientist does not study nature because it is useful; he studies it because he delights in it, and he delights in it because it is beautiful. If nature were not beautiful, it would not be worth knowing, and if nature were not worth knowing, life would not be worth living. Of course I do not here speak of that beauty which strikes the senses, the beauty of qualities and of appearance; not that I undervalue such beauty, far from it, but it has nothing to do with science; I mean that profounder beauty which comes from the harmonious order of the parts and which a pure intelligence can grasp.”

However, poetry as a surplus out of an abundant void and as part of the formed and forming phenomena, comprising his view of the beautiful goes beyond the duality of the sensual and intellectual – its first and second nature. It does so by emphasising in and from its very beginning on forming patterns through the current flow of steady interplay: the continuity in metamorphosis according to our sense and experience of time and so the coherent interdependency of its law of currency.

- ( 1) The sciences like natural and applied sciences as well as humanities and social sciences focus on forms of life and living in versatile ways. The phrase “natural sciences” used in this essayistic treatise is taken rather narrowly or wide, if you will, referring to every day usage, i.e. related to natural history and natural philosophy. The concept of nature itself ranges from its meaning of the external and integrative nature to the essence of the prescribed. This comprises the fact that the distinctions between the natural science disciplines are not always sharp either, and that they share a number of cross-discipline fields. Physics for example plays a significant role in the other natural sciences, as represented by astrophysics, geophysics, physical chemistry and biophysics. Likewise chemistry is represented by such fields as biochemistry, geochemistry and astrochemistry. In some fields of integrative application, specialists in more than one field are a key part of most dialog like in nanoscience, astrobiology, and complex system informatics. In debating on the sciences poetry conveys life in an even more basic and essential way.
- ( 2) Virginia Woolf, *Moments of Being*, London 1976
- ( 3) György Doczi, *The Power of Limits. Proportional Harmonies in Nature, Art & Architecture*. Boulder, London 1981
- ( 4) “Infinite” not set against the “finite”, but conceived as infinite life, which manifests itself in and through finite things and not by annihilating or reducing them to mere mechanical instruments.
- ( 5) the subjectum in accordance with its etymological roots as the “under-lying” and subjectivity defined by Walter Schulz are precariously alluded to one another.  
 „The impossibility (...) of subjectivity stated by Fichte and modern thinkers understanding adequately itself as present and being driven to always presupposing itself - just this constantly losing oneself is based on the positive fact that the subject can relate to itself, not because it rests in itself but because it is steadily on the go until its very end.  
 Walter Schulz, *Subjektivität im nachmetaphysischen Zeitalter*, Pfullingen 1992, S. 85
- ( 6) Novalis. *Werke in einem Band*, München 1995
- ( 7) Lily E. Kay, *Das Buch des Lebens*, München 2001. Sigrid Weigel, *Genea-Logik. Generation, Tradition und Evolution zwischen Kultur- und Naturwissenschaften*. Paderborn 2006
- ( 8) Hans-Peter Dürr, *Das Netz des Physikers*, München 2000
- ( 9) „Life“ in the primary meaning of „nature“ as lat. nasci = coming into life, being born, cf.: Hannah Arendt. Her concept of „natality“. Ludger Lütgehaus: *Natalität. Philosophie der Geburt*. Zug 2006
- (10) In accordance with Kant’s idea that the laws of nature form the conditions of possible experiences.
- (11) The structure of the Möbius-Strip 1858 discovered by the mathematician and astronomer August Ferdinand Möbius and the physicist Johann Benedict Listing is based on the principle of infinity or repetition, for example the missing centre of the strip. It gives a multidimensional picture as it merges into oneself in such a way that when you begin to colour the area of one of the seemingly two sides one will have coloured the whole object in the end. Mathematicians look at it as a “nicht-orientierbare Mannigfaltigkeit”, as a manifold not to be exactly located i.e. not to be self-orientated. Holger Dambeck, *Rätsel des Möbiusbandes gelöst*, Spiegel, 19.7.07 (transl. by. R.Z.)
- (12) Taoism calls the abundant void: Dao as the nameless – the prime cause of being. This seems to correspond to H.P. Dürr’s perception: „We have taken matter further and further apart and have discovered that there is something left over...” note 7
- (13) Jules Henri Poincaré, *Foundations of Science: Science and Hypothesis, the Value of Science*. Science and Method, University Press of America; New Ed (November 1982) New York, p. 366-7

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