

THE POEM AS PERIODIC CENTER:  
COMPLEXITY THEORY AND THE CREATIVE VOICE IN NIETZSCHE,  
GOTTFRIED BENN AND WALLACE STEVENS

By

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Für  
Anita Victoria Schlee  
und  
Johannes Anton Schlee († 1998)

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## INTRODUCTION

What makes us human is our self-reflective mind and our profound urge to seek answers to persistent questions such as why we exist, where we come from, and where we are heading. Our deep need for answers corresponds to our drive to create meaning, for ordering the universe and the world around us. This is both a blessing and a curse, as many thinkers through the ages have acknowledged.

A variety of concepts have been suggested to provide answers, the main sources being religion and science. Religious faith accords a stability that is based on the promise of resolution in an afterlife. We look to science in hopes that it may explain natural phenomena that seem otherwise incoherent, impenetrably complex, or chaotic. These explanations extend to the workings of our own body and mind.

Many would agree that neither the Christian belief system nor the analytical methods of science have succeeded in providing adequate explanations for such complex phenomena as the number phi, for example. How can we rationalize that this ratio seems to arise out of the basic structure of our cosmos and at the same time appears clearly and regularly in the metamorphosis of both animate and inanimate nature, in the seashell, or in the rotation of a hurricane? Even the shapes of man-made constructions, such as the Egyptian pyramids and Leonardo Da Vinci's drawing, the *Vitruvian Man*, also follow this ratio.<sup>1</sup> These startling discoveries suggest that there exists an underlying order, an

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<sup>1</sup> Cf. Priya Hemenway and Amy Ray, *Divine proportion : Phi in Art, Nature, and Science* (New York: Sterling Publishers, 2005), pp. 69 and 92, and Joseph Turbeville, *New Tabular Evidence of a Monument in Harmony with the Universe: a Sourcebook on Nature's Numbers for Artists & Architects* (Victoria, B.C.: Trafford, 2003), p. 71.



astonishing resemblance between the underlying deep structure of works of art and the construction of matter in the natural world.

The failure to find satisfying answers to such questions requires us to explore beyond our comfort zone. For those of us in the humanities, what lies “beyond” is frequently the realm of the sciences. Thus, in this dissertation I move beyond traditional boundaries of literature and venture a scientific approach that uses complexity theory to gain a better understanding of how poetry functions as a navigational device in a world filled with motion and no clear meaning. In that it provides sporadic moments of centeredness for both the poet and the reader, poetry exhibits an uncanny parallel to the periodic centers in the cosmos, within the flux of life.

Science has traditionally relied on the notion of equilibrium in postulating the reducibility of biological phenomena to their constituent parts. We assume that reductionism affords us greatest access to the mysteries of nature, that in a reduced form, it can be explained by scientific laws. By contrast, complexity theory adopts a holistic approach in focusing on the dynamics of the interaction between the various parts of a system. It is based on a view of matter being in continuous flux and is concerned with hidden structures of order in seemingly random data, with a focus on self-organizing processes and evolutionary change in a variety of media, both natural and artificial.

By its very nature, complexity theory tackles highly dynamic processes such as life itself, which does not lend itself to easy reduction without loss of vital information because it is constantly changing, infinitely expanding its possibilities. Such is the essence of life. I argue that just like life, a work of art, and specifically a poem, is never a completed product but represents an ongoing process, due to its intrinsic thrust toward the

creation of ever greater complexity. Autopoiesis, self-creation, is the defining characteristic in this dynamic process of life and, as we shall see, also characterizes the creative impulse in poetry. For lyric poetry specifically, autopoiesis suggests that poetic devices cannot have absolute meaning but instead represents an ongoing process of perception and interpretation.

In the following we will move from a mechanistic model for explaining the creative impulse, to a *systemic* model. Instead of reducing a phenomenon to its minimalistic structure in order to understand it we will attempt to see it within its larger context by focusing on the lateral connections between its various parts. In regards to a poem, meaning thus emerges from the interconnections between the individual words.

To provide the basis for my discussion of the works of two Modernist poets, the German medical doctor Gottfried Benn (1889-1956), and the American insurance executive, Wallace Stevens (1879-1955), I turn to Ralph Waldo Emerson (1803-1882) and Friedrich Nietzsche (1844-1900). Both thinkers adamantly postulate that the individual must break free from the scaffolding of constructed and therefore invalid truths, just as nature eliminates those parts of it that are ailing. Instead, man is to reconnect his mind with his body and through this fusion realize his true self in a process of becoming. Locating authority in the self rather than in society and the external world implies a radical break with the assumptions of the previous periods, namely the Age of Positivism, and is a defining aspect during the nineteenth as well as the twentieth century, both time periods discussed in this dissertation.

Gottfried Benn is among the few German poets of the twentieth century who gained international recognition. His oeuvre spanned the years 1910 to 1955. Even

though his early poetry shares certain stylistic and thematic features with German expressionism, and although he did, even in later years, consider himself an heir of that school, he did not subscribe fully to their manifest. Rather, his writing is based on his personal philosophy which he explicitly elaborates on in his theoretical essays, and implicitly in his prose and poetry. Benn vehemently laments the emergence of the conscious mind because in his opinion it alienated the subject from the world of objects it inhabits. Consciousness leads to a sense of being uprooted. The individual has thought the world to pieces, as Benn claims in his poem “Verlorenes Ich,” and is left, isolated, on what both Benn and Stevens describe as a pile of historio-religious rubble.

In this fragmentary world, solace, as a sense of wholeness, can be found only in a temporary state of meditation which allows the isolated individual to reconnect to his essence. For Benn it lies in a pre-rational and mystical holism. For Emerson and Nietzsche, the sense of wholeness is found in nature itself. The body assumes a vital role in this process since it constitutes the medium for participation in mythical moments.

Also writing during the first half of the twentieth century, Wallace Stevens comes to a startlingly similar conclusion in both his poetry and his prose. Then again, this is perhaps not so surprising considering the affinities between the two poets: both Benn and Stevens believe in a world of flux, and in the importance of art as a “metaphysical activity,” which Nietzsche had contended half a century earlier. In a system of process, truth does not depend on definite values or absolute qualities. The latter vary and are dependent upon initial conditions; they emerge from the interaction between self and world which is both depicted in, and results in, a poem.

Since the relationship between self and world is never static, any assumed achievement of harmony is fleeting. In a world of flux, there can be only periodic centers during which the poet incorporates the chaotic diversity of the pluralistic world to form a momentary tension-filled, yet harmonious state.

An enduring harmonious state, as enticing as it might sound, would mean stagnation. And stagnation, in the natural world, is merely another word for death. The incessant struggle to achieve balance and the fact that we can never fully attain this goal are therefore equally vital, both in the process of life and in creativity. Within the organic cycle of life, death is what makes life meaningful; and it is the impetus to live and thus to eternally create and recreate that constitutes the autopoietic impulse in poetry.

In an introductory chapter on traditionally held views on the concept of mimesis, I elucidate the shift in focus from imitating the products of nature to the processes of nature. The second chapter elaborates on this notion of process in a discussion of the theory of complex systems which holds that systems are not stable but in constant flux because they are defined by the interactions of their constituent parts. I argue in the third chapter that the same can be said of a poem – that it comprises a system that has no stable meaning but is incessantly evolving, in interaction with its environment, or context.

The importance of context in regards to creation and definition of the self in its relationship to the world is my focus in chapter four. Pertinent writings by Ralph Waldo Emerson and Friedrich Nietzsche provide the basis for my examination of the relevance of the body in establishing self-reliance, self-organization, and self-definition.

By applying the findings of complexity theory to the works of Gottfried Benn and Wallace Stevens in chapters five and six, I propose to view mimesis as a complex process

of not only re-presentation but re-creation. In the course of this process, new creations come into being through the continuous de- and reconstruction of the poem, or poetic system. As such, the poem constitutes a subsystem – as does the human being – in the system of nature itself. This dissertation thus suggests that the act of poetic creation in the continuous and dynamic re-creation of form is grounded in natural forces themselves. In a world of ever changing and fleeting phenomena, the poem creates a moment of confluence between subject and object.

## CHAPTER I

### FROM PRODUCT TO PROCESS: THE CHANGING NATURE OF MIMESIS

A divine being has been commonly understood to be the authority upon which we base our view of the world and the way we render it. Throughout history artists have endeavored to imitate nature, a process commonly known as *imitatio naturae*. Traditional definitions of poetic imitation posit the notion of God working within and through the inspired poet; the concept is known as *deus in nobis*. Throughout history creation (*creatio*) and imitation (*imitatio*) have been central to poetic discourse. The first to ascribe to poetry an imitative quality (*mimesis*) was Aristotle (384 – 322 B.C.). Ever since, we have been trying to understand more fully the act of imitation and have raised questions about the authority the model is derived from.<sup>2</sup>

There was already great complexity to the concept of mimesis in classical Greece. Initially, the term referred not only to art, poetry and music but also to the extra-aesthetic realm.<sup>3</sup> In general, mimesis posits reflection; it is an interpretation of what is perceived and is thus the basis of creativity. Speculative concerns about the nature of the

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<sup>2</sup> If we trace the etymological roots of the term create we find that the connotations of *creatio* (from latin *creocere*) are quite extraordinary in number. They range from “grow” to “produce,” “make,” “call into existence, construct, give rise to, constitute, represent, invest, occasion, and to “form out of nothing” Cf. the article on the term “create,” in *The Concise Oxford Dictionary of English Etymology*, ed. by T. F. Hoad (Oxford: Oxford University Press, 1996), Oxford Reference Online. See also Philip P. Wiener, (ed.), *Dictionary of the History of Ideas*, 5 vols. (New York: Scribner, 1973-1974), I: 577-589. Here p. 577.

<sup>3</sup> Cf. Gunter Gebauer and Christoph Wulf, *Mimesis*, transl. by Don Reneau (Berkeley: University of California Press, 1995), especially sections three and five of Part I. Here p. 25.

creative impulse in conjunction with abstract cosmological theorizing emerged for the first time in the thought of the pre-Socratics, at the end of the fifth century.<sup>4</sup>

### 1.1. Heraclitus' Notion of the Fluid Universe

Both Heraclitus (fl. 500 B.C.) and Parmenides (fl. 450 B.C.) were concerned with the problem of appearance and reality, as well as the issue of unity and diversity in the universe.<sup>5</sup> The book of Heraclitus, of which only about 100 sentences survive, was famous for its aphoristic obscurity even in antiquity. Heraclitus' obscurity is considered to be a calculated consequence of his style, which is compact and most likely, deliberately cryptic.<sup>6</sup> It is clear too that his statements are often intended to be self-referential: their linguistic form exemplifies the very structure of which they speak. Critics seem to agree that Heraclitus' thinking was meant as a comprehensive and systematic whole, covering every aspect of human experience, of which every part was connected with every other. Throughout his writings, the abstract notion of structure is omnipresent; explicitly in the word *harmonia*, but mostly implicitly.<sup>7</sup>

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<sup>4</sup> Cf. Jonathan Barnes' chapter on Heraclitus in *Early Greek philosophy* (London: Penguin Books: 1987), pp. 100-126.

<sup>5</sup> Virtually nothing is known about the lives of either Heraclitus nor Parmenides, except what transpires from more or less reliable later sources (mainly Plato and Aristotle). For this reason, there is conflicting evidence regarding their dates which is why I merely give a general date for when they flourished. Cf. T. M. Robinson, *Heraclitus: Fragments* (Toronto: University of Toronto Press, 1987), p. 3; and David Gallop, *Parmenides of Elea: Fragments* (Toronto: University of Toronto Press, 1984), pp. 3-5.

<sup>6</sup> Cf. Aristotle's account of Heraclitus' book, reflected in Barnes, p. 101. See also Thomas Busch's analysis of Nietzsche's reception of Heraclitus' concept of becoming, *Die Affirmation des Chaos. Zur Überwindung des Nihilismus in der Metaphysik Friedrich Nietzsches*, Dissertations, Philosophy Series, vol. 6 (St. Ottilien: EOS Verlag Erzabtei St. Ottilien, 1989), pp. 270-280.

<sup>7</sup> Cf. Barnes, pp. 102-104.

Heraclitus sees a parallelism or identity of structure between the operations of the mind, as expressed in thought and language, and those of the reality which the mind tries to grasp. Heraclitus also holds that everything is directed by a “firebolt,” an eternal fire, which he refers to as need and satiety.<sup>8</sup> In general, the structure of his work can be described as unity-in-opposites and, according to Heraclitus, it appears in many examples, static or dynamic, drawn from everyday life.<sup>9</sup>

Because of the structural similarities between the subject (mind) and the object (external world) according to Heraclitus, the key to understanding the nature of the world is introspection; it lies in reflective self-discovering and self-extending. With his acknowledgement of the universality of change, and the development through internal contradictions, Heraclitus is essentially the first to contend that the harmonious structure of the world depends upon opposite tension, an agonistic state, (like that of the bow and the lyre).<sup>10</sup> Within such a world of flux, Heraclitus held that only change was “real,” and stability an illusion.

However, the pre-Socratics were largely forgotten and their work lost except for what we learn about them through Aristotle and few others. As we shall see in the course of the following chapters, Heraclitus’ ideas of a world of persistent motion and the creation of energy through agonistic relationships find their way into science as well as literature.

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<sup>8</sup> Barnes, p. 104.

<sup>9</sup> Cf. Barnes, pp. 103 and 117.

<sup>10</sup> Barnes, p. 102. Parmenides, on the other hand, argued that anything knowable must be fully determinate and absolutely unified.



## 1.2. The Traditional Dichotomy: Plato and Aristotle

Plato and Aristotle were the two principal philosophers in classical Greece who systematically examined creativity in art. For them art is a basic and significant human activity. However, their views diverge sharply as regards the nature and value of mimetic art. This is in part owing to the fact that for Plato the ideal cannot be reached in a work of art. What we perceive around us in the form of nature is to him merely a copy of an unattainable truth, or ideal (*idea*), which renders art an imitation of this copy; a copy of yet another copy so to speak. This is why Plato considers poets, painters, and other representational artists two steps removed from the truth.<sup>11</sup>

Possibly the most influential account of the creative process handed down to us from antiquity is Plato's idea of *furor poeticus*, the notion that the poet is in some state of spiritual frenzy while he is being inspired or rather, *possessed*: "For the poet is a light and winged and holy thing, and there is no invention in him until he has been inspired and is out of his senses, and reason is no longer in him."<sup>12</sup> Hence, Plato clearly stressed the passivity of the inspired poet who creates by divine dispensation but with virtually no knowledge of what he is doing.

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<sup>11</sup> For the following information on Plato and Aristotle Wayne J. Hankey's essay "Aquinas and the Platonists," *The Platonic Tradition in the Middle Ages: a Doxographic Approach*, by Stephen Gersh and M. J. F. M. Hoenen (Berlin: de Gruyter, 2002), pp. 272-234. Here p. 320. See also Anthony J. P. Kenny, *Essays on the Aristotelian tradition* (Oxford: Clarendon Press, 2001), as well as the section on Aristotle in Hazard Adams et al., ed. *Critical Theory since Plato*, revised ed. (Harcourt Brace Jovanovich, 1992), pp. 49-66.

<sup>12</sup> Adams, p. 14.

Aristotle abandons Plato's search for absolute forms, and places art in the area of the variable and contingent. The scientific tradition upon which Aristotle draws is largely that of the biologists and members of the medical school. Not surprisingly, then, Aristotle approaches literature as if he were a biologist.<sup>13</sup> He shows intense concern for the observed detail of natural phenomena, including those of thought, language, and psychology. His ethics, which to him were a branch of the natural history of human beings, exhibit an appreciation of the complexities of human motivation.

Furthermore, Aristotle restricts the concept of mimesis to poetry, music, and the plastic arts and "develops further the beginnings of a formulation of the independent aesthetic realm found in Plato."<sup>14</sup> Another crucial feature in Aristotle's understanding of imitation is exemplified in his distinction between the poet and the historian: while the latter simply conveys events and thus deals with particulars, the poet deals with universals in that he is concerned not only with what "is" but also with what is possible. It follows that mimesis for Aristotle is "copying and changing in one."<sup>15</sup> Hence, the poet is imitator *and* creator, and the purpose of art is to be "innovatively iterative" and not monotonously repetitive.<sup>16</sup>

As Rome expanded its power and culture over the Mediterranean region in the centuries after two hundred B.C., Christianity slowly gained its stronghold. Meanwhile, a

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<sup>13</sup> Aristotle is the first critic to attempt a systematic discussion of genres.

<sup>14</sup> Gebhard, p. 53.

<sup>15</sup> Gebauer, p. 54.

<sup>16</sup> John A. McCarthy, *Remapping Reality. Chaos and Creativity in Science and Literature* (Amsterdam and New York: Rodopi, 2006), p. 79.

more complete version of the scientific portions of the classical tradition evolved and burst onto the scene in Christian Europe in the twelfth century.<sup>17</sup> Continuing into the late Middle Ages, knowledge about the world of nature was an integral part of scholarship even though theology and religion were regarded as legitimate participants in the investigation and formulation of truths.

During the Renaissance, with the heightened confidence in the capabilities of man which characterizes Humanism, we see the emergence of a new conception of creativity, namely that of the poet as a creator: like another God, *velut alter deus*, he invents what he conceives of in nature. The principle of *imitatio* is substituted with that of *inventio*. This movement goes hand in hand with the beginnings of secularization, set in motion during the sixteenth century with the development of cosmology: in 1543, Nicolas Copernicus published his treatise *De Revolutionibus Orbium Coelestium* (The Revolution of Celestial Spheres) in which a new view of the world was presented: the heliocentric model. This work challenged the age long views of the way the universe worked and the preponderance of the Earth and, by extension, of human beings. The realization that we, our planet, and indeed our solar system (and even our galaxy) are quite common in the heavens and reproduced by myriads of planetary systems provided a sobering and at the same time unsettling view of the universe. The reassurance of the earth's central position in Medieval cosmology succumbed to a less secure and comfortable one.

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<sup>17</sup> Cf. David C. Lindberg, "The Medieval Church encounters the Classical Tradition: Saint Augustine, Bacon, and the Handmaiden Metaphor," *When Science and Christianity Meet*, by David C. Lindberg and Ronald L. Numbers (Chicago: University of Chicago Press, 2003), pp. 7-33.

The constituent element in the Scientific Revolution was the mathematical treatment of natural phenomena.<sup>18</sup> Therefore, the early seventeenth century saw a change in the European attitude to the natural world that increasingly replaced the Aristotelian animistic conception of nature as an organism by Galileo's metaphor of nature as a precisely regulated clock or machine.<sup>19</sup> Simultaneously, this trend led away from metaphysical explanations of the world and its phenomena towards an empirical approach which meant that nature itself became the source not only of explanation but also of inspiration.

While the dichotomy between Plato's and Aristotle's concepts of mimesis remained in place for centuries to come, the Scientific Revolution slowly found its way into European thought. These changes were characterized by systematic doubt, empirical and sensory verification, and the abstraction of human knowledge into separate sciences. This modification in world view can be charted in painting, sculpture, architecture as well as literature; it is obvious that people of the seventeenth and eighteenth centuries began *looking* at the world with different eyes.<sup>20</sup>

Even though the major shift from imitating the products of nature to imitation of the processes of nature is attributed to the eighteenth century (and is especially apparent in the works of Bodmer and Breitinger, Lessing, and most of all, Goethe), McCarthy

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<sup>18</sup> Cf. Bernard Cohen, *The Newtonian Revolution: with Illustrations of the Transformation of Scientific Ideas* (Cambridge: Cambridge University Press, 1980), pp. 3-33.

<sup>19</sup> The clockwork universe is discussed in greater detail in the following chapter.

<sup>20</sup> This new way of *looking* at the world in turn gave rise to the new independent discipline of aesthetics. The term itself was coined by Alexander Gottlieb Baumgarten in 1735 (cf. Hans Reiss, "The Rise of Aesthetics from Baumgarten to Humboldt," *The Cambridge History of Literary Criticism*, vol. IV, ed. by H. B. Nisbet and Claude Rawson (Cambridge: Cambridge University Press, 1997), pp. 658-680. Here p. 658.

refers us to Nikolaus von Cues (1401-1464). A German cardinal, philosopher, and administrator, he explained the difference between theory and appearance by relative motion. In his philosophical writings, composed after 1439, he set aside the definition and methods of the “Aristotelean Sect” and replaced them with his own deep speculations and mystical forms of his own. The best known is his first treatise, “De docta ignorantia” (1439- 40), on the finite and the infinite. In his *Cosmology* he calls the Creator the *Possest* (*posse-est*, the possible- actual), alluding to the argument that God is *possible*, therefore actual. Cues’ microcosmos in created things in his emphasis of the notion of *potential infinitiva* was later elaborated on further by Gottfried Wilhelm Leibniz.<sup>21</sup>

McCarthy attributes to Cues not only the antitipation of the topology of fractals but also the idea of chaos as the origin of the existing world, and therefore the suggestion that chaos is “themother of all beings and shapes.”<sup>22</sup>

### 1.3. The European Debate on Creativity

Intellectuals throughout Europe looked to the creative imagination – the single most important attribute of the creative genius – as the key to unlocking nature’s secrets.<sup>23</sup> While in Germany there was a struggle to create a native literary culture, the

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<sup>21</sup> J. G. Hagen, “Nicholas of Cusa,” *The Catholic Encyclopedia*, vol. XI (New York: Robert Appleton Company, 1911), p. 62. See also McCarthy, p. 81.

<sup>22</sup> McCarthy, p. 80. On a thorough discussion on Leibnitz’s expansion of the notion that the best of all possible worlds demands imaginative re-creations, see McCarthy, p.80. Cf. Jill Ann Kowalik, *The Poetics of Historical Perspectivism* (Chapel Hill: University of North Carolina Press, 1992), p. 50.

<sup>23</sup> Penelope Murray points out that before the 18<sup>th</sup> century, which denoted a major paradigm change in the way creative inspiration was perceived, creativity was inextricably linked to the word “genius,” which itself

English had already established William Shakespeare as a genius.<sup>24</sup> English criticism of the late seventeenth and early eighteenth centuries set up an opposition between genius, in the example of Shakespeare, and the strict rules of art associated with French Neo-Classicism; an opposition which found its way into France's as well as Germany's literary debates.

The reasons Shakespeare's works were deemed to be those of a genius were laid out by Joseph Addison in his essay on genius, as well as in his series of eleven *Spectator* papers on the pleasures of imagination (numbers 411-421), both of which were enormously influential in England as well as Germany. Addison classifies an artist's "level" of genius (on a scale of multiple levels), the first of which are those "who by the mere Strength of natural Parts, and without any assistance of Art or Learning, have produced Works that were the Delight of their own Times, and the Wonder of Posterity."<sup>25</sup> In other words, true expressive strength for Addison stems from nature rather than from learning.

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had a variety of different meanings (none of which correspond to our modern use of the term). Part of the complexity of defining the term "genius" is due to various meanings of our English word which stems from two sources: Latin *ingenium*, meaning both "natural disposition" and "innate ability" versus the Latin *genius*, denoting a guardian deity or spirit which watches over a person. While interest in the nature of origins of creativity began with the Greeks, to whom we owe the image of the Muses, the Greeks did not in fact have a word for genius, or for creativity for that matter (*Genius. The History of an Idea*, ed. and with an introduction by Penelope Murray [New York: Basil Blackwell, 1989], pp. 9-31).

<sup>24</sup> Cf. Jonathan Bate, "Shakespeare and Original Genius," *Genius. The History of an Idea*, ed. by Penelope Murray (New York: Basil Blackwell, 1989). pp. 76-97.

<sup>25</sup> Joseph Addison, Article No 160 (September 3 1711), *The Spectator*, by Joseph Addison, Richard Steele, and others, ed. by G. Gregory Smith, Vol. I (London/New York, 1954), pp. 482-485.

While the central concept of the neo-classical theory of literature was still the imitation of nature, the classical understanding of mimesis underwent a shift away from imitating the *products* of nature towards imitating its *processes*.<sup>26</sup>

Beginning in the early 1730s in Leipzig, Gottsched advocated the imitation of Neo-Classical French drama, whose main representative was Corneille. He gave the old axiom of the imitation of nature a rationalist twist, contending that probability for the sake of moral education was more important than mimesis in the literal sense. Thus, Gottsched limited the sphere of poetry by chaining it to the laws of reason and the concept of probability. The latter he justified with the authority of Aristotle who had separated historical from poetic truth.<sup>27</sup>

In radical opposition to Gottsched's rationalistic regimentation of poetics, the Swiss theoreticians Bodmer and Breitinger valued the affects rather than reason since in their mind, it was the emotional rather than the rational effect of a work that was crucial. True to Horace's dictum *ut picture poesis*, they propagated "painterly poetry," arising from the imagination.<sup>28</sup> Poetry was now no longer something that was concocted according to specific recipes or rules, neither was it a product of the mind, as Gottsched had claimed – instead, poetry originated deep within the poet.<sup>29</sup> While the concept of

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<sup>26</sup> Cf. McCarthy, *Remapping Reality*, p. 77.

<sup>27</sup> Cf. Klaus L. Berghahn, "German Literary Theory from Gottsched to Goethe," *The Cambridge History of Literary Criticism*, vol. IV, ed. by H. B. Nisbet and Claude Rawson (Cambridge: Cambridge University Press, 1997), pp. 523-545. Here pp. 530-531.

<sup>28</sup> Berghahn, pp. 530-532.

<sup>29</sup> Goethe illustrates this in *Faust* in the antagonism of Wagner, who represents the *poeta doctus* and Faust, who claims that the desire to create and with it the work of art must come from within: "wenn es nicht aus der Seele dringt," and "wenn es euch nicht von Herzen geht." Cf. Johann Wolfgang von Goethe, *Werke: Hamburger Ausgabe in 14 Bänden* (HA), ed. by Erich Trunz (München: Beck, 1981), III: 24-25.

exciting emotions was nothing new – traditional rhetoric already had *docere* and *movere* as its two main principles – Breitinger’s insistence on poetry that would move the heart of the poet as well as the reader marked the beginnings of a new rhetoric, namely “Gefühlsrhetorik.” This did not mean, however, that spontaneous, “natural” writing was now the way to go; in fact, writers such as Klopstock, Herder, and the young Goethe spent a great deal of effort on perfecting their rhetorical techniques in order to make the work of art *appear* to be “natural” and spontaneous.

One of Bodmer and Breitinger’s most vigorous followers was Klopstock, who viewed his “profession” as poet as a sort of religious calling; an understanding which provided him with a sort of prophetic confidence. Klopstock now opposed what he referred to as *poeta vates* (seer-poet) to Gottsched’s *poeta doctus* (learned poet). In this context, religion played the role of irrational medium that lead the way to the development of an accordingly irrational concept of the poet and the creative process itself. With the rise of irrationality, the poet achieved a new legitimacy, one that is based upon the impressions of the lyric “I” and therefore automatically provides the poet with authority.

By defending and emphasizing the power of the imagination and the creative genius of the poet, Bodmer and Breitinger expanded the narrow confines of the imitation of nature.<sup>30</sup> In their wake, Gotthold Ephraim Lessing fully broke with the pedantic poetics of rules, laying down his solution to the problems of mimetic theory in *Laokoon, oder über die Grenzen der Malerei und Poesie* (*Laokoon, or the Limits of Painting and*

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<sup>30</sup> Cf. Berghahn, p. 532.



*Poetry*) in 1766. In defining poetry in opposition to painting Lessing determines the limits of the visual arts and at the same time frees poetry from its subjugation to painting. He declares poetry as the broader art form with more possibilities due to its transitory nature that allows it to imitate actions in a temporal sequence.<sup>31</sup>

Agreeing with Gottsched that the stage must be the medium for the new literature but condemning the latter's advocacy of French Neo-Classicism, Lessing offered Shakespeare as a new paradigm, claiming that Shakespeare was closer to the German culture not only linguistically but also spiritually. In Germany, as had been the case in England, the debate about the term "genius" was to a large extent a means of countering the French literary dominance, as well as against the rationalist Enlightenment movement in general. No longer an imitation of nature but an imitation of the creating, name-giving Godhead, the poet became a second creator.<sup>32</sup> Hence, the genius needs neither rules nor models because he creates his works spontaneously out of himself, an idea which can be traced back to Plato's *furor poeticus*.<sup>33</sup>

Shaftesbury gave it the concept of the poet as a second maker its modern meaning in the eighteenth century but the emphatic cult of the original genius in Germany was inspired by Edward Young's *Conjectures on Original Composition* (1759). Translated within two years of its publication it played a significant role in the shaping of young

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<sup>31</sup> Berghahn, pp. 532-533.

<sup>32</sup> Cf. Herder, *Sämtliche Werke*, vol. XII, ed. Bernhard Suphan, 33 vols (Berlin: Weidmann, 1877-1913), p. 7.

<sup>33</sup> Berhahn, p. 534.

Herder's *Sturm-und-Drang* aesthetics.<sup>34</sup> In doing so, it laid the foundation for the German Genie- movement during the 1770s.

An essential image which illustrates the binary opposition of the learned poet, and the inspired poet is the organic model. Young points to a “vegetable nature” as a prerequisite:

An Original may said to be of a vegetable nature; it rises spontaneously from the vital root of Genius; it grows, it is not made: Imitations are often a sort of manufacture wrought up by those mechanics, art, and labour, out of pre-existent materials not their own.<sup>35</sup>

Bate affirms that although the notion that works of art have an organic form is derived from the Neoplatonic tradition, Young's innovation is in putting the two ideas together.<sup>36</sup>

Young's clear distinction between *organic* and *mechanic* anticipates the principle that will shape the newly established discipline of aesthetics.<sup>37</sup>

#### 1.4. The River as Metaphor for the Creative Act

While Shakespeare became the dramatic paradigm of a genial poet, Pindar emerged as the lyrical paradigm. However, the opposing parties still shared the assumption that the key to cultural renewal lay in imitation of one sort or another, and it

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<sup>34</sup> Cf. Bate, p. 88.

<sup>35</sup> Young, p. 12.

<sup>36</sup> Cf. Bate, p. 89.

<sup>37</sup> Cf. Hans Reiss essay “The Rise of Aesthetics from Baumgarten to Humboldt,” *The Cambridge History of Literary Criticism* (vol. IV: The Eighteenth Century), ed. by H.B. Nisbeth and Claude Rawson (Cambridge: Cambridge University Press, 2003), pp. 659-680.

was here that first Hamann and then his disciple Herder read Young's *Conjectures*. From Young, Herder derived a program for the establishment of a German national literature that was to be just that: German. Claiming that assimilation of foreign works was not beneficial for this feat but in fact rather harmful and hindering, he pointed to works such as the Old Testament, Homer, Pindar, and Shakespeare, and Ossian as examples of original genius.

According to Herder, these authors had an uncultured directness, a "naturalness" which could only have emerged when all imitation was shunned. In his essay on Shakespeare of 1773, Herder argues the importance of cultural identity in the working of creativity; "nature" is now the particular historic moment, in which for example Shakespeare created his drama.<sup>38</sup> From this it follows that history is not an incessant movement away from a sort of genial state of purity but rather, a generative principle. Breaking with antiquity as model for creative art, this concept at the same time advocated individuality and authenticity.

In the eighteenth century the Pindaric ode advanced to represent specifically "genial" poetry. Horace's *carminum* IV, 2 was a key text in prefiguring and establishing the Greek poet Pindar (518-438 B.C.) as a model of the elementary and naturally-genial poet. Horace essentially compares Pindar to a river which plunges down the mountains and overflows its banks:

Monte decurrens velut amnis, imbres  
Quem super notas aluere ripas,

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<sup>38</sup> Cf. Benjamin W. Redekop, *Enlightenment and Community: Lessing, Abbt, Herder and the Quest for a German Public*, McGill-Queen's studies in the history of ideas, 28 (Montreal: McGill-Queen's University Press, 2000), pp. 186-187.

Fervet immensusque ruit profundo  
Pindarus ore.

[Wie vom Gebirge der Strom stürzt,  
Den Regengüsse über sein Bett anschwellten,  
So brauset, so stürmet des unerreichbaren Pindars  
Vollströmender Gesang.]<sup>39</sup>

The image of the raging river, portraying the poet's expressive power emphasizes the sheer natural force of the creative act and became *the* metaphor for the creative genius. In analogy to this image, Pindar neglects the second of the traditional rhetorical goals, *docere*, but focuses entirely on *movere*; he achieves this by breaking with traditional metrical rules, using neologisms and enjambements. Clearly in opposition to classical tradition and its rules, Pindar, as the paradigm for lyric poetry, became a beacon for originality, eccentricity, and differing from the norm in general.<sup>40</sup>

#### 1.4. Goethe and the "Geniezeit"

Herder met Goethe in Strasbourg, where the latter was a 21-year old law student. We find Goethe's first theoretical expression of allegiance to Herder's views in his essay "Von deutscher Baukunst."<sup>41</sup> In this treatise, Goethe praises original genius in the guise of the architect of the Strasbourg cathedral which is presented as a supreme example of art arising from the German national soul. Comparing the genius to a creator-God,

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<sup>39</sup> Cf. Walter Killy and Ernst A. Schmidt (eds.), *Horaz, Oden und Epoden* (Zürich und München:, 1981), pp. 296ff.

<sup>40</sup> Cf. Schmidt, I: 197 and D. S. Carne-Ross, *Pindar* (New Haven: Yale University Press, 1985), pp 1-40. Here especially p. 3.

<sup>41</sup> Goethe, HA, XII: 7-15.

Goethe claims that general principles and traditions are not only irrelevant but actually inhibit the genius from bringing to the surface true art – which arises from intense, unique, individual, and spontaneous feeling. Everything “foreign” on the other hand, (it can be assumed, that above all else Goethe is referring to the French here), cannot be genius in its attempt to imitate antiquity, out of lack of courage to be itself.<sup>42</sup>

As the principle hallmark of the work of genius, Goethe identifies an internal unity which he claims accounted for the immediate hold the cathedral gained over him the moment he saw it:

Ein ganzer, großer Eindruck füllte meine Seele, den, weil er aus tausend harmonisierenden Einzelheiten bestand, ich wohl schmecken und genießen, keineswegs aber erkennen und erklären konnte.”

[One vast, all-encompassing impression filled my soul, which, as it consisted of a thousand harmonizing details, I could indeed savor and enjoy, but which I could not identify and explain].<sup>43</sup>

It was from Young that both Herder and Goethe derived the belief that true artistic creation was “natural”, not only because it required no conscious cultivation of any kind, but because it partook of nature’s orderliness. In anticipating the Neo-Classical reproof that only rational – and thereby conscious – organization can impose order upon the work of the imagination, the supporters of original genius now claimed that the creative imagination is in itself imbued with organizing principles which are spontaneously embodied in its products.

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<sup>42</sup> Cf. Barry Bergdoll, *European architecture 1750-1890* (New York: Oxford University Press. 2000), pp. 145-157.

<sup>43</sup> Johann Wolfgang von Goethe, „Von deutscher Baukunst,“ (1772) *Werke, Berliner Ausgabe*, 22 vols, (Berlin and Weimar: Aufbau-Verlag, 1965-78), IXX: 33. My translation.

In several poems written in the early and mid 1770s, Goethe is the first to transform what had hitherto been formulated in theory into poetic execution: the theory of the genius being “gottgleich” becomes “inner form.” The lyrical form deemed to be best suited for expressing this poetic intensity and purity was the Pindaric Ode. In 1728, Young had written a treatise about this poetic form in his “Discourse on Lyrick Poetry,” and Herder, to whom the ode seemed closest to nature (“der Natur am nächsten”) claims it to be, for this reason the most original and the source of the others” (“die originalste, und der Grund der übrigen”).<sup>44</sup> Thus, since this form of poetry is “der Ursprung der Dichtkunst”, Herder concludes that the ode must be the quintessential means of expression for the lyric genius. While the Pindaric ode does run the risk of becoming mannered and forcedly-exaggerated due to its focus on conveying passion, greatness, and originality, it nevertheless has a consciously concealed logic and order inherent in it which seemed to correspond with nature’s organizing principles.<sup>45</sup>

Typical for the Pindaric ode is the poet’s calling to the muse at the beginning of them poem, as Goethe does, for example, in “Wanderer’s Sturmlied.” However, while antiquity, the muses’ inspiration gave the impetus for the poet to create, the poetic genius, who is convinced of his creative powers, is able to call the muses to him whenever he pleases – testimony of the genius’ authority. The problem which arises for the genius,

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<sup>44</sup> Johann Gottfried Herder, *Sämmtliche Werke*, ed. by Bernhard Suphan et al., (Hildesheim: Georg Olms-Verlag, 1967), XXXII: 76. My translations.

<sup>45</sup> A more clearly distinct tradition in the composition of odes is represented by the Horatian ode which employs a regularly repeated stanza form. Cf. Christopher Baldick, “Pindaric,” in *The Concise Oxford Dictionary of Literary Terms* (Oxford: Oxford University Press, 1996), Oxford Reference Online. See also Schmidt’s discussion of the Pindaric as opposed to the Anacreontic ode, which were symbolized by the eagle and the dove, respectively (p. 219). Cf. Gottfried Benn’s usage of the eagle and the dove in his poem “Das späte Ich,” which I discuss in chapter five.

nevertheless, lies in the distance he has put between himself and the rest of the world, in effect alienating himself from the world in his “Höhenflug.” The genius can never rest, he is a constant wanderer.<sup>46</sup> What Goethe presents here is the archetypal tragedy of the creative artist: the contradiction of art versus life, which would be a topos for centuries to come.<sup>47</sup>

During the Geniezeit, Goethe’s poem “Prometheus” became the archetype for the poetic genius’ confidence in his creative abilities. In this poem, as well as in two others, namely “Ganymed” and “Mahomed’s Gesang,” the genius adopts the persona of a God-like creature. In “Prometheus,” written in 1774, the genius as Titan vaunts his autonomous creativity and scorning his father Zeus’ claims to homage. While the poem is a manifesto for humanity’s striving for social, political, and spiritual self-determination, it is at the same time a breaking with the hitherto held image of God as a creator; instead, Prometheus trusts in his own creative abilities. However, this attitude is not to be confused with a sort of genial hubris since leading to this self-authorization is a period of suffering in which Prometheus is thrown back onto himself. The Prometheus ode marks an important chapter in literary history – in fact, in history in general – because not only does it implicitly describe the rejection of hitherto held beliefs, but Prometheus himself seizes hold of the power to create, in an allusion to the bible:

Hier sitz’ ich, forme Menschen  
Nach meinem Bilde,  
Ein Geschlecht, das mir gleich sei,  
Zu leiden, weinen,

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<sup>46</sup> Cf. Boyle, pp. 89-91.

<sup>47</sup> Examples are Goethe’s *Torquato Tasso*, and later Thomas Mann’s novels.

Geniessen und zu freuen sich,  
Und dein nicht zu achten,  
Wie ich.

[Here I sit, forming man  
In my image,  
A people that is like me  
To suffer, cry  
To relish and rejoice,  
And not honor you,  
Like I.]<sup>48</sup>

Jochen Schmidt points out that a number of English as well as French poets were familiar with the image of Prometheus as the genius-creator prior to Goethe's poem. In fact, it was Edward Young in his "Conjectures," who had ascribed to Shakespeare the "genial fire" which enabled them, just like Prometheus, to infuse eternal life into dramatic works.<sup>49</sup> The first to actually establish a connection between the figure of Prometheus with a concept of lyric poetry, as Schmidt notes, was Shaftesbury:

I must confess there is hardly anywhere to be found a more insipid race of mortals than those whom we moderns are contented to call poets, for having attained the chiming faculty of a language, with an injudicious random use of wit and fancy. But for the man who truly and in a just sense deserves the name of poet, and who as a real master, or architect in the kind, can describe both men and manners, and give to action its just body and proportions, he will be found, if I mistake not, a very different creature. Such a poet is indeed a second Maker, a just Prometheus under Jove. Like that sovereign artist or universal plastic nature, he forms a whole, coherent and proportioned in itself, with due subjection and subordinacy of constituent parts.<sup>50</sup>

Goethe himself had referred to this poem as „Zündkraut einer Explosion“ (“an accelerator for fire”) since it had inspired a general debate about Spinoza that would

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<sup>48</sup> Goethe, "Prometheus," *Werke* (Berlin: Aufbau-Verlag, 1972) (BA), I: 328. My translation.

<sup>49</sup> Cf. Schmidt, p. 127.

<sup>50</sup> Anthony Earl of Shaftesbury, *Characteristics of Men, Manners, Opinions, Times*, ed. with an introduction and notes, by John M. Robertson, 2 vols. (Gloucester, Mass: Peter Smith, 1963), I: 135 ff.



occupy contemporary debate for decades.<sup>51</sup> The connection to Spinoza was a prerequisite for this view of a creative, self-organizing nature. A contemporary of Descartes and Leibnitz, Spinoza had contended that “God” and “Nature” were two names for the same reality, namely the single substance (meaning “to stand beneath” rather than “matter”) that underlies the universe and of which all lesser “entities” are merely modes or modifications. He contended that “Deus sive Natura” (“God or Nature”) was a being of infinitely many attributes.<sup>52</sup> Not surprisingly, Spinoza’s pantheism became the epitome of the rejection of a transcendental God.

Spinoza’s influence is even more apparent in the two other poems by Goethe mentioned above, “Mahomets Gesang” and “Ganymed.” In a song of praise of Mohammed, the genius as charismatic leader is compared to a mighty river – an allusion to Horace’s description of Pindar’s genius, of course – who draws out the potential of the lesser streams, joining their flow with his as he sweeps them on to the all-embracing ocean. The ocean, which is his origin as well as goal, is, of course, another metaphor for the immanent divine power which these poems suggest is the driving power behind all creativity, be it natural or artistic. At the same time, the ocean represents the goal of a sort of universal all-embracing harmony. In “Ganymed,” the genius is a loving worshipper of Nature who ecstatically gives himself up to the embrace of Zeus, here portrayed as the immanent divinity within a pantheistical universe. Like the river in “Mahomets Gesang” Ganymed yearns to be one with the “alliebender Vater,” who is no longer the

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<sup>51</sup> Goethe, *Dichtung und Wahrheit*, in HA., X: 49.

<sup>52</sup> Cf. Barry Sandywell, *Reflexivity and the Crisis of Western Reason* (New York: Routledge, 1996), pp. 144-147.

transcendental God of the Christian belief system but the divine power embodied in nature.

### 5.1. Goethe's Concept of Complexity in Nature

In 1773, Goethe published his revised, more “spontaneous” version of *Götz von Berlichingen*, his programmatically anti-Neo-Classical drama.<sup>53</sup> This play was responsible for unleashing the *Sturm und Drang* (Storm and Stress) movement in Germany, which quickly developed into a cult of original genius, finding its climax a year later, in 1774, with the writing and publication of *Die Leiden des jungen Werthers*. The main character, displaying a fatal inclination to cultivating his inner urges, his true self, in effect becomes the poster child for genial subjectivism. Claiming subjectivity as absolute authority, combined with a sort of Rousseauan disgust with culture (“Kulturekel”) and a non-requited love, leads Werther to essentially drown within himself. His downward spiral is echoed in his letters, especially the one of December 12, in which he describes the chaotic flooding of his town, thereby foreshadowing his own death.<sup>54</sup> Thus, Goethe's diagnosis of Werther exemplifies the *destructive* forces that can result when the individual and its subjectivity are absolute instances: it must necessarily

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<sup>53</sup> For a more detailed discussion of Goethe's understanding and treatment of creativity and its relationship to complexity theory, see John A. McCarthy, “‘The Pregnant Point’: Goethe on Complexity, Interdisciplinarity, and Emergence,” *Goethe, Chaos and Complexity*, ed. by Herbert Rowland (Amsterdam: Rodopi, 2001), pp. 17-31. Cf. Michael Beddow's essay “Goethe on Genius,” in *Genius*, pp. 98-112.

<sup>54</sup> See Goethe, *Leiden des jungen Werthers*, HA VI:98. This scene could be seen as an allusion to the Pindaric metaphor of the creative genius as a river, its elementary power destroying and freeing Werther at the same time.

lead to alienation from society and, eventually, to self-destruction. The proximity of creative and destructive power is also implicit in the entire theme of *Faust*.<sup>55</sup>

It is clear that Goethe now believed that creative genius involved more than the genius speaking with the original voice of nature. Michael Beddow contends that “genius now involves marrying individual invention with a sense of what human beings have collectively achieved in the development of civilization, creating works which enhance civilization by intertwining individuality with tradition.”<sup>56</sup>

Though not in a separate and definitive study of poetic imagination, Goethe commented on the aesthetic experience and its proximity to natural phenomena in numerous publications.<sup>57</sup> In fact, he attributed many of his revelations about human nature to his study of the natural sciences: “Even more emphatically than the German Romantics writing at the same time, Goethe recognized the benefit of interdisciplinary knowledge for the achievement of aesthetic goals.”<sup>58</sup> In so doing, Goethe can be attributed with prefiguring “the holographic conception of modern science.”<sup>59</sup>

Goethe solves the dilemma of the separation of art and nature by declaring humankind to be subsumed under the general laws of nature: “Humankind is the highest,

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<sup>55</sup> Cf. John A. McCarthy’s reading of Goethe’s *Faust* against the backdrop of chaos, complexity, and Nietzsche’s philosophy of eternal emergence in *Remapping Reality*, chapter five: “A highly Complex Matter: The Spirit of the Earth, Evil, and Creativity in ‘Faust,’” pp. 169-230.

<sup>56</sup> Beddow, p. 106.

<sup>57</sup> McCarthy, p. 85.

<sup>58</sup> Cf. McCarthy, pp. 85-66 and Gerhart Baumann, “Goethe: Schriften zur Kunst – Vermittlungen einer Poetik,” *Ein unteilbares Ganzes* (1997), pp. 89-116. Here p. 99.

<sup>59</sup> McCarthy, p. 86. McCarthy also notes that Arthur Koestler frequently quotes Goethe’s holistic approach to science in his *The Act of Creation* (1964), as well as in his follow-up volume, *Janus* (1970), in which Koestler “scorns the fragmentation of research into discontinuous parts as a reductionist fallacy.” (McCarthy, p. 177)

may the actual object of the creative arts” (“Der Mensch ist der höchste, ja der eigentliche Gegenstand bildender Kunst”).<sup>60</sup> The only way to compete with nature is thus to interact with it; analysis and categorization of natural phenomena are merely a prelude to truly artistic endeavors. McCarthy proffers:

By means of his own creative energy, the artist transforms external reality, not through aggressive intrusion but through sensitive attention to hidden nuances of meaning and movement inherent in nature [...] Hence for Goethe, the proper imitation of nature is premised on the artist’s ability to acquire interdisciplinary knowledge and bring it to bear in the creative act. It is an energizing process.<sup>61</sup>

It is thus the notion of dynamic interplay that lies at the heart of Goethe’s theoretical musings.<sup>62</sup>

Astrida Tantillo also offers an analysis of Goethe’s philosophy of nature in her book *The Will to Create* (2002). She points to a conversation Goethe had with Eckerman (February 1829) in which he admits that without his attempts in science, he would “never have learned to know mankind as it is.”<sup>63</sup> Goethe’s natural philosophy clearly places nature’s creative powers at its center; a power which he describes as stemming from the interaction between polarity and “Steigerung” (increase, intensification), which he calls the two main catalysts in all of nature (“die zwei großen Triebräder aller Natur”):

der Begriff von Polarität und von Steigerung, jene der Materie, insofern wir sie materiell, diese ihr dagegen, insofern wir sie geistig denken, angehörig; jene ist in immerwährendem Anziehen und Abstoßen, diese in immerstrebendem

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<sup>60</sup> Cf. McCarthy, p. 87 and Johann Wolfgang von Goethe, *Sämtliche Werke*. Frankfurter Ausgabe, ed. by Friedmar Apel, Hendrik Birus et al., 40 vols (Frankfurt am Main: Deutscher Klassiker Verlag, 1985-99), XVIII: 482.

<sup>61</sup> McCarthy, p. 88.

<sup>62</sup> Cf. McCarthy, pp. 178 ff, where he applies his findings to Goethe’s *Faust*.

<sup>63</sup> Astrida O. Tantillo, *The Will to Create. Goethe’s philosophy of nature* (Pittsburgh: University of Pittsburgh Press, 2002), p. 93.

Aufsteigen. Weil aber die Materie nie ohne Geist, der Geist nie ohne Materie existiert und wirksam sein kann, so vermag auch die Materie sich zu steigern, so wie sich der Geist nicht nehmen läßt, anzuziehen und abzustoßen;

[Polarity is a state of constant attraction and repulsion, while intensification is a state of ever-striving ascent. Since, however, matter can never exist and act without spirit, nor spirit without matter, matter is also capable of undergoing intensification, and spirit cannot be denied its attraction and repulsion.]<sup>64</sup>

Tantillo describes the relationship between polarity and “Steigerung” as a “pulse.”<sup>65</sup> I would like to add that the movement Goethe is describing – that of continuous attraction/repulsion/intensification – is clearly reminiscent of a spiral-movement; a shape that can be found everywhere, on all scales, in nature.<sup>66</sup>

Tantillo refers to Goethe’s essay “Polarität” (“Polarity”), where he discusses the concept of creativity in greatest detail. Here Goethe contends that nature creates numerous life-forms and a variety of phenomena through the interaction of polarity and Steigerung. By doing so, Goethe clearly identifies intensification as the force behind transformations from simple into complex (and unique) forms:

Sie (die Natur) bedient sich hierzu des Lebensprinzips, welches die Möglichkeit enthält, die einfachsten Anfänge der Erscheinungen durch Steigerung ins Unendliche und Unähnlichste zu vermannigfaltigen.

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<sup>64</sup> Goethe, *Erläuterungen zu dem aphoristischen Aufsatz „Die Natur,”* HA, XIII: 48-49. Translation by Tantillo, (pp. 60-61). Tantillo also points out that in the creation myth, „polarity was personified in the characteristics of Lucifer, and Steigerung in those of the godhead. The materiality of the devil threatened to collapse the world until the godhead contributed its expansive drive.” Thus, Tantillo continues, the nonmaterial side of creation leads the material outside of itself so that it “may expand and create rather than collapse and destroy,” (p. 61).

<sup>65</sup> Cf. Tantillo, p. 61.

<sup>66</sup> I discuss the spiral shape in greater detail in the following chapters, especially chapter two. See also John McCarthy’s mention of the spiral in his chapter on *Faust (Remapping Reality)*, p. 196).

[To do this [nature] uses the principle of life, with its inherent potential to work the simplest phenomenon and diversify it by intensification into the most infinite and varied forms.]<sup>67</sup>

In several of his writings, Goethe refers to a law of dynamic order. In his didactic poem “Metamorphosis of Plants” (1798) he concludes that every plant announces universal laws of change and self-similarity (“wiederholte Spiegelungen”).<sup>68</sup> Those mirrorings (“Spiegelungen”) evolved into a major aesthetic ordering strategy. In contemporary terms, McCarthy proffers, they are “reflectaphors that act together with the narrative to produce a strong and vital work similar to the living organism, which draws equally on the spiral and the vertical tendencies obvious in plant life.”<sup>69</sup>

In what is very much a holistic approach, Goethe proposes that our observations of nature lead to a better understanding of human beings. Due to the fact that nature’s essence is the *drive* that Goethe described in the incessant productive conflict of polarity and *Steigerung*, nature is never static. McCarthy alludes the interplay of the two forces to the symbol of a spiral:

Goethe explained that these two separate tendencies [polarity and *Steigerung*] function in conjunction to ensure perfection in the plant. The spiral drive is structuring, nurturing, and progressive function, while the vertical drive is the spiritual one (“ein geistiger Stab”), the basis (or entelechy) of existence which ensures longevity. When not in harmony, monstrosities arise. The manifestation of these two drives is “Gestalt.”<sup>70</sup>

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<sup>67</sup> Goethe, *Sämtliche Werke*, ed. by Hendrik Birus et al., 40 vols (Frankfurt am Main: Deutscher Klassiker Verlag, 1985-); cf. Tantillo, p. 62.

<sup>68</sup> Cf. McCarthy, pp. 178-179, and Goethe, FA, I: 640-641.

<sup>69</sup> McCarthy, p. 179. See also my discussion of reflectaphors (Briggs) in chapter three.

<sup>70</sup> Cf. McCarthy, p. 179, and Goethe, FA, XXIV: 187-788.

McCarthy summarizes that “Gestalt” for Goethe is a dynamical and evolutionary event. The doctrine of forms is equivalent to a doctrine of metamorphosis, and metamorphosis is “the key to all natural signs.”<sup>71</sup> A balance of these agonal forces is thus the prerequisite for success, both in the natural world as well as in the context of artistic creation.

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<sup>71</sup> McCarthy, p. 179, and Goethe, FA, XIII: 205, # 2.70.3.

## CHAPTER II

### A SCIENTIFIC APPROACH TO CREATIVITY: COMPLEXITY THEORY

“Psychological exile” is the term Edward O. Wilson ascribes to the situation of man in the universe, a result of being faced with the chaos of the environment, the recognition of the self, and the finiteness of personal existence.<sup>72</sup> This state of confusion is caused by perhaps the most distinctive quality of the human species, its sense of self-awareness, which in turn has throughout human history been struggling to impose order on the chaos, impelling us to puzzle about the world and our role in it.<sup>73</sup>

To make sense of the world, we employ the “knowledge” obtained from the sciences or the humanities, two disciplines originating from the same set of questions and seeking the same purpose: an understanding of the self, in relation to its environment. While science seeks factual, objective knowledge by means of reductionism (i.e. reducing a “problem,” a phenomenon, an element, into its constituent parts and to synthesize these elements afterwards to recreate their original assembly), the arts complement the findings of science by proceeding holistically. In other words, the arts “fill the gaps” by answering those questions which the analytical method could (until then) not answer. Wilson remarks that through the imagination “the arts were the means by which these [unexplained] forces could be ritualized and expressed in a new, simulated reality.”<sup>74</sup>

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<sup>72</sup> Edward O. Wilson, *Consilience* (New York: Random House, 1998), p. 246.

<sup>73</sup> See also Christof Koch, *The Quest for Consciousness: a Neurobiological Approach* (Denver, Co: Roberts and Co., 2004), pp. 11-20.

<sup>74</sup> Wilson, p. 246.



However, the realization that the analytical method is not always effective and followed anything but a linear process. In the sixteenth and seventeenth centuries the medieval worldview, which had been based on Aristotelian philosophy and Christian theology radically changed. The notion of an organic, living, and spiritual universe was replaced by that of the world as a machine, an image that became the dominant metaphor of the modern era.

This change was brought about by the Scientific Revolution: new discoveries in astronomy, physics, and mathematics by Copernicus, Galileo, Bacon and Newton. The growing realization since the Renaissance that our planet and solar system, even our galaxy are part of numerous other solar systems provided an unsettling view of the universe. Theo-centrism, and with it the reassurances of a cosmology based on the earth typical of the Middle Ages vanished, and a new view of the world, one less secure and comfortable, came into being. Led on by the advancing sciences, a new trend evolved that led away from metaphysical explanations of the world towards an empirical approach. Nature, having been the source of inspiration throughout history, now also became the basis of explanation.

Philosophy followed the lead of the sciences, as René Descartes applied the method of analytical thinking to philosophy, a method which, of course, consists of breaking up complex phenomena into their constituent parts and analyzing these separately, in order to gain an understanding of the functioning of the whole. Descartes based his view of nature on a fundamental dichotomy between two different realms, that of mind and that of matter. According to Descartes, the material universe, including all living organisms, could in principle be understood entirely by analyzing it in terms of its

smallest parts. The faculty of reason, therefore, he considered the only reliable method of attaining knowledge.

This concept of the world as a machine created by Galileo and Descartes was complemented by Isaac Newton, whose mechanistic explanations in the form of exact mathematical laws provided what seemed like the ultimate conquest of nature by mankind. Co-inventor of the calculus (nearly one thousand years after Archimedes, who first proposed the methods of integral calculus in his *Palimpsest*), Newton's conception of the universe was that of a huge, regulated and uniform machine that operated according to natural laws in absolute time, space, and motion.<sup>75</sup>

Much like a clock, a mechanical device made up of separate parts organized by a design which is not implicit in the individual parts as such. Whether this design presupposed an external designer remained a matter of dispute throughout the Enlightenment. However, what was indisputable in this mechanistic world view was that the order of the whole is neither intrinsic nor did it emerge from the various parts. The laws that controlled this clockwork universe Newton expressed in formulas which were independent of history and of any temporal variations in general.

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<sup>75</sup> Calculus was in fact developed independently by Isaac Newton and Gottfried Wilhelm Leibniz (1646–1716). See *A Dictionary of Physics*. Ed. John Daintith (Oxford: Oxford University Press, 2000), Oxford Reference Online.



**Figure 1: An orrery, a mechanical model of the solar system, can be taken as a metaphor for the clockwork universe of Newtonian Mechanics ([http://www.physicalworld.org/restless\\_universe.html](http://www.physicalworld.org/restless_universe.html))**

The world the scientist looked out upon was, in essence, a fixed, changeless world, governed by immutable laws. It was a predictable world of matter acted upon by force, ruled by a rigid determinism. In this realm, motion was constant and measurable in a straight line; i.e. motion was linear.

Therefore, world and universe were considered to be an intrinsically stable system, which meant that it was closed rather than open, deterministic rather than random, and reversible rather than irreversible. Such a system operates at or near equilibrium, meaning that the closure of the structure and reversibility of its laws incline the system to a state of inertia. The final characteristic of an intrinsically stable system is the fact that its parts are independent of each other and are merely externally related. The whole of the system, therefore, is the sum of its parts; and the system can be understood by dissecting it and analyzing the various elements.

Having laid the foundation for the Enlightenment's understanding of the planetary system, Newton's mechanistic model would soon be appropriated to interpret other aspects of life, such as society and culture. If the universe was a machine and could be understood rationally, then so could economics, history, politics, and human character. It also followed that if economics, history, politics, and ethics were mathematically calculable, they could be manipulated as if they were machines, that is, they could be improved and made to run better. Coinciding with this human-empowering Enlightenment philosophy, then, the mechanistic paradigm was founded on the idea that all phenomena are fundamentally rational and can therefore be quantified and analyzed.

This period of European thought is characterized not only by the emphasis on experience and reason; it also brings with it mistrust of religion and traditional authority, as well as a gradual emergence of the ideals of liberal, secular, democratic societies. The Enlightenment is associated with a materialist view of human beings, an optimism about their progress through education and science, and a generally utilitarian approach to society and ethics. In England, the movement can be discerned in the 17th century with the writings of Francis Bacon and Hobbes, and in France with the new emphasis on unaided reason in the work of Descartes.

But it was in the 18th century that the Enlightenment movement fully flourished, especially in France, Scotland, and Germany. Here, the critical philosophy of Kant is both a kind of culmination and a mark of the succeeding Romantic period. The notions of chaos and order and the implied agonistic relationship between them occupied his thinking throughout his life. And while he was deeply indebted to binary thinking, he “nevertheless pushed dialectical reasoning to its limits, arriving at an essentially holistic

view.”<sup>76</sup> The Romantics, in their search for holistic perception, their emphasis on the interdependence and relatedness in nature, and their desire to restore the connections between man and the vast organism that constitutes the earth are thus deeply indebted to Kant.<sup>77</sup>

Hence, the latter movement in literature and art reasserts passion and imagination in reaction to the classicistic and rationalistic tendencies of the Enlightenment. Viewed in a comparative perspective, such a reaction against the Enlightenment is found first in Germany among writers such as Goethe and Schleiermacher; in England it can be seen in the works of Blake, Wordsworth, and Coleridge.<sup>78</sup>

The most profound and comprehensive ideal of romanticism is the vision of a greater personal freedom for the individual. Its origins can be traced to the economic rise of the lower class, which had been struggling to free itself from feudal and monarchical restrictions. From there it moves to the individualism of the Renaissance and to the Reformation, which was based on the belief in an immediate relationship between man and God. The striving for personal freedom is also apparent in the psychology of Locke, Hartley, and others, who contended that minds are formed by environmental conditions,

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<sup>76</sup> Cf. John McCarthy, *Remapping Reality* (Amsterdam and New York: Rodopi, 2006), p. 151. See also McCarthy, “Chaos: Motif, Theme, or Theory?,” *Thematics Reconsidered*, ed. by Frank Trommler, with an introduction by Theodore Ziolkowski (Amsterdam: Rodopi, 1995), pp. 133-43.

<sup>77</sup> Cf. Donald Worster, *Nature's Economy: A History of Ecological Ideas*, 2nd ed. (Cambridge: Cambridge University Press, 1994), p. 82. See also Jim McKusick's introduction to “Romanticism and Ecology,” (a special issue of *The Wordsworth Circle*) where he argues that “much Romantic writing emerges from a desperate sense of alienation from the natural world and expresses an anxious endeavor to re-establish a vital, sustainable relationship between mankind and the fragile planet on which [we] dwell” (McKusick, “Introduction: Romanticism and Ecology,” *The Wordsworth Circle* [Summer 1997], pp. 123-24. Here p. 123.

<sup>78</sup> While Goethe is not a Romantic in the eyes of German literary historians, he is considered by comparatists to be a representative of European Romanticism.

thus seeming to indicate that all men are created equal and may be improved by environmental changes.

Such general influences were strengthened by the great English and French romantic authors, the “Storm and Stress” writers of Germany, and the idealistic philosophy of Kant. The romantic movement in the United States, as elsewhere, left its impressions also in the more practical spheres of action, as in revolutionary activities for political freedom and individual rights; humanitarian reform (Abolitionism and Feminism); liberal religious movements (Unitarianism and Universalism).<sup>79</sup> In general, rather than labeling and defining fixed spaces, there was a thrust towards the unknown, the subconscious, an urge to tap into that which during the Enlightenment the mind had not been able to penetrate.

Similar changes were taking place in the sciences. With the publication of his book *On the Origin of Species* in 1859, Charles Darwin raised doubt about the fixed properties of the earth and universe. He hypothesized about the evolution of organic life on this planet.<sup>80</sup>

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<sup>79</sup> *The Concise Oxford Companion to American Literature*. James D. Hart (Oxford University Press, 1986).

<sup>80</sup> After studying the evolutionary writings of his own grandfather, Erasmus Darwin, Charles Darwin went to Cambridge in January 1828 in order to become a parson. After graduation he joined Captain Robert Fitzroy on the H.M.S. Beagle voyage (December 1831 to October 1836). This voyage became the key event in Darwin's life and greatly expanded the way he thought about the natural world. The ship surveyed the southern coastlines of South America and also visited Brazil, Tahiti, the Galapagos Islands, New Zealand, Australia, and various ports in the Indian and Atlantic oceans. During the journey Darwin learned from Charles Lyell's *Principles of Geology* (1831–1833) that the environment is constantly changing. He applied this idea fruitfully to the origin of mountain ranges and coral reefs, and to other questions of natural history. Darwin became fully converted to idea of evolution by applying to living beings Lyell's ideas of gradualism and constant small changes. He took the idea of competitive struggle and survival rates from Thomas Malthus's *Essay on the Principle of Population* (1798) and by the end of 1838 had set out the basic ideas that would underlie the *Origin of Species* about twenty years later. Cf. John Bowlby, *Charles Darwin: a New Life* (New York: W.W. Norton, 1992), pp. 15-37, and 109-224.

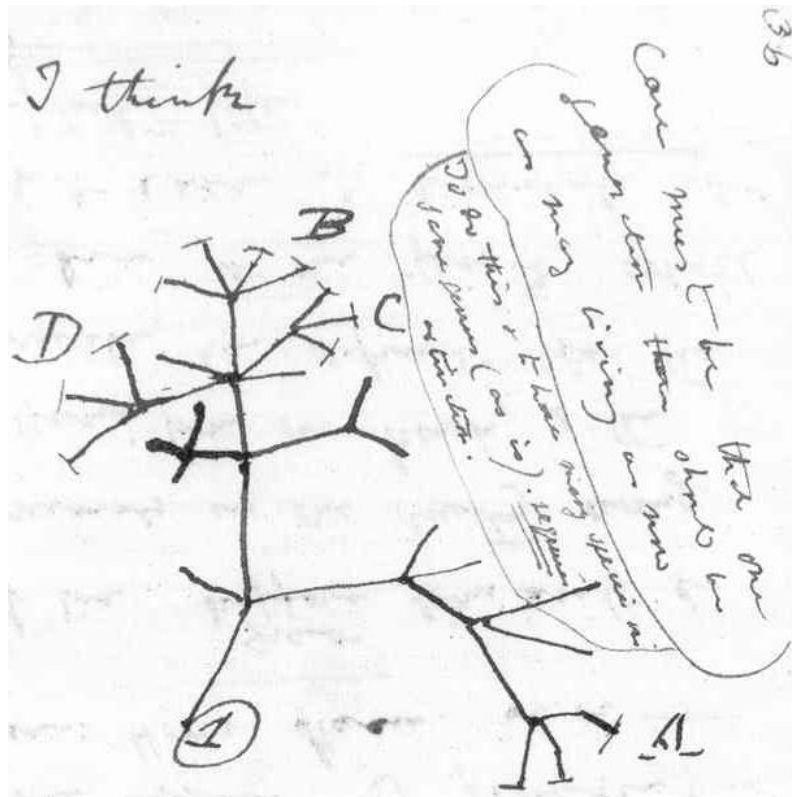


Figure 2: Charles Darwin's first sketch (1837) of an evolutionary tree from his First Notebook on Transmutation of Species on view at the Museum of Natural History in Manhattan ([http://www.english.uga.edu/nhilton/4890/darwin/darwin\\_tree](http://www.english.uga.edu/nhilton/4890/darwin/darwin_tree)).

Evolution, of course, presupposes radical change. On the macrocosmic level, Newton's machine-universe was drastically undermined with the appearance of Einstein's Special Theory of Relativity in 1905, and, on the microcosmic level of atoms and subatomic particles, with the later development of quantum theory.<sup>81</sup> A fundamental branch of theoretical physics, Quantum Theory, the foundations of which were established during the first half of the Twentieth century replaced Newtonian mechanics and classical electromagnetism at the atomic and subatomic levels. It thereby replaced

<sup>81</sup> *A Dictionary of Physics*. Ed. John Daintith (Oxford University Press, 2000), Oxford Reference Online.

“the classic building-blocks conception of reality with one dominated by a universal flux of events and processes.”<sup>82</sup>

However, the first strong opposition to the mechanistic Cartesian paradigm came from the Romantic Movement in the late eighteenth and nineteenth centuries, which interpreted mind and matter not as a dichotomy but as extensions of one another. The German Romantic poets and philosophers returned to the Aristotelian tradition by concentrating on the nature of organic form. A central figure in this European movement, Johann Wolfgang von Goethe conceived of form as a pattern of relationships within an organized whole and he admired nature’s moving order.

Thus, during much of Romanticism, different forms of art, such as music, painting, and literature were to constitute an organic whole, in the form of what the Romantics themselves called a “Gesamtkunstwerk.” The term is associated later with Richard Wagner and is discussed by him in *Das Kunstwerk der Zukunft* (The Artwork of the Future, 1849). Literally meaning “synthesis of the arts,” the term describes a dramatic form in which all the arts – poetry, drama, the visual arts, music, song – are united to form a new and complete work of art. Because all the arts are integrated and each is subservient to the whole, Wagner considered it the ideal work of art that functions in an organic manner.<sup>83</sup>

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<sup>82</sup> John A. McCarthy, *Remapping Reality. Chaos and Creativity in Science and Literature* (Amsterdam, New York: Rodopi, 2006), p. 62.

<sup>83</sup> Theodor W. Adorno, *In Search of Wagner*, transl. by Rodney Livingstone (New York: Verso, 2005), pp. 86-87.



The understanding of organic form had also played a part in the philosophy of Immanuel Kant.<sup>84</sup> Revealing the influence of German rationalist philosopher Gottfried Wilhelm Leibniz, Kant believed that, in a world divided into phenomena and “things in themselves,” science could only offer mechanical explanations and was inadequate in explaining other areas. In these cases, Kant asserts, scientific knowledge needed to be supplemented by considering nature as purposeful. He argues in his “Kritik der Urteilskraft” that in contrast with machines, organisms are self-reproducing and self-organizing wholes. Within this organic body, every part is there for the sake of the other. From this it follows that an organic body is one in which each part necessarily relates to each other part in its composition. In a machine, according to Kant, the parts only exist *for* each other, in the sense of supporting each other within a whole, but in an organism, the parts also exist *by means of* each other, namely in the sense of maintaining one another. Hence, organized beings are those whose parts are reciprocally means and ends:

Ein Baum zeugt erstlich einen andern Baum nach einem bekannten Naturgesetze. Der Baum aber, den er erzeugt, ist von derselben Gattung; und so erzeugt er sich selbst der Gattung nach, in der er, einerseits als Wirkung, andererseits als Ursache, von sich selbst unaufhörlich hervorgebracht, und eben so, sich selbst oft hervorbringend, sich, als Gattung, beständig erhält [...].

Zweitens erzeugt ein Baum sich auch selbst als Individuum. [...] Die Materie, die er zu sich hinzusetzt, verarbeitet dieses Gewächs vorher zu spezifisch-eigentümlicher Qualität, welche der Naturmechanism außer ihr nicht liefern kann, und bildet sich selbst weiter aus, vermittelt eines Stoffes, der, seiner Mischung nach, sein eignes Produkt ist [...].

Drittens erzeugt ein Teil dieses Geschöpfs auch sich selbst so: daß die Erhaltung des einen von der Erhaltung der andern wechselseitig abhängt [...] Der Selbsthülfe der Natur in diesen Geschöpfen bei ihrer Verletzung, wo der Mangel

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<sup>84</sup> Cf. John A. McCarthy, “Beyond a Philosophy of Alternatives: Chaos, Cosmology and the Eighteenth Century,” *Disrupted Patterns: on Chaos and Order in the Enlightenment*, ed. by Theodore E. D. Braun and John A. McCarthy, Braun Internationale Forschungen zur Allgemeinen und Vergleichenden Literaturwissenschaft, 43 (Amsterdam: Rodopi, 2000), pp. 21-36, especially pp. 28ff.

eines Teils, der zur Erhaltung der benachbarten gehörte, von den übrigen ergänzt wird; der Mißgeburten oder Mißgestalten im Wachstum, da gewisse Teile, wegen vorkommender Mängel oder Hindernisse, sich auf ganz neue Art formen, um das, was da ist, zu erhalten.

[In the first place, a tree generates another tree according to a known natural law. But the tree produced is of the same genus; and so it produces itself *generically*. On the one hand, as effect it is continually self-produced; on the other hand, as cause it continually produces itself, and so perpetuates itself generically.

Secondly, a tree produces itself as an *individual* [...] The matter that the tree incorporates it previously works up into a specifically peculiar quality, which natural mechanism external to it cannot supply, and thus it develops itself by aid of a material which, as compounded, is its own product.

Thirdly, each part of a tree generates itself in such a way that the maintenance of any one part depends reciprocally on the maintenance of the rest [...] The self-help of nature in case of injury in the vegetable creation, when the want of a part that is necessary for the maintenance of its neighbors is supplied by the remaining parts; and the abortions or malformations in growth, in which certain parts, on account of casual defects or hindrances, form themselves in a new way to maintain what exists.]<sup>85</sup>

In short: A tree produces itself – it is cause and effect as species and as individual: assimilation of nutrients from the environment is conducive to its growth and maintenance. It is impossible for us to construct an organism out of dissected remains or out of the materials it uses as nourishment. There is mutual dependence of the parts. If one part is injured, it is repaired, or else other parts take over its function. Since according to Kant, means and ends are reciprocally related as well as mutually constitutive, the parts of the organism do not point beyond themselves to an external *telos* but constitute their own purpose. In this way, the organism basically displays an inner teleology (or purposiveness without purpose, i.e. with none other than propagating itself).

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<sup>85</sup> Immanuel Kant, „Kritik der Urteilskraft,“ § 64 and 65 (Dinge, als Naturzwecke, sind organisierte Wesen), *Immanuel Kant's sämmtliche Werke*. In chronologischer Reihenfolge, ed. by Benjamin Jaesche (Leipzig: L. Voss, 1867), pp. 283-286. Translation by Werner Pluhar, *Critique of Judgment*, (Indianapolis: Hackett Publishing Company, 1987).

Kant, or as Schlegel referred to him, the “Copernicus of philosophy” leads Schelling to view the organism as unity of mind and matter, claiming that every organic product carries the reason of its existence in itself, for it is cause and effect of itself.<sup>86</sup>

Schelling writes the following on organization of an organism:

Die Organisation aber produziert sich selbst, entspringt aus sich selbst; jede einzelne Pflanze ist nur Produkt eines Individuums ihrer Art, und so produziert und reproduziert jede einzelne Organisation ins Unendliche fort nur ihre Gattung. Also schreitet keine Organisation fort, sondern kehrt ins Unendliche fort immer in sich selbst zurück. Eine Organisation als solche demnach ist weder Ursache noch Wirkung eines Dinges außer ihr, also nichts, was in den Zusammenhang des Mechanismus eingreift. Jedes organische Produkt trägt den Grund seines Daseins in sich selbst, denn es ist von sich selbst Ursache und Wirkung. Kein einzelner Teil konnte entstehen, als in diesem Ganzen, und dieses Ganze selbst besteht nur in der Wechselwirkung der Teile. [...] Also liegt jeder Organisation ein Begriff zugrunde, denn wo notwendige Beziehung des Ganzen auf Teile und der Teile auf ein Ganzes ist, ist Begriff. Aber dieser Begriff wohnt in ihr selbst, kann von ihr gar nicht getrennt werden, sie organisiert sich selbst, ist nicht etwa nur ein Kunstwerk, dessen Begriff außer ihm im Verstande des Künstlers vorhanden ist. Nicht ihre Form allein, sondern ihr Dasein ist zweckmäßig. Sie konnte sich nicht organisieren, ohne schon organisiert zu sein.

[The organization, however, produces itself; it has its source in itself. Every single plant is only a product of an individual of its kind and therefore, every single organization produces and reproduces ad infinitum only its own kind. Thus, no organization actually progresses but forever returns to itself. It follows that such an organization is neither cause nor effect of anything outside of itself; thus, nothing which interferes with the context of the mechanism. Each organic product carries within it the reason for its existence because it is its own cause and effect. No single part could arise except in this whole; and the existence of the whole itself lies only in the interaction of the parts [...] Hence, every organization is based on a concept, since wherever there is a necessary relation of the whole to the parts, as well as of the parts to the whole, there is a concept, a system. But this system is intrinsic in the organization and cannot be separated from it. It (the organization) organizes itself and is not merely a work of art that is formed outside of itself, in

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<sup>86</sup> Kant's notion of an organism, namely as organized being, becomes the guiding metaphor behind Schelling's philosophy of nature, and inspires Friedrich Schlegel and the Jena Romantics. Friedrich Schlegel, in "Fragmente," writes: „Kant der Kopernicus der Philosophie hat von Natur vielleicht noch mehr synkretistischen Geist und Witz als Leibnitz,“ *Atheneum. Eine Zeitschrift*, ed. by A.W. Schlegel and F. Schlegel, 3 vols (1798-1800), (Darmstadt: Wissenschaftliche Buchgesellschaft, 1992), I:235.

the mind of the artist. Not merely its form but also its existence is purposive. The organization would not be able to organize itself were it not organized a priori.]<sup>87</sup>

According to Schelling, a concept lies at the base of every organization which dwells in the organization itself. As unity of mind and matter, the organism is a model for self and world because our spirit is characterized by an infinite striving to organize itself, a universal tendency toward organization ought to reveal itself in the external world. And indeed, as we will see, it does.

During the second half of the nineteenth century, mechanism regained its stronghold due to the newly perfected microscope which led to remarkable advances in biology.<sup>88</sup> The beginnings of modern embryology, the rise of microbiology, and the discovery of the laws of heredity grounded biology firmly in chemistry and physics.<sup>89</sup> As a result, scientists renewed their efforts to find physical and chemical explanations for life. Yet it became ever more clear with time that the reductionist approach could not account for such seemingly chaotic systems as the human brain, for example, or on a larger scale, even life itself, since such a system derives its significance not only from the structure of the individual elements that constitute the whole.

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<sup>87</sup> F.W.J. Schelling, „Ideen zu einer Philosophie der Natur,“ *Schelling: Sämtliche Werke*, ed. by K.F.A. Schelling (Stuttgart: Cotta, 1856-1861), p. 137. My translation. See also Robert J. Richards, *The Meaning of Evolution: the morphological construction and ideological reconstruction of Darwin's theory* (Chicago: University of Chicago Press, 1992), p. 27.

<sup>88</sup> Although the microscope was probably first invented during the second decade of the seventeenth century (the earliest printed descriptions and illustrations of a microscopically observed object, the bee, appeared in 1625), instruments of higher magnification did not become widely available until the 1830s. *The Oxford Companion to the History of Modern Science*. ed. by J. L. Heilbron, (Oxford: Oxford University Press, 2003), Oxford Reference Online.

<sup>89</sup> Louis Pasteur (1822-1895) and Robert Koch (1843-1910) are considered to be the founders of medical microbiology. Pasteur is most famous for his series of experiments designed to disprove the then widely held theory of spontaneous generation (abiogenesis), which claims that living organisms can develop from non-living matter, as in the supposed origin of life on Earth, or in the concept of spontaneous generation. *A Dictionary of Plant Sciences*. Michael Allaby.(Oxford: Oxford University Press, 2006), Oxford Reference Online.

Systems whose functioning could not be determined by reductionism were originally viewed as chaotic. Only in the past three decades did researchers discover that there is nevertheless an underlying order to the seemingly chaotic interaction of elements in a complex structure such as the human brain. Hence, the patterns of such a structure are in fact not chaotic, just extremely complex. What makes the system so complex are the number of non-linear connections that the whole of the system is much more than merely the sum of its parts.

What then, is the difference between a complex system and a chaotic one? Let us begin with the latter. The roots of chaos theory date back to about 1900, to the studies of Henri Poincaré on the so-called ‘three-body problem,’ i.e. the problem of the motion of three objects in mutual gravitational attraction. In a nutshell, what Poincaré found was that there can be orbits that are non-periodic, and yet not forever increasing nor approaching a fixed point.<sup>90</sup> Later studies on the topic of such nonlinear differential equations were carried out by G.D. Birkhoff, A.N. Kolmogorov, M.L. Cartwright, J.E. Littlewood, and Stephen Smale.<sup>91</sup> Except for Smale, these studies were all directly inspired by physics: the three-body problem in the case of Birkhoff, turbulence and astronomical problems in the case of Kolmogorov, and radio engineering in the case of Cartwright and Littlewood. Although chaotic planetary motion had not been observed,

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<sup>90</sup> Ian Kaufmann, *Does God Play Dice? The New Mathematics of Chaos*, 2<sup>nd</sup> ed. (Malden, MA: Basil Blackwell Ltd., 1989), see especially chapter 4, pp. 49-63.

<sup>91</sup> Aside from laying the mathematical foundations of probability theory and the algorithmic theory of randomness and making crucial contributions to the foundations nonlinear dynamics, Andrey Kolmogorov (1903-1987) had many interests outside mathematics research. An especially notable example in this context is his quantitative analysis of structure in the poetry of Russian author Aleksandr Pushkin. Cf. <http://www.exploratorium.edu/complexity/CompLexicon/kolmogorov.html>.

scientists had encountered turbulence in fluid motion and non-periodic oscillation in radio circuits with no theory to explain these phenomena.<sup>92</sup>

Poincaré, who is credited with being the last great generalist, or universalist, conceived of a new kind of geometry, namely a *visual* kind.<sup>93</sup> His is a mathematics of patterns and relationships known as topology. Topology is popularly referred to as “rubber sheet geometry” because its figures can be transformed into each other by continuous bending, stretching, and twisting.<sup>94</sup> This general study of continuity is the foundation of the modern qualitative theory of dynamical systems.

Not surprisingly, the main catalyst for the development of chaos theory was the electronic computer in the 1970s and 1980s since much of the mathematics of chaos theory involves the repeated iteration of simple mathematical formulas, which were impractical if not impossible to do by hand. Electronic computers made these repeated calculations possible as well as fast. One of the earliest electronic digital computers, ENIAC (Electronic Numerical Integrator and Calculator), was used to run simple weather forecasting models.<sup>95</sup>

The American mathematician and meteorologist Edward Lorenz was studying weather patterns when he began to realize that the weather did not always change as predicted.<sup>96</sup> Minute variations in the initial values of variables in his primitive computer

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<sup>92</sup> Cf. Capra, pp. 126-127.

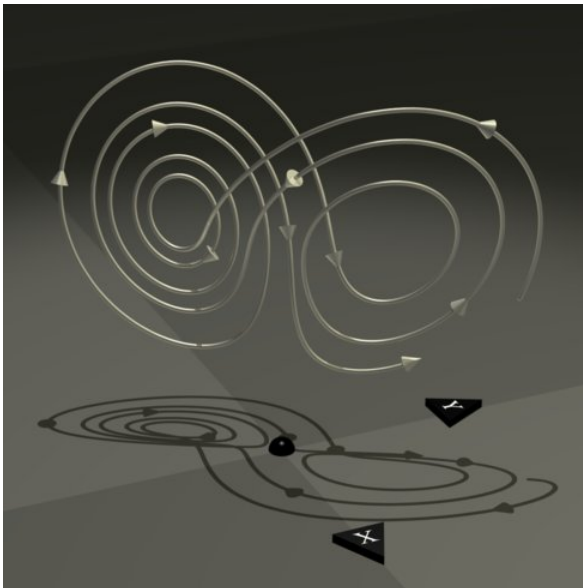
<sup>93</sup> Cf. Capra, p. 126; see also McCarthy, *Remapping Reality*, p. 45.

<sup>94</sup> For more information on topologically equivalent figures see Capra, pp. 126, 127.

<sup>95</sup> Raúl Rojas and Ulf Hashagen, *The First Computers: History and Architectures* (Cambridge, Mass: MIT Press, 2002), p. 189.

<sup>96</sup> As McCarthy points out, it was in fact Edward Lorenz who in the 1970s rediscovered Poincaré’s work and established it as an “an early landmark in complex dynamics,” (*Remapping Reality*, p. 46).

weather model would result in grossly divergent weather patterns. This sensitive dependence on initial conditions came to be known as the butterfly effect. The phrase refers to the idea that a butterfly's wings might create tiny changes in the atmosphere that ultimately cause a tornado to appear (or prevent a tornado from appearing). The flapping of the wings of a butterfly represents a small change in the initial condition of the system, which nevertheless causes a chain of events leading to large-scale phenomena. In addition, the curve representing this phenomenon resembles butterfly wings.<sup>97</sup>



**Figure 3: The butterfly effect, rendered here in a metal wire to show direction and three-dimensional structure ([http://www.en.wikipedia.org/wiki/Lorenz\\_attractor](http://www.en.wikipedia.org/wiki/Lorenz_attractor)).**

To sum up then, chaos theory is concerned with hidden structures of order in seemingly random data, and with self-organizing processes. Complexity theory, however, focuses

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<sup>97</sup> Cf. Edward N. Lorenz, *The Essence of Chaos* (Seattle: University of Washington Press, 1993), pp. 14-15 and 181-84.

entirely on the latter, in the context of evolutionary change in a variety of media, both natural and artificial: “whereas chaos is about nonlinear dynamics in general, complexity is more particularly concerned with nonlinear systems that evolve and, more strikingly, also *evolve the capacity to evolve* [my emphasis].”<sup>98</sup>

## 2.1. Connectionism and Intertextuality

The idea that the dynamics of a system have a tendency to increase the inherent order of a system by themselves has a long history. The ancient atomists believed that designing intelligence was unnecessary, arguing that given enough time, space and matter, organization was ultimately inevitable. The German embryologist Hans Driesch (1867-1941) came across an example of such self-regulation while experimenting with sea-urchins.<sup>99</sup> When Driesch destroyed one of the cells of a sea-urchin embryo at a very early stage, the so-called two-celled stage, the remaining cell did not develop into half a sea urchin but instead into a complete (albeit smaller) organism.<sup>100</sup>

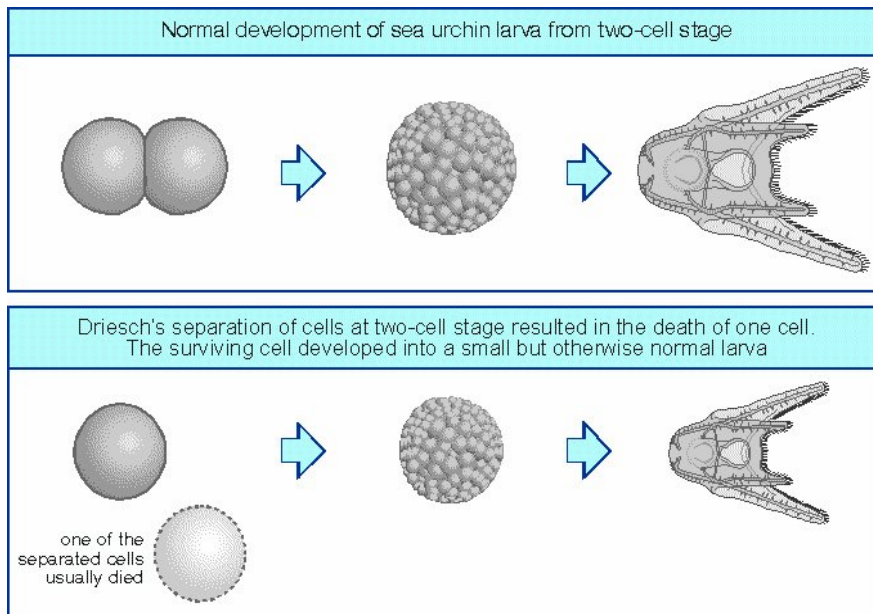
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<sup>98</sup> N. Katherine Hayles, “Enlightened Chaos,” preface to *Disrupted Patterns*, ed. by Theodore E.D. Braun and John A. McCarthy (Amsterdam: Rodopi, 2000), pp. 1-5. Here p. 1.

<sup>99</sup> Driesch received his doctorate in Jena in 1889 under Ernst Haeckel (1834-1919) who had popularized Darwin’s theories and saw evolution as providing a framework for describing the world. In 1906 the *Monist League* was formed in Jena with Haeckel as its president. The League held a strong commitment to social Darwinism. Man was seen as part of nature and in no way qualitatively distinct from any other organic form. From this it followed that human society was also a creation of natural selection. However, Haeckel added to this view a strong anticatholicism, a contempt for politicians, and a forecast of impending doom. After the chaos of World War I, Haeckel’s views were taken up by eugenicists, the Volk movement and, more significantly, the National Socialists. Cf. *A Dictionary of Scientists* (Oxford: Oxford University Press, 1999), Oxford Reference Online.

<sup>100</sup> See Hans Driesch, *The Science and Philosophy of the Organism* (Aberdeen: Aberdeen University Press, 1908), p. 76.





**Figure 4: Driesch's experiment with sea urchin cells**  
[http://www.mun.ca/biology/desmid/brian/BIOL3530/DB\\_Ch01/fig1\\_9](http://www.mun.ca/biology/desmid/brian/BIOL3530/DB_Ch01/fig1_9)

Such a process of self-realization of innate potentiality Aristotle had called “entelechy.” Using Aristotle's philosophy, Driesch proposed that the autonomy of life was introduced by way of entelechy which he interprets as a process of development, a an impulse or force toward full self-realization. The word itself traces to Latin, “entelechia,” from Greek “enteles” (complete), from “telos” (purpose, completion) and “echein” (to have) and denotes realization as opposed to potentiality. In some philosophical systems, it may denote a force propelling one to self-fulfillment. This concept is a key element in the metaphysics of Leibniz, and is closely related to his monadology where each sentient entity contains its own entire universe within it. Each sentient entity is a monad, an

absolutely independent thing that has no direct contact with any other sentient entity (except through the mediating agency of God).

The question remains as to what exactly this force is. A popular answer to this question in the nineteenth century, and supported by Driesch and the French philosopher Henri Bergson, among others, was the doctrine of vitalism. It holds that there is some feature in all living bodies that cannot be explained in physical or chemical terms. This feature may be the presence of a further entity (such as a soul), but it may also be simply the emergence of special relations or principles of organization arising from the complexity of the organism. Aristotle's writings *De Anima* and *De Generatione* were the principal source of the idea of vitalism. In terms of cell biology, a return to vitalism can be seen in the holistic idea that life is an emergent process which cannot be accurately described simply by understanding any number of chemical processes that occur in the system of the biological cell.<sup>101</sup>

During the early twentieth century, there was a shift in focus from function to organization which correlates to shift from mechanistic to systemic thinking. Fritjof Capra explains in detail the emergence of "systems thinking":

From that time on, a system has come to mean an integrated whole whose essential properties arise from the relationships between its parts, and "systems thinking" the understanding of a phenomenon within the context of a larger whole. This is, in fact, the root meaning of the word "system," which derives from the Greek *synhistanai* ("to place together"). To understand things systemically literally means to put them into a context, to establish the nature of their relationships.<sup>102</sup>

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<sup>101</sup> Cf. Elliott Sober, *Philosophy of Biology* (Boulder, Co: Westview Press, 2000), pp. 22-25.

<sup>102</sup> Fritjof Capra, *The Web of Life* (New York: Anchor Books [Random House], 1996), p. 27. In his most recent publication, entitled *The Hidden Connections: A Science for Sustainable Living*, Capra extends the framework of systems and complexity theory to the social domain and uses the extended framework to discuss some of the critical issues of our time, such as the management of human organizations, the

While analytical thinking is reductive, dividing an object into smaller parts to understand it, systems thinking puts an object (subsystem) into the context of a larger whole (system). Systems thinking therefore is *contextual*, i.e. an object is defined and redefined within the changing context, its environment. From this it can be deduced that the essential properties of an organism are properties of the whole that arise from the interactions and relationships among the parts and are destroyed when the system is dissected into isolated elements. Instead, we must employ “lateral thinking,” as method of thinking concerned with changing concepts and the perception of ideas that may not be obtainable by using traditional step-by-step logic which moves in vertical manner.

Systems thinking emerged as revolutionary because modern scientific thought had been based on the Cartesian paradigm of mathematical analysis. Therefore, the “great shock” of twentieth-century science has been that systems cannot be understood by reductionism as the properties of the parts are not intrinsic properties, but can be understood only as interactions.<sup>103</sup>

In *Complexity and Postmodernism*, Paul Cilliers defines such complex systems as a large number of elements that are interacting dynamically where each element in the system is ignorant of the behavior of the system as a whole.<sup>104</sup> The interactions are non-linear, short ranged, and contain feedback loops that can be positive or negative, enhancing or inhibiting the process. In addition, complex systems are open systems,

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challenges and dangers of economic globalization, the scientific and ethical problems of biotechnology, and the design of ecologically sustainable communities and technologies.

<sup>103</sup> Cf. Capra, pp. 29-30.

<sup>104</sup> Paul Cilliers, *Complexity and Postmodernism: Understanding Complex Systems* (London: Routledge, 1998), especially pp. 1-24.

interacting with their environment, and are characterized by a constant flow of energy, thus ensuring the system's survival. These systems have a history from which they evolve through time, and which is co-responsible for their present behavior. Therefore they must have both the ability to store information concerning their environment for future use and the ability to adapt their structure when necessary, according to the stored information. In this context, Mark Taylor provides a short but pointed description of the term:

The word complex means consisting of interconnected or interwoven parts; composite; compound; involved or intricate, as in structure. Etymologically considered, complexity derives from the past participle of the Latin *complectere*, *complexus*, which means to entwine together) (*com-*, together + *plectere*, to twine, braid). The stem *plek* (to plait) forms the Latin suffix *-plex*, which means to fold. Complexity, then, is formed by interweaving, interconnecting, and folding together different parts, elements, or components.<sup>105</sup>

Thus, since in a complex system individual elements are intertwined and this (changing) form determines the system's functioning, by analyzing parts of a whole and then putting it back together, the analytical method proves to be an inadequate approach to complexity. Therefore, Cilliers suggests the "connectionist" approach, a term adapted from the field of neuroscience. Cilliers exemplifies the notion of connectionism in the analogy of post-structuralism, specifically the theory of language proposed by Saussure and extended by Derrida since "the dynamics that generates meaning in language can be used to describe the dynamics of complex systems in general."<sup>106</sup>

According to Saussure, language is a system made up of arbitrary signs, which acquire meaning only through their relationships with other signs, namely, through a system of differences. For example, the word "green" (signifier) means "green"

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<sup>105</sup> Mark Taylor, *The Moment of Complexity: Emerging Network Culture* (Chicago: University of Chicago Press, 2001), p. 138.

<sup>106</sup> Cilliers, p. 37.

(signified) not because the sum of letters that constitute the word express its nature but because it is not “red” or “black.” In establishing the distinction between the signifier and the signified, observing that there is no natural link between them and that each sign is determined by the way in which it differs from the other signs, Saussure introduced a system in which linguistic components are not assigned an identity by means of rules, but derive their meaning from their relationships with all the other components.

Cilliers then employs Derridaean deconstruction to point out that since the meaning of a sign is a result of the “play” in the space between the signs, we can assume that there must be some space, i.e. an excess of meaning, between the signs for this interaction to be possible. Derrida deconstructs Saussure’s model of language by stripping the sign of its “signified” component, thus causing the signified to be just another “signifier” which refers to yet another. This leads to the assumption that meaning is never simply present and therefore must always be interpreted.<sup>107</sup>

Thus, Cilliers concludes with Derrida that language is an open system, in which the play between the components is always in progress. This implies that meaning is never static but constantly in flux: “in terms of a general theory of complex systems, one would say that these dynamics of the system of language are a result of the way in which the system self-organizes in order to meet the needs of the community.”<sup>108</sup>

From this analysis it can be concluded that in a complex system, there is no absolute truth, no extreme stability, and no perfect middle. In fact, it is in the margins

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<sup>107</sup> Cf. the journalist and social philosopher Arthur Koestler’s commentary on the importance of context in his chapter “From Humor to Discovery,” *The Act of Creation* (London: Hutchinson and Co., 1964), pp. 89-90.

<sup>108</sup> Cilliers, p. 40.

between chaos and order, followed by order and chaos, where a system can be considered to be truly alive because only during those phases is the system creating by constantly organizing and de-organizing itself. Cilliers points out the locus of this interaction: “When we move from equilibrium to far-from-equilibrium conditions, we move away from the repetitive and the universal to the specific and the unique.”<sup>109</sup> In equilibrium, matter is “blind” but in far-from equilibrium conditions, it begins to be able to perceive, to “take into account” in its way of functioning, differences in the external world.<sup>110</sup>

In contrast to this organically interconnected and interactive model, nineteenth century classical science, in revealing to man “a dead, passive nature that behaves as an automaton which continues to follow the rules inscribed in the program” had inherently isolated man from nature.<sup>111</sup> In addition, the discovery of the second law of thermodynamics (the knowledge that there is an inescapable degradation of energy in the universe entropy) that proved directionality of time (the universe cannot be run backwards to make up for entropy), suggested that the whole universe was aging. As the system was drained of energy, it also reduced its diversity and thereby pointed to an increasingly homogenous future. As do several other scientists, Prigogine and Stengers propose instead that, although the above is true for equilibrium conditions, at least under non-equilibrium conditions, entropy may produce, rather than degrade, order,

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<sup>109</sup> Koestler refers to this phenomenon as “the defeat of habit by originality” which can be achieved by connecting previously unrelated dimensions of experience, in order to attain a higher level of evolution. As such, it constitutes “an act of liberation,” (p. 96).

<sup>110</sup> Ilya Prigogine, Isabelle Stengers, *Order out of Chaos: Man’s new Dialogue with Nature* (New York: Bantam, 1984), pp. 13, 14.

<sup>111</sup> Prigogine and Stengers, p. 6.

organization, and therefore life.<sup>112</sup> That discovery, they conclude, can lead us to a new dialogue with nature, one which recognizes its “spontaneous activity,” its creative force.<sup>113</sup>

Thus, it has been established that creative energy evolves from non-linear interactions of diverse factors within a complex system; the greater the diversity of these factors, the more complex the system. The biologist Lyall Watson refers us to the spiral (shape) as the perfect example of such a system. Spirals can be found everywhere in nature on the small (e.g. in a seashell, the rotation of a hurricane) and large scale (e.g. the galaxy).

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<sup>112</sup> Prigogine and Stengers, p. 13.

<sup>113</sup> Prigogine and Stengers, p. 9.



Figures 5.1 and 5.2: The 53rd plate from Ernst *Haeckel's Kunstformen der Natur* (1904), depicting a variety of seashells, organisms he classified as Prosobranchia. In the enlarged version (right), the spiral shape is clearly visible ([http://www.en.wikipedia.org/wiki/Image:Haeckel\\_Prosobranchia](http://www.en.wikipedia.org/wiki/Image:Haeckel_Prosobranchia))



Figure 6: A picture of the galaxy taken by the Hubble Space Telescope in 2005 also reveals a spiral shape (<http://www.hubblesite.org/newscenter/archive/2005/12/image/y>)



What these seemingly unrelated phenomena have in common is what astrophysicist Mario Livio calls “the golden ratio”: the irrational number phi (approximately 1.618033989). This number is denoted by the Greek letter  $\phi$ , when the ratio of the “whole” (i.e., the sum of the larger and smaller parts) to the larger part is the same as the ratio of the larger part to the smaller part. It also describes the ever-expanding nature of what is termed a logarithmic spiral and is a key shape for anything that grows because with growth, the ratio does not change.<sup>114</sup> Therefore, Watson concludes, the spiral is “the perfect symbol of change and growth, of order within chaos, of opposites which are nevertheless the same.”<sup>115</sup>

## 2.2. Self-Organization

How do these opposites function in a self-organizing system? To start at the beginning, what exactly is self-organization in a system? It is a process in which the internal organization of a system, normally an open system, increases in complexity without being guided or managed by an outside source. The most robust and unambiguous examples of self-organizing systems are from physics, where the concept was first applied. The concept of self-organization is also central to the description of biological systems, from the sub-cellular to the ecosystem level. Obviously, the idea of self-organization challenges the earlier paradigm of ever-decreasing order which was

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<sup>114</sup> Cf. Mario Livio, *The Golden Ratio: The Story of Phi, the World's Most Astonishing Number* (New York: Broadway Books, 2002).

<sup>115</sup> Lyall Watson, *Dark Nature: A Natural History of Evil* (New York: Harper Collins, 1995), pp. 11, 12.

based on a philosophical generalization from the second law of thermodynamics in statistical thermodynamics where entropy is envisioned as a measure of the statistical “disorder” at a micro level. In open systems, it is the flow of matter and energy through the system that allows the system to self-organize.

Ilya Prigogine claimed that self-organization can only occur far away from thermodynamic equilibrium. This view is supported by Stuart Kauffman who studied mathematical models of evolving systems. He noted that in these as well, the rate of evolution is maximized near the edge of chaos.<sup>116</sup> To denote this phenomenon, the phrase “edge of chaos” was coined by computer scientist Christopher Langton in 1990.<sup>117</sup> The phrase has come to refer to physical, biological, economic and social systems that operate in a region between order and chaos, always far from equilibrium, where the complexity is maximal. It is here, at the edge of chaos, that living systems are most flexible and have the greatest potential for emergence; i.e., novelty and creativity.

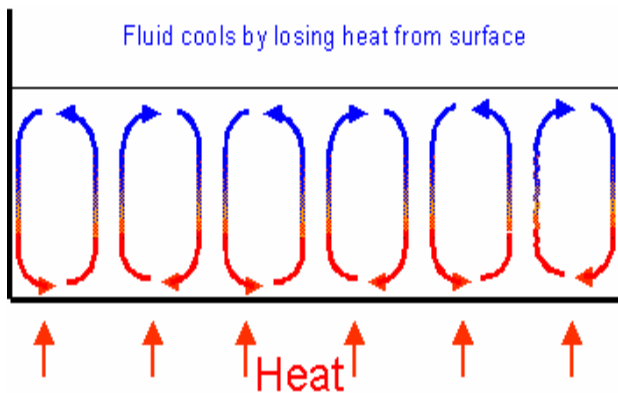
Ilya Prigogine developed machinery to experiment with states far from equilibrium. These he called “dissipative structures,” denoting open systems operating far from thermodynamic equilibrium within an environment that exchanges energy, matter or entropy. Such systems are characterized by the spontaneous appearance of a complex, sometimes chaotic, structure. An example for the theory of dissipative structures is the Bénard cells, or Bénard instability, which Bohm and Peat explain as a “very complex but

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<sup>116</sup> See Stuart Kauffman, *At Home in the Universe: The Search for the Laws of Self-Organization and Complexity* (Oxford: Oxford University Press, 1995), p. 91.

<sup>117</sup> Christopher G. Langton, “Computation at the edge of chaos,” *Physica D*, 42, 1990.

regular array of patterns which undergo systematic movements.”<sup>118</sup> More specifically, Bénard cells are so-called convection cells that appear spontaneously in a liquid layer when heat is applied from below.<sup>119</sup> The experimental set-up uses the layer of liquid, e.g. water, between two parallel planes. If the temperature of the bottom plane is progressively increased, there will be a point in temperature at which convection cells will appear. i.e. the microscopic random movement spontaneously becomes ordered on a macroscopic level. The rotation of the cells is stable and will alternate from clock-wise to counter-clockwise, meaning that there is a spontaneous symmetry breaking.<sup>120</sup>

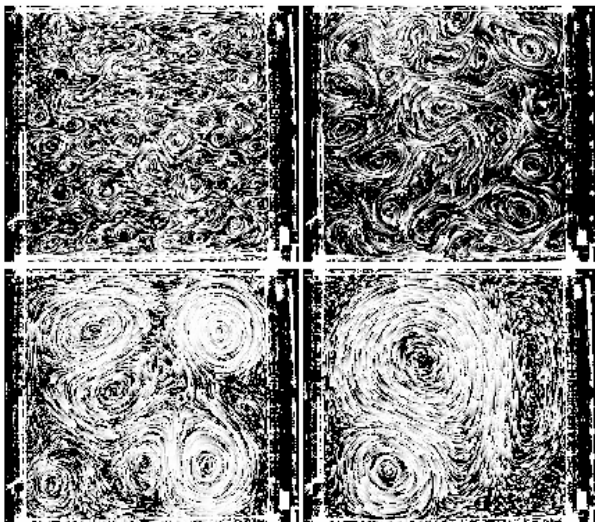


**Figure 7: Convection cells: warm, low density fluid rises while cool, high density fluid sinks ([http://upload.wikimedia.org/wikipedia/en/1/12/Convection\\_cells.png](http://upload.wikimedia.org/wikipedia/en/1/12/Convection_cells.png)).**

<sup>118</sup> David Bohm and F. David Peat, *Science, Order, and Creativity*, 2<sup>nd</sup> ed. (London: Routledge, 2000), p. 137.

<sup>119</sup> Convection is the process by which heat is transferred from one part of a fluid to another by movement of the fluid itself. This movement occurs as a result of gravity; the hot part of the fluid expands, becomes less dense, and is displaced by the colder, denser part of the fluid as this drops below it. Convection is one of the three primary mechanisms of heat transfer, the others being conduction and radiation. Convection occurs in the atmosphere, oceans, and planetary mantles; evaporation constitutes a large part of convection. While these are all examples of naturally occurring heat transfer, there is also *forced convection*, which refers to hot fluid that is transferred from one region to another by a pump or fan). *Dictionary of Physics*, ed. by John Daintith (Oxford University Press, 2000), Oxford Reference Online.

<sup>120</sup> Cf. Bohm and Peat, pp. 137-144.



**Figure 8:** When a pan with a thin layer of water is heated uniformly from below, as long as the system is dynamically at equilibrium the molecules move in a disorganized and random manner. When the heat is turned up, however, whorls begin to form that become increasingly agitated. As the heat is increased even more and the system turns to far from equilibrium, a critical point is reached when the whorls re-organize into a coherent whole. If the heat is turned up even more the cells dissolve (<http://www.scientific-religious.com/Benard%20cells.gif>).

A further example of this class of reactions which serve as a classical example of non-equilibrium thermodynamics, resulting in the establishment of a nonlinear chemical oscillator is the so-called Belousov-Zhabotinskii reaction, or BZ reaction. An essential aspect of the BZ reaction is its so-called “excitability.” The word indicates that under the influence of stimuli, patterns develop in what would otherwise be a perfectly quiescent, stable medium. “Clock reactions” such as the BZ, for example, can be excited into self-organizing activity through the influence of light.



**Figure 9:** The wavelike chemical activity in the Belousov-Zhabotinskii reaction is shown here in a petri dish. Its chemical reaction shows a periodic color change between magenta and blue within a period of approximately one minute. It occurs with a mixture of sulphuric acid, potassium bromate (V), cerium sulphate, and propanedioic acid. The color change is caused by alternating oxidation–reductions in which cerium changes its oxidation state ( $\text{Ce}^{3+}$  gives a magenta solution while  $\text{Ce}^{4+}$  gives a blue solution).<sup>121</sup> ([jchemed.chem.wisc.edu:8000/.../SP14/prog1-SP14.html](http://jchemed.chem.wisc.edu:8000/.../SP14/prog1-SP14.html)).

Spontaneous formation is also the explanation for the phenomenon of the soliton, the stable solitary wave. The term “soliton” was introduced in the 1960’s, but the scientific research of this phenomenon had started in the nineteenth century when John Scott-Russell, a Scottish naval engineer, observed a large solitary wave in a canal near Edinburgh. It was not until the mid 1960’s when scientists began to use modern digital computers to study nonlinear wave propagation that the soundness of Russell’s early ideas began to be appreciated. He had viewed the solitary wave as a self-sufficient dynamic entity, displaying many properties of a particle. From the modern perspective it is used as a constructive element to formulate the complex dynamical behavior of wave systems throughout science.<sup>122</sup> From these discoveries, McCarthy draws the conclusion that a shift of thought is in order:

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<sup>121</sup> Cf. Richard J. Field and László Györgyi, *Chaos in chemistry and biochemistry* (Singapore: World Scientific, 1993), pp. 47-82, especially p. 70.

Instead of thinking in terms of discrete and separate identities, we need to think in terms of fluid motions such as ripples, waves, and currents but which can nonetheless stand apart starkly profiled. Solitons appear everywhere on the micro and macrolevels. [...] In whatever garb the soliton might appear, it always results from the correlation of a whole system of movement unlinked mechanically [...] Because the soliton results from the nonlinear congruence of individual sine waves, it can be seen as an example of self-organization, contradicting with its positive feedback loops the principle of the equipartition of energy; dispersion is a sign of negative feedback loops.<sup>123</sup>

Since such self-organization necessarily relies on positive as well as negative feedback, plus multiple interactions of these opposing forces, these opposites should be examined more closely. Produced by life itself, they are innumerable variations of life-enhancing and life-destroying forces that bring order to randomness.

This assumption inevitably leads to the next, namely that the classification of whether a force is “positive” or “negative” is a matter of perspective: “Whatever complexity such systems have is a joint property of the system *and* its interaction with another system, most often an observer and/or controller.”<sup>124</sup> If “good” or “evil” forces are a matter of perspective, the concepts in themselves must, in fact, be interchangeable. Watson comes to the same conclusion, suggesting that good “is not necessarily the opposite of evil, but one part of the field in which both exist.”<sup>125</sup> This concept not only

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<sup>122</sup> Cf. Eryk Infelds and George Rowlands, *Nonlinear Waves, Solitons and Chaos* (Cambridge: Cambridge University Press, 2000), pp. 202-213, especially p. 204.

<sup>123</sup> McCarthy, *Remapping Reality*, pp. 62–63. In materials science specifically, dispersion is the phenomenon that causes the separation of a wave into components of varying frequency. It is a stable or unstable system of fine particles that are evenly distributed in a medium. A “sine wave” or “sinusoid” is the function that denotes the wave pattern in natural phenomena such as ocean waves, sound waves, and light waves. The term refers to virtually any waveform that has an equation in which one variable is proportional to the sine of the other. Cf. Infelds and Rowlands, pp. 146-148.

<sup>124</sup> John L. Casti, *Complexification: Explaining a Paradoxical World through the Science of Surprise* (New York: Harper Collins, 1994), p. 269.

<sup>125</sup> Watson, p. 24

provides valid natural reasons for the existence of that which we conceive to be evil, it also forces us to reexamine our definitions of value-distribution: “get too close and you get sucked into another reality in which all the rules have been changed.”<sup>126</sup>

Thus, within a complex system, both life-enhancing and life-destroying forces are incessantly communicating – meaning that the system is in fact constantly destroying and recreating itself. While it is seeking equilibrium, it never truly reaches it because if movement ceased this would mean death in a biological system. The constant movement (struggle), then, is precisely what generates the system’s creative force.

While fluctuations, as shown, are vital to a complex system, it is important to note that this balance (though never in perfect equilibrium), for example that of nature, can be disturbed significantly, through an external, i.e. unnatural, force. To exemplify this idea, Watson relates the historical event of rabbits being introduced to the continent of Australia. After escaping their confinement, they multiplied in immense numbers, living outside the constraints of their original habitat in a place where they had no natural enemy, and, in effect, “breaking the rules of coexistence.” Watson calls the removal of these animals from their “original locus” an “unnatural act.” Watson introduces three what he calls “principles of pathics.” These denote “the study of that in nature which represents a loss of character and community, leading away from rather than towards natural cohesion.”<sup>127</sup> Watson lists as the first principle that “good things get to be bad if they are displaced, taken out of context or removed from their (original) locus.” His second principle states that “good things get very bad if there are too few or too many of

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<sup>126</sup> Watson, p. 24.

<sup>127</sup> Watson, p. 30.

them,” and finally, that “good things get really rotten if they cannot relate to each other properly and their degree of association is impoverished.”<sup>128</sup> This implies that there is a certain near-equilibrium state in which the system functions smoothly but when this “balance” (which allows room for movement) is disturbed, the system eventually perishes.

These kinds of “unnatural acts” are processes that are inherent in postmodern culture and which N. Katherine Hayles calls “denaturing” because they re altered which results in the loss of their natural qualities.<sup>129</sup> An example of denaturing is when alcohol’s natural composition is chemically altered by additives. Applied to mankind, this denaturing process described by Hayles proceeded in three waves, moving from the denaturing of language, to that of content, and then of time until “the human subject is also deconstructed and then reconstructed in ways that fundamentally alter what it means to be human.”<sup>130</sup>

### 2.3. Self-Reflexivity and Autopoiesis

Systems thinking is useful not only in the sciences but it can help explain seemingly random phenomena in all aspects of life. The contemporary German social

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<sup>128</sup> Watson, pp. 46-47.

<sup>129</sup> N. Katherine Hayles, *Chaos Bound: Orderly Disorder in Contemporary Literature and Science* (Ithaca: Cornell University Press, 1990). See specifically chapter 10: “Chaos and Culture: Postmodernism(s) and the Denaturing of Experience,” pp. 265-295.

<sup>130</sup> Rather, Hayles suggests, the human subject is “posthuman,” anticipated and implied by postmodernism, (p. 266).



theorist Niklas Luhmann (1927-1998), for example, based his social theory on systems theory since the latter gave him the level of abstraction that he needed to describe social phenomena without explicitly considering the role played by individuals. It was in the early 1980s when Luhmann published his central work, *Soziale Systeme* (1984).<sup>131</sup> In this study he adopted a new version of systems theory, namely the theory of autopoietic systems, whose principal originators were Humberto Maturana and Francisco Varela, two Chilean neuroscientists (which is why their theory is also referred to as the “Santiago Theory”).

In contrast to the preceding system-theoretic paradigm, which first distinguishes a system from its environment and then proceeds to describe system processes by relating them to functions that the researcher attributes to them, the new theory radically dismisses this on the grounds that the old theory employs an observer-relative viewpoint that need not at all correspond to the “phenomenology” of the system, taken as a unified entity “for itself.”

Since what distinguishes a living system from a nonliving one (specifying the “essence” of the living was a prime concern for Maturana) is that it is able to produce itself by reproducing its elements while maintaining an organization of these elements that is characteristic of it, the way to obtain a “true” understanding of such a system is by focusing on this very process of self-production and self-organization.<sup>132</sup>

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<sup>131</sup> S. Strijbos and Andrew Basden, *In Search of an Integrative Vision for Technology: Interdisciplinary Studies in Information Systems* (New York: Springer, 2006), pp. 159-164.

<sup>132</sup> Humberto R. Maturana and Francisco J. Varela, *Autopoiesis and Cognition: the Realization of the Living*, with a preface to “Autopoiesis” by Sir Stafford Beer (Dordrecht, Holland and Boston, MA: D. Reidel Publishing Company, 1980), p. 82. See also Ralph E. Anderson, Irl E. Carter, and Gary Lowe, *Human Behavior in the Social Environment: a Social Systems Approach* (New York: De Gruyter, 1999), pp. 23-39, especially p. 33.

Maturana and Varela's theory originated in insights first recorded in a paper about the relation between a frog's brain and its eyes, or rather, vice versa: by implanting electrodes in frogs' brains, Maturana was able to detect the way in which sensory receptors process the data the brain receives. He discovered that the frog's eye speaks to the brain in a language already highly organized and interpreted instead of transmitting a more or less accurate copy of the distribution of light upon the receptors.<sup>133</sup> Obviously, there are important differences between frogs and humans, the most crucial one for this purpose being that humans are both conscious and self-conscious. This means that a human being can reflect back upon itself, i.e. the relation between subject and object (or observer and observed) becomes self-reflexive.

Maturana and Varela in fact emphasize the implications of self-reflexivity in their theory on autopoiesis. They explain that a living system capable of being an observer can interact with those of its own descriptive states, which are linguistic descriptions of itself. By doing so it generates the domain of self-linguistic description within which it is an observer of itself as an observer, a process which can be necessarily repeated in an endless manner. The observer as an observer necessarily remains in a descriptive domain in which no description of an absolute reality exists. Instead, any cognitive reality generated would unavoidably be relative to the knower.<sup>134</sup> The fact that an observer cannot transcend his or her own perspective necessarily implies that the observed data

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<sup>133</sup> Quoted in N. Katherine Hayles, *How we became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), p. 135.

<sup>134</sup> Maturana and Varela, p. 121. See also Erich Jantsch, *The Self-Organizing Universe: Scientific and Human Implications of the Emerging Paradigm of Evolution* (New York: Pergamon, 1980).

(i.e. experience) is always already processed. This in turn means that any effort to describe the framework of interpretation creates a self-reflexive structure with no exit in sight. Thus, everything we perceive, including literary works, is already processed and is therefore always our own interpretation, or for that matter, our own creation.<sup>135</sup>

At this point then, Maturana and Varela transfer the notion of autopoiesis from the biological dimensions of cognition in order to come up with a model to describe the structure of living organisms in general. Again underscoring the principle of self-organization, they claim that the organization of a system – in fact, they call such a system an “autopoietic machine” – must be shown in such a manner that the way in which all their properties arise becomes obvious:

An autopoietic machine is organized (defined as a unity) as a network of processes of production (transformation and destruction) of components that produces the components, which: (i) through their interactions and transformations continuously regenerate and realize the network of processes (relations) that produce them; and (ii) constitute it (the machine) as a concrete unity in the space in which they (the components) exist by specifying the topological domain of its relation as such a network.<sup>136</sup>

To sum up then, the organizational structure that sustains life is autopoietic. The self-reflexivity in such an autopoietic system is isomorphic with Kant’s self-organizing being as well as Schelling’s interpretation of organization cited earlier. Maturana's theory could be instantiated in various spheres, namely the cellular, the cognitive, and the social.

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<sup>135</sup> If we could – so to speak – step outside ourselves, become nothing and in turn be part of the universe, we might liken the experience to becoming “a transparent eye-ball,” as Emerson calls it: “standing on the bare ground [...] I become a transparent eye-ball; I am nothing; I see all; the currents of the Universal Being circulate through me,” Ralph Waldo Emerson, “Nature, in *The Collected Works of Ralph Waldo Emerson*, ed. by Alfred R. Ferguson (Cambridge, MA: The Belknap Press of Harvard University, 1971), p. 10. The same is true for Nietzsche whose Zarathustra-figure gained insight by being on the outside, i.e. by elevation (mountain). Cf. chapter 4 of this dissertation.

<sup>136</sup> Maturana and Varela, pp. 78-79.

The defining characteristic of all of them is their self-production out of their elements. For this reason Luhmann argues that when viewed as a network of communication, social systems display the characteristics identified as those of an autopoietic system: “Social systems use communication as their particular mode of autopoietic reproduction. Their elements are communications that are recursively reproduced by a network of communications that cannot exist outside of such a network.”<sup>137</sup> Thus, to provide a satisfactory theoretical treatment of a given system, it is necessary first to define what elements constitute it and second to show how new elements can emerge through the process of autopoiesis.

#### 2.4. Emergence

Emergence, as a central concept of complex systems, can be a dynamic process that occurs over time, such as the evolution of the human body over thousands of successive generations. It can also happen over disparate size scales. Emergent behavior is generally difficult to predict because the number of interactions between components of a system increases combinatorially with the number of components. This potentially allows for many new and subtle types of behavior to emerge. However, it is not just the sheer number of connections between components which encourages emergence; it is also how these connections are organized. A hierarchical organization is one example that can generate emergent behavior, but perhaps more interestingly, emergent behavior can also arise from more decentralized organizational structures, such as a

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<sup>137</sup> Niklas Luhmann, “The Autopoiesis of Social Systems,” *Essays on Self-Reference* (New York: Columbia University Press, 1990), p. 63.

marketplace.<sup>138</sup> In many cases, the system has to reach a certain threshold of diversity, organization, and connectivity before emergent behavior appears.

Obviously, systems with emergent properties or emergent structures may appear to defy entropic principles and the second law of thermodynamics, because they form and increase order despite the lack of command and central control. This is possible because open systems can extract information and order out of the environment. In other words, nothing commands the system to form a pattern. Instead the interaction of each part with its immediate neighbors in complex manner leads to order. This is why emergent structures are more than the sum of their parts. Because the emergent order will not arise if the various parts simply coexist, the interaction of these parts is crucial.

A biological example of emergence is an ant colony. In such an organization, the queen does not give direct orders or tell the ants what to do. Instead, each ant reacts to stimuli in the form of chemical scent from larvae, other ants, intruders, food and build up of waste, and leaves behind a chemical trail, which, in turn, provides a stimulus to other ants. Each ant is an autonomous unit that reacts depending only on its local environment and the genetically encoded rules for its specific species.

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<sup>138</sup> Such a hierarchy is already evident as the main characteristic in the so-called “Great Chain of Being” or “scala naturae,” i.e. a classical and western medieval conception of the order of the universe. This notion of the world's structure was accepted, and unquestioned, by most educated men from the time of Lucretius until the Copernican revolution and the Renaissance. The Chain of Being is composed of a great number of hierarchal links, from the most base and foundational elements up to the very highest perfection (which, of course, is God). The Principle is also known from the American intellectual historian Arthur O. Lovejoy's book *The Great Chain of Being: A Study of the History of an Idea*. With this book, Lovejoy founded a field of research in history and related fields that deals with the expression, preservation, and change of human ideas over time. A particular approach within the study of intellectual history, work in the history of ideas involves research in the history of philosophy and the history of literature. Cf. Robert F. Gleckner and Gerald E. Enscoe, *Romanticism: Points of view* (Detroit: Wayne State University Press, 1975), pp. 234-237.



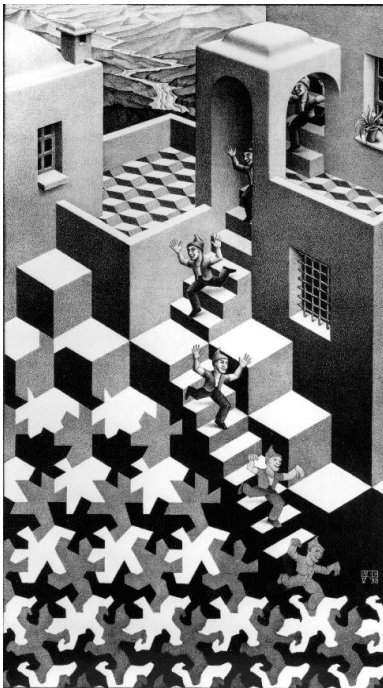
**Figure 10: A termite “cathedral” mound produced by a termite colony is a classic example of emergence in nature ([http://en.wikipedia.org/wiki/Image:Termite\\_Cathedral\\_DSC03570.jpg](http://en.wikipedia.org/wiki/Image:Termite_Cathedral_DSC03570.jpg)).**

Emergent structures can be found in many natural phenomena, from the physical to the biological domain. Emergent structures are, in fact, a favorite strategy found in many animal groups, in addition to colonies of ants: swarms of bees, flocks of birds, herds of mammals, schools of fish, and packs of wolves. As has already been demonstrated, extreme weather phenomena possess emergent properties, as does the spatial structure and shape of galaxies, all of which characterize the large-scale distribution of energy and matter in the universe.

Examples of emergent behavior are also outside the natural world, for example in the stock market. As a whole, it precisely regulates the relative prices of companies across the world. However, it has no leader, i.e. there is no one entity which controls the workings of the entire market. Investors, have knowledge of only a limited number of companies within their portfolio, and must follow the regulatory rules of the market. Through the interactions of individual investors the complexity of the stock market as a

whole emerges. The World Wide Web follows the same principle in that it is constituted by the interconnected communications between different users.

The same principle of emergence can be found in the fine arts, for example in paintings by Paul Klee, Marcel Duchamp, and M. C. Escher.<sup>139</sup>



**Figure 11: M. C. Escher’s painting „Cycle“ from the 1930s exhibits an uncanny resemblance in its conception with the anthill pictured above.**

To sum up, for a phenomenon to be termed emergent it should generally be unpredictable from a lower level description. At the very lowest level, the phenomenon usually does not exist at all or exists only in trace amounts, i.e. it is irreducible. The

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<sup>139</sup> Cf. Roberto Giunti’s article “Complexity Art” in *Tout-Fait. The Marcel Duchamp Studies Online Journal*, issue 5 (2003), pp. 1-6. In a very convincing manner, Giunti illuminates unexpected links between some leading figures in twentieth century art, namely Klee, Duchamp and Escher, all of them directly related to some fundamental ideas of complexity. He claims thus that the science of complexity provides us with a realm in which we can cover the range of ideas between the three artists. He explains quite convincingly how he divided the common traits between Klee, Duchamp and Escher into three groups, all of them mathematically relevant and strictly related to each other and to corresponding complexity themes; the three groups are “recursion and fractals,” “feedback loops and self organization,” and “instability and chaos,” (p. 1).

property itself is often unpredictable and unprecedented, and may represent a new level of the system's evolution. The complex behavior or properties are not properties of any single such entity, nor can they easily be predicted or deduced from behavior in the lower-level entities precisely because they are irreducible. The alignment of randomness with incomprehensibility forms the basis of algorithmic complexity.<sup>140</sup>

To gain a better understanding of the concept of irreducibility, let us consider a computational definition of complexity. In the 1960s, several independent researchers argued that complexity can be understood in terms of algorithmic compression. In mathematics and computing, an algorithm is a finite set of instructions for accomplishing a task that will terminate in a defined end-state. In other words, an algorithm is a kind of recipe that serves as a program for computing. One of the above mentioned scientists, Gregory Chaitin, explained that a system's level of complexity is the size of the smallest program which computes it or a complete description of it. The simpler the system, the smaller the program.<sup>141</sup> John L. Casti adds that the complexity of an object is therefore directly proportional to the length of its shortest possible description. He exemplifies the condition for an object to be random, i.e. maximally complex, with a string of letters. The set of letters is random if there is no rule for generating it whose statement is appreciably shorter – that is, requires fewer letters to write down – than the string itself. This means that an object or pattern is random if its shortest possible description is the object itself.<sup>142</sup>

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<sup>140</sup> See also Casti, chapter 5: “The Irreducible,” pp. 171-205.

<sup>141</sup> Gregory Chaitin, *Information, Randomness, and Incompleteness* (Singapore: World Scientific Co, 1990), p. 88.

<sup>142</sup> Casti, p. 9.



Something is random when it is incompressible, such as in this example of two sequences of letters:

1. ABCDABCDABCD
2. ZKTDQRFZEARX<sup>143</sup>

The first sequence is compressible because two thirds of it is in fact redundant, while the second sequence is incompressible because it is random. Complexity and compressibility, then, are indirectly proportional: the less compressible, the more complex, and vice versa.

On a larger scale, then, life itself is a major source of complexity, and autopoiesis is the major principle or driving force behind life. In this view, autopoiesis is the main reason for the growth of complexity in the natural world. If we speak of the emergence of complex living beings and life-forms, we refer to processes of sudden and unpredictable changes. Far from being a machine, nature is analogous to human, namely sensitive to its surroundings, and ultimately unpredictable. In the deterministic world of the mechanistic universe neither history nor the future are relevant to the present, whereas in the living world of dissipative structures history plays an important role. The future is uncertain; precisely this uncertainty is the heart of creativity.

## 2.5. From Mechanical to Systems Thinking

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<sup>143</sup> Taylor, *The Moment of Complexity*, p. 139.

The process of creativity, then, is the activity involved in the continual embodiment of the system's pattern of organization. This process constitutes the link between pattern and structure. As Fritjof Capra points out, all three criteria (process, pattern, and structure) are mutually independent. However, their pattern of organization can only be recognized if it is embodied in a physical structure. Since in living systems this embodiment is an ongoing process, "structure and process are inextricably linked."<sup>144</sup>

As a result, while a complex system strives to achieve equilibrium, its multi-leveled forces pull it away from stability. This consistent movement is essentially what keeps it alive because it ensures its creativity, as was exemplified in the model of language. The same is true for the human being. This very agonistic tendency is the essential factor in ensuring any system's creativity, its life even. In turn, this creativity provides the energy for the system to consistently self-organize and produce itself anew. In and of itself, the process is the ultimate goal. Reaching a consistent state of stability – or assuming that one has reached it – leads to stagnation. Hence, "equilibrium is another word for death."<sup>145</sup>

Science has traditionally relied on equilibrium in postulating that biological phenomena are "reducible." In this reduced form it can be explained by scientific laws. By contrast, complexity theory is based on a view of matter being in constant flux. In the following then, we will move from a mechanistic to a systemic model. Instead of reducing a phenomenon to understand it, we will attempt to see it within its larger context. The belief that not reductionism but holism leads to understanding has been a key concept in literature for centuries, as was exemplified in chapter one.

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<sup>144</sup> Cf. Capra, p. 160.

<sup>145</sup> Cilliers, p. 4.

By its very nature, complexity theory takes into consideration life itself, which is not reducible because it is constantly changing, not moving backward, but forward into the future by infinitely expanding its possibilities. Such is the essence of life. Thus, we have not a completed product, but an ongoing process, where the teleological thrust is toward the creation of ever greater complexity. Autopoiesis is the defining characteristic in this process of life.

## CHAPTER III

### THE LYRIC AND CREATIVITY: POETRY AS METAPHOR

Manifest in the previous chapter is the growth of the emerging field of complexity studies that extends to such disciplines as biology, physics, demographics, ecology, meteorology, economics, linguistics, and sociology. Scientists leading the exploration of chaotic phenomena, including Edward O. Wilson and Nobel prize-winner Ilya Prigogine, argue that science can never be divorced from culture, and that cultural values influence the development of science.<sup>146</sup> Indeed, the apparent universality of what are considered complex phenomena suggests that human systems, such as historical and cultural events, societies, and also narratives, are shaped by seemingly “chaotic” scenarios. Rejecting reductionism and determinism, chaos and complexity theory favor a holistic embrace of complexity and flux.

Several chaos pioneers drew inspiration from Johann Wolfgang von Goethe, who presents a somewhat unusual conception of an organism throughout his scientific texts, as was laid out in detail in the first chapter of this dissertation. Goethe argues that any seemingly individual organism is in a complex community of parts, rather than a one unified whole, and that the parts thus work to produce a chain of creation without end.<sup>147</sup>

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<sup>146</sup> Cf. Alvin Toffler, Introduction to Ilya Prigogine and Isabelle Stengers, *Order Out of Chaos: Man's New Dialogue with Nature* (London: Flamingo, 1985), xii, xiii.

<sup>147</sup> Cf. Tantillo, p. 91.

Even though the matrix of complexity theory seems to lend itself very well to the interpretation of art, and literature in particular, relatively little has been written so far applying complexity to literature. A few scholars from the humanities such as N. Katherine Hayles, Angus Fletcher, Paul Cilliers, John A. McCarthy, Ira Livingston and others are beginning to explore its potential. Bridging the gap between the traditional cultures of the humanities and science, these scholars' work constitutes an area of interaction that can be called a "third culture."

The term "third culture" lies at the heart of John Brockman's book *The Third Culture*, in which the author discusses the work of several well-known thinkers, including Stuart Kauffman and Francesco Varela, who are directly communicating their new and often provocative ideas to the general public.<sup>148</sup> The title of Brockman's book refers to Charles Percy Snow's 1959 work *The Two Cultures and the Scientific Revolution*, which described the conflict between the cultures of the humanities and science.<sup>149</sup> In a second edition of *The Two Cultures*, published in 1963, Snow added a new essay, "The Two Cultures: A Second Look," in which he suggested that a new culture, a "third culture," would emerge and close the communications gap between the literary intellectuals and the scientists. The third culture thus constitutes a realm of interaction between science and the humanities.<sup>150</sup> The works by the above mentioned literary scholars serve to

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<sup>148</sup> John Brockman, *The Third Culture: Beyond the Scientific Revolution*, Simon & Schuster, 1995). John Brockman has continued the themes of "The Third Culture" in the website of the Edge Foundation, where leading scientists and thinkers contribute their thoughts.

<sup>149</sup> Charles Percy Snow, *The Two Cultures and the Scientific Revolution* (London and New York: Cambridge University Press, 1993).

<sup>150</sup> Cf. John A. McCarthy, *Remapping Reality* (Amsterdam and New York: Rodopi, 2006), p. 29; see also Elinor S. Shaffer (ed.), *The Third Culture: Literature and Science* (Berlin and New York: Walter de Gruyter, 1998), pp. 1-5.

reunite and reconfigure what McCarthy throughout *Remapping Reality* calls the three main spheres of human interaction; namely the physical, the ethical, and the creative.

### 3.1. The Poetic System

How can one relate complexity theory to poetry? Why poetry as opposed to prose, and what sort of poetry would we be talking about? While some parallels to lyric poetry may have already become obvious to the reader, most are more obscure. Put bluntly, at first sight some poems often *seem* chaotic, but actually have an underlying order; that is, they are actually interactive, dynamic systems. Angus Fletcher uses the metaphor of an eighteenth-century chamber group of musicians who play without a conductor: “what emerges is the capacity of a system to develop its own ensemble character.”<sup>151</sup> In the following I will attempt to describe the autopoietic character of a typical poem and explain why it can be considered a complex system and it therefore lends itself particularly well for a study of creativity. It will be both necessary and useful to start by determining in what ways poetry differs from other literary genres. In other words, what makes lyric poetry so particularly fitting for a study about creativity?

As Niklas Luhmann points out in his system theory of art, poetry is a special case since it takes place in the medium of perception as well as in a linguistic code.<sup>152</sup> While this might be true for all verbal arts, poetry is certainly the extreme case, mainly because

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<sup>151</sup> Cf. Angus Fletcher, *A New Theory for American Poetry* (Cambridge, MA: Harvard University Press, 2004), p. 206.

<sup>152</sup> Niklas Luhmann, “Art as a Social System,” transl. by Eva M. Knodt, *Meridian: Crossing Aesthetics*, ed. by Werner Hamacher and David E. Wellbery (Stanford, CA: Stanford University Press, 2000), p. 124.

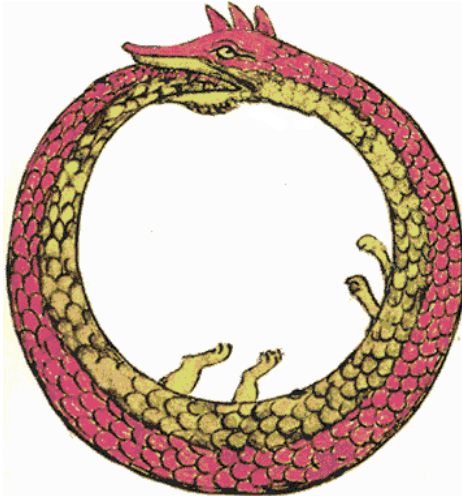
to convince, poetry appeals to perception, not to conscious reflection. The function of the ornament, in poetry as elsewhere, is to intensify redundancy and variety. Poetry, then, is not just rhymed prose. Reading poetry as a sequence of propositions about the world and considering the poetic only as beautification, adornment, or decoration, is not observing it as a work of art. Nor can one apprehend in this way the formal combination the poet uses to compose his work. Luhmann elaborates on the reason poetry stands apart:

Only at the level where symbols, sounds, meanings, and rhythms conspire – a level that is difficult to “read” – do poems refer to themselves in the process of creating forms. They generate contextual dependencies, ironic references, and paradoxes, all of which refer back to the text that produces these effects. Supported by the text, poetic self-reference may eventually articulate itself explicitly – not as a flat, abrupt statement, but as a form within the nexus of forms that constitute the text.<sup>153</sup>

The two main characteristics of lyric poetry, then, are first, that written poetry not only appeals to our thinking but also, or perhaps even more so, to our perception. In other words, the form of the poem is important – how important remains to be seen. Secondly, Luhmann suggests that there is an underlying level, a kind of deep structure, which is the locus of poetic self-reference and also the place from whence form emanates.

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<sup>153</sup> Luhmann, “Art as a Social System,” p. 125.



**Figure 12: The Ouroboros, circular symbol depicting a snake, or less commonly a dragon, swallowing its tail, is a symbol for self-reference. The Ouroboros also represents self-reflexivity, cyclicity, and the eternal return, in the sense of something constantly re-creating itself and as such is an emblem of wholeness and infinity.<sup>154</sup> (<http://en.wikipedia.org/wiki/Image:Ouroboros.png>)**

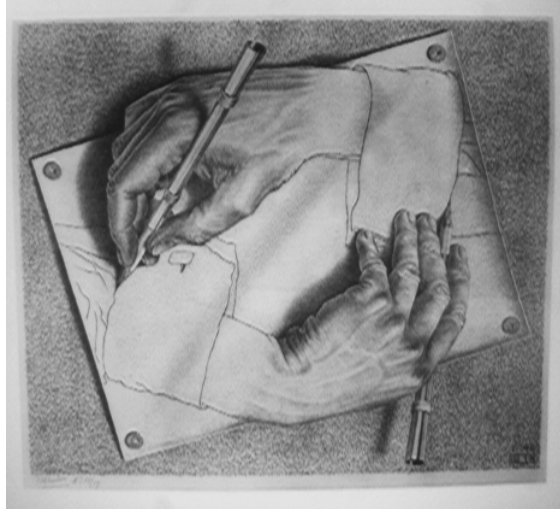
How, then, does poetic self-reference function as a catalyst for form? Aesthetic self-referencing has long been a crucial structural factor in both music and the visual arts. Eva Müller Zettelmann points to the mirror compositions of Johann Sebastian Bach and Paul Hindemith, as well as the original meta-painting of Velasquez, Magritte, and M.C. Escher as examples of this technique.<sup>155</sup>

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<sup>154</sup> Cf “ourorobos,” *A Dictionary of Phrase and Fable*, ed. by Elizabeth Knowles (Oxford: Oxford University Press, 2006), Oxford Reference Online. See also Marco Bussagli’s book in which he explores M.C. Escher’s symbolism in regards to self-referentiality: M. Bussagli, *Escher*. Art dossier, 196. (Florence: Giunti, 2004).

<sup>155</sup> Eva Müller-Zettelmann, “‘A Frenzied Oscillation’: Auto-Reflexivity in the Lyric,” *Theory into Poetry: New Approaches to the Lyric* (Amsterdam/New York: Rodopi, 2005), pp. 125-45.





**Figure 13: M.C. Escher's image of hands creating themselves**  
(<http://www.math.technion.ac.il/~rl/M.C.Escher/2/escher-hands.gif>)

Ira Livingston refers us to the linguist Roman Jakobson, who identified self-reference as the predominant linguistic function of poetry, which he labeled poeticity. Ira Livingston explains the term as referring to the way poetry tends to call attention to itself as an artifact of language – for example, by rhyme or meter or special diction – so as to make *what* is being said secondary to *how* it is being said. Livingston argues that beyond the formal patterning of poems such as rhyme and meter, poetic self-reference edges into “metadiscourse” in which text takes itself as one of its themes. These self-references can produce multiple and contradictory effects. They can call the realism of the text into question and urge readers to become aware of the act of representation as a thing in itself.<sup>156</sup>

Zettelmann further elaborates on what she calls “the metalyric.” She diagnoses an interpretative stagnation resulting from the lack of clear or even basic definitions and standardized analytical categories concerning self-referential poetry. Taking as the

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<sup>156</sup> Cf. Ira Livingston, *Between Science and Literature. An Introduction to Autopoetics* (Urbana and Chicago: University of Illinois Press, 2006), pp. 58-59.

starting point for the history of metalyric reflection the works of Archilochos (seventh century BC.) and Sappho (seventh to sixth centuries B.C.), Müller-Zettelmann outlines its evolution down to the lyric production of the twentieth century, emphasizing in particular the similarities between the Romantic period and the twentieth century. She notes that poetic guidelines in the classical period were still presented in the form of an explicit system of argumentation.

However, for the Romantics the poetic imagination with its synthesis of form and content was the only way of creating an approach to the world that embraced more profound relationships. The new axiom of the indissoluble link between beauty and the truth, between form and content, marked the slow demise of explicit metapoetry, as well as the advent of a type of metalyric that made increased use of the technique of implicit or non-discursive presentation. This growing “opaqueness in poetic metaphor,” Zettelmann explains, was linked in the twentieth century to a new type of metalyric technique – as used extensively in concrete poetry – which focused on the fiktionality of a text by means of a total devaluation of its content and the use of auto-referential elements of textualization.<sup>157</sup>

Along with this “growing opaqueness,” Müller-Zettelmann sees as the decisive feature of twentieth century lyric a “particular focus on the linguistic medium” which she likens to the ‘linguistic turn’ of contemporary philosophy. Given the general tendency to meta-characteristics in twentieth century lyric, she then undertakes a classification of what she considers metalyric elements, analyzing the conditions, forms and functions of

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<sup>157</sup> Cf. Müller-Zettelmann, p. 127.

self-reflection in poetry, in contrast to rather vague definitions of other critics. She explains:

Metalyric poems refer to lyric inspiration, to the poetic creative process, to the social task of literary creation, or to the intended reader's reception. The list of possible meta-themes could be extended further, but their semantic common denominator is in their reference to some aspect of the fictionality of the lyric work of art. Whenever either the aesthetic construction (fictio) or the inventedness (fictum) is thematized or presented, we have some form of metalyric writing.<sup>158</sup>

Müller-Zettelmann differentiates between critical and non-critical metapoems, explicit versus implicit, as well as between self-and non-self metalyric texts. She describes as specifically interesting about self-metalyric forms (which she terms "primary metalyric") the "impossibility of distinguishing between the act and the object of textualization. To make her point, she cites Jean-Pierre Dupuy:

Between the operator and the operand, the program and the data, the cause and the effect, the meta-language and the language, there is a continuous reversal of levels, a frenzied oscillation, in which each in turn sits on the higher level, then on the lower, and so on, not unlike two rivals, each of whom briefly gains the upper hand without ever completely defeating each other.<sup>159</sup>

What Dupuy and Müller-Zettelmann refer to as "frenzied oscillation" is, interestingly, precisely that activity from which the meaning of the poem emerges. Rather than static words that can be interpreted in a linear fashion, the incessant movement apparent between different levels of signification in a metalyric poem is testament to the energy emanating from it.

Another crucial aspect of metalyric poetry is its effect on the reader. The metalyric, Müller-Zettelmann proffers, is unlike the general literary self-referentiality; it

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<sup>158</sup> Müller-Zettelmann, p. 132.

<sup>159</sup> Jean-Pierre Dupuy, "Self-Reference in Literature," *Poetics: Journal for Empirical Research on Literature, the Media and the Arts* 18.6 (1989), pp. 491-515. Here p. 506.

is a form of self-focusing which forces the reader consciously to come to terms with various aspects of fictionality to an extent which exceeds that which is usual for the genre.<sup>160</sup> She concludes that the metalyric refers to poems that are self-referential to (lyric) literary texts, and in the wider sense also to art in general, which “in an explicit discursive or implicit ‘showing’ fashion, draw particular attention to the fictio (aesthetic construction) and/or fictum (inventedness) aspect of the fictionality of literary works.”<sup>161</sup>

### 3.2. A Theory of Truth: Deep Structure

In what way then, does a self-referential poem or “meta-poem” function as an autopoietic system? Let us start with the obvious: a poet employs the main scientific idea in complexity, namely the notion of a self-organizing system since a poem generally lacks an obvious developmentally straightforward plot, i.e. it is non-linear, both in content as well as in form. This is often evident from just looking at the “broken lines” of a poem.<sup>162</sup> Nevertheless, the individual parts (words) of a poem are interconnected; they interact on a level of *deep structure*, the level which Niklas Luhmann referred to as that where symbols, sounds, meanings, and rhythms conspire.<sup>163</sup>

The term “deep structure” is in fact quite common in linguistics and especially in the study of syntax. The deep structure of a linguistic expression is a theoretical construct

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<sup>160</sup> Cf. Müller-Zettelmann, p. 141.

<sup>161</sup> Müller-Zettelmann, p. 142

<sup>162</sup> Cf. Fletcher, p. 191.

<sup>163</sup> Luhmann, “Art as a Social System,” p. 124.

that seeks to unify several related interacting forms. As such, it is a representation of the syntax of a sentence and is distinguished by varying criteria from its *surface structure*, indicating that every sentence exists on at least two levels: the surface structure which corresponds to the actual spoken sentence and the deep structure which underlies meaning of the sentence. A single *deep* idea can be expressed in many different *surface* structures. The deep structure reveals the semantic components while the surface structure exposes the proper phonological information in order to express that thought. Thus, the distinction between “deep structure” and “surface structure” permits us to explain ambiguous sentences more than one interpretation.

The term was initially defined in *Aspects* and in other works by Noam Chomsky in the mid-1960s, as the part of the syntactic description of a sentence that determines its semantic interpretation. It was renamed D-structure in the late 1970s and as such comprises the second of three levels of syntax – more abstract than S-structure (surface structure) and less abstract than Logical Form. In the history of Chomsky's theories, D-structure derived from the deep structure of the 1960s and early 1970s and is therefore a sort of initial structure from which structures at other levels were derived.<sup>164</sup>

While structure can be said to be based on order, it is much more encompassing than the latter. As David Bohm points out, it is possible to abstract a specific structure as – at a specific point in time – “relevant” and “appropriate.” Later in time, however, as the context is made broader, the limits of the previous abstraction become evident and new

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<sup>164</sup> Cf. David Crystal, *A Dictionary of Linguistics and Phonetics* (Cambridge, MA: Blackwell, 1997), p. 125.

notions develop.<sup>165</sup> Thus, there can be no absolute definition of structure, just as there can be no absolute definition of a specific meaning. “Absolute,” then, is another word for “static,” which, as was argued in the preceding is another word for “death.” Consider in this regard Bohm and Peat’s affirmation of the dynamic nature of structure:

Structure is often treated as being static and more or less complete in itself. But a much deeper question is that of how this structure originates and grows, how it is sustained, and how it finally dissolves. Structure is basically dynamic, and should perhaps better be called *structuring*, while relatively stable products of this process are *structures*. But even these latter structures should not be considered as basically static, for they are the results of processes which sustain them and keep them, for a time, more or less within certain limits.<sup>166</sup>

If we relate these insights from linguistics and complexity studies to poetry, it becomes clear that the only constant is in fact incessant change. The ceaseless interaction of the individual parts of a poem results in a whole that is naturally emergent (fluid) rather than artificially predetermined (rigid). In a poem, individual parts retain their differences and their distinctness, even as they form a coherent unity.

John Briggs comments further on the nature of the global interaction of elements within a work of art, a phenomenon he refers to as “reflectaphors”:

Reflectaphors are created in the dynamics that takes place among the elements that comprise a work of art. In the visual arts, reflectaphors emerge in the interactions of elements like shape, line, color and negative space. In literature they appear in such techniques as irony, pun, motif, symbol and metaphor. Through reflectaphors are displayed an artwork's subtlety and its ability to astonish: they are the intersection between its parts and the whole (...) They are the artwork's hidden order.<sup>167</sup>

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<sup>165</sup> David Bohm and F. David Peat, *Science, Order, and Creativity*, 2<sup>nd</sup> ed. (London: Routledge, 2000), p. 142.

<sup>166</sup> Bohm and Peat, p. 141.

<sup>167</sup> John Briggs, “Reflectaphors: The (Implicate) Universe as a Work of Art,” in *Quantum Implications, Essays in Honor of David Bohm*, ed. by David Peat and Basil Hiley (London: Routledge & Kegan Paul, Ltd., 1987), pp. 414-436. Here p. 414.

We cannot speak of “absolute” meaning, or “absolute” truth, then, since the reflectaphors, the intersections between the parts and the whole of a poem, are dynamic; they are constantly defined and redefined.

How, then, can we know anything to be true, if there is no absolute definition? The semantic theory of truth proposes that any claim that a sentence is true can only be made as a formal requirement regarding the language in which the proposition itself is expressed. The problem is obvious, and is the basis of Polish Logician Alfred Tarski’s Indefinability Theorem. Tarski’s shaping ideas appear in a paper entitled “On the Concept of Truth in Formal Languages,” which had as its goal a definition of truth for sentences, in a way that both ensures satisfaction of the schema of type *T* (“snow is white”) and avoids the liar paradox.<sup>168</sup> In this essay, Tarsky states that the concept of truth for the sentences of a given language cannot consistently be defined *within* that language.<sup>169</sup> To make his point, he distinguishes between a formalized *language* (*L*), on the one hand, whose sentences meet a purely syntactical criterion of well-formedness, and an *interpretation* (*I*) of (*L*) on the other. A general characterization of truth in *I* for sentences of *L* can then be specified in terms of the inductively defined relation of

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<sup>168</sup> In philosophy and logic, the so-called liar paradox (allegedly due to Epimenides) stands for paradoxical statements in general. Its simplest example is the sentence “This sentence is false,” which must be false if it is true, and true if it is false. Cf. Tim Maudlin, *Truth and paradox: solving the riddles* (Oxford: Clarendon Press, 2004), pp. 2-25.

<sup>169</sup> Alfred Tarski, “The concept of Truth in Formalized Languages,” transl. by J. H. Woodger, *Logic, Semantics, and Metamathematics*, 2<sup>nd</sup> ed. by J. Corcoran (Indianapolis: Hackett, 1983), pp. 152-278.

satisfaction. Tarski showed also that this definition could not be carried out in *L* itself, but required the resources of a richer meta-language (Tarski's Theorem).<sup>170</sup>

The problem Tarski strives to solve is the same we encounter with the so-called correspondence theory of truth. Traced to Plato, it holds that an object is represented when it is reconstructed according to a fully described blueprint, an exact replica or an archetype, in a linear step-by-step fashion that excludes alternative paths. In other words, propositions are true if and only if they correspond with the "facts." Immanuel Kant discusses the correspondence theory of truth in *Die falsche Spitzfindigkeit der vier syllogistischen Figuren*, basing his discussion on the common belief that truth consists in the agreement of knowledge with the object. Abbott translates and condenses Kant's elaborations as follows:

According to this mere verbal definition, then, my knowledge, in order to be true, must agree with the object. Now, I can only compare the object with my knowledge by this means, namely, by taking knowledge of it. My knowledge, then, is to be verified by itself, which is far from being sufficient for truth. For as the object is external to me, and the knowledge is in me, I can only judge whether my knowledge of the object agrees with my knowledge of the object.<sup>171</sup>

According to Kant, then, the definition of truth as correspondence is merely a verbal definition, here making use of Aristotle's distinction between a nominal definition, a definition in name only, and a real definition, a definition that shows the true cause or essence of the thing whose term is being defined. From Kant's account of history, the

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<sup>170</sup> Cf. Maudlin, p. 6. See also Colin Howson's essay on "Tarski, Alfred" in *The Oxford Companion to Philosophy* (Oxford University Press 2005), Oxford Reference Online.

<sup>171</sup> Cf. Immanuel Kant, „Die falsche Spitzfindigkeit der vier syllogistischen Figuren,“ *Werke* (Königsberg: Kanter Verlag, 1762), II: 599, here in translation by Thomas Kingsmill Abbott, with an introduction by Dennis Sweet in *Kant's Introduction to Logic and His Essay on the Mistaken Subtlety of the Four Figures* (1963), (New York: Barnes and Noble, 2005), p. 45.



definition of truth as correspondence was already in dispute from classical times, the skeptics criticizing the logicians for a form of circular reasoning.<sup>172</sup>

The question remains as to precisely what is supposed to correspond with what. In other words, we have no access to facts independently of the statements and beliefs that we hold. We cannot look over our own shoulder to compare our beliefs with a reality apprehended by any other means than those beliefs that were shaped by further beliefs, and so on. Hence we have no fixed hold on “facts” as something like structures to which our beliefs may or may not correspond. Thus, nothing is definitive but everything is relative to something that, again, is only relative.

The latter stance accurately describes the coherence theory of truth which allows contradictions and alternatives; in fact, it must have contradictions if it is to be complete. The coherence theory of truth holds that the truth of a proposition consists in its being a member of some suitably defined body of other propositions: a body that is consistent, coherent, and possibly endowed with other virtues.<sup>173</sup> In other words, any one entity is part of a system, which in turn is part of a system, and so on. Thus, according to the coherence theory of truth a statement is true if it “coheres” with other statements – false if it does not. In order for a proposition to be true according to the correspondence theory, there must exist some fact to which it corresponds. Clearly then, connectionism and context are crucial concepts in this theory, as will be shown in subsequent chapters. We

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<sup>172</sup> Kant, *Spitzfindigkeit*, §2.

<sup>173</sup> Cf. Frank P. Ramsey, Nicholas Rescher and Ulrich Majer, *On Truth: Original Manuscript Materials (1927-1929) from the Ramsey Collection at the University of Pittsburgh* (Dordrecht: Kluwer Academic Publishers, 1991). See especially chapter two on the Coherence Theory of Truth, pp. 25-42.

have thus established that the emergent “one” represents the “many,” though not by identical correspondence but by coherence, which is not necessarily linear.

This concept of “e pluribus unum” has also been applied to other realms, as in the notion of the melting pot which implies that a number of ethnic groups, cultures, and religions in a society will fuse together to produce new cultural as well as social forms. This idea was common in the USA in the first half of the twentieth century, and is exemplified in the motto on American coinage *e pluribus unum*: one out of many. Of course, this newly formed unit is not a static one but will continue changing and (re-producing), as will its constituent parts, a notion which is captured in the metaphor of the melting pot.

### 3.3. Perpetual Metamorphosis: The Wave

Angus Fletcher attributes to precisely this notion of ongoing change and inherent “air of mystery” the special place that poetry holds in human history: “it is indeed hard to imagine that poetry could have played a part in human history had it not been a mysterious use of language, whereby a play of perpetual metamorphosis distinguishes the poem from all other use of language.”<sup>174</sup>

We can imagine at this point a wave as symbol for the coherent surge of energy traveling through individual parts without displacing them, i.e. the pattern of a system is conserved while its constituent matter is in flux.<sup>175</sup> A wave merely picks up individual

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<sup>174</sup> Fletcher, p. 177.

<sup>175</sup> Cf. Fletcher, p. 105.

water molecules and releases them again. The water basically participates in the wave's movement for only an instant and then falls back. John McCarthy proposes to conjoin this wave packet with the soliton, the so-called "standing wave," and refers us in turn to Jahn and Dunne for an explanation of the soliton:

When any wave train reaches a boundary or discontinuity in the medium in which it is propagating, some portion of it is reflected and some portion is transmitted. If all relevant boundaries of the medium are fixed in some fashion, the succession of incident, reflected, and re-reflected propagating waves compounds to establish a pattern of "standing" waves, wherein the displacements of the medium wax and wane in a stationary, rather than propagating, configuration.<sup>176</sup>

Because the soliton results from the nonlinear congruence of individual sine waves, McCarthy reasons, it can be viewed as "an example of self-organization, contradicting with its positive feedback loops the principle of the equipartition of energy"; dispersion is a sign of negative feedback loops. He further reminds us that this synchronized energy of the standing wave occurs everywhere in the universe, from "pulsating stars to aftershocks to alpha rhythms and the minute electrical impulses needed to coordinate the nerve and muscle fibers in a body riding a bicycle."<sup>177</sup>

Ira Livingston points out that such a process of regular interplay of patterned energy through matter also "constitutes the first manifestation of God in the Judeo-Christian Bible: 'The spirit of God moved across the face of the waters'."<sup>178</sup> The spirit of

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<sup>176</sup> Cf. McCarthy, *Remapping Reality*, p. 63; Robert G. Jahn and Brenda J. Dunne, *Margins of Reality: The Role of Consciousness in the Physical World* (San Diego, New York and London: Harcourt Brace Jovanovich, 1987), pp. 213-214. The term "soliton" was introduced in the 1960's, but the scientific research of this phenomenon had started in the nineteenth century when John Scott-Russell, a Scottish naval engineer, observed a large solitary wave in a canal near Edinburgh. It was not until the mid 1960's when scientists began to use modern digital computers to study nonlinear wave propagation that the soundness of Russell's ideas began to be appreciated.

<sup>177</sup> McCarthy, *Remapping Reality*, p. 63.

<sup>178</sup> Livingston, p. 79.

the creator of all things, then, is likened to the wave that temporarily changes its environment. This wave-form is essential to any sustainable system since it lives only when it is changing shape. The same could be said of words of a poem washing over a human mind: words are essentially “recruited” to participate in a moment’s thought and then fall back onto the paper. The poem itself is not in fact consumed by being read; the words, lines, and stanzas, as well as the overall structure as it is laid out on paper remain the same.<sup>179</sup>

Clearly, however, this metaphor is problematic since it leaves out something absolutely crucial: the words in a poem are not merely what Ira Livingston calls “filler” for thoughts; they are what one thinks *with* as well as *against*.<sup>180</sup> In other words, the poem is not only self-sustaining, it also creates; it does more than “use” what is present, it actually produces new components, as any living system does. This leads us to the characteristic organization of living systems, namely the process of autopoiesis.

### 3.4. Autopoiesis

Autopoiesis literally means “self-production” and is derived from the Greek “auto” for “self” and “poiesis” for “creation” or “production.” It expresses a fundamental complementarity between structure and function. The term was originally introduced by Chilean biologists Francisco Varela and Humberto Maturana in the early 1970s and refers

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<sup>179</sup> Cf. Livingston, p. 79.

<sup>180</sup> Cf. Livingston, p. 79.

to the dynamics of non-equilibrium structures; that is, organized states that are sometimes also called dissipative structures, which remain stable for long periods of time despite matter and energy continually flowing through them.<sup>181</sup>

The canonical example of an autopoietic system, and one of the entities that motivated Varela and Maturana to define autopoiesis, is the biological cell. It is made of various biochemical components such as nucleic acids and proteins, and is organized into bounded structures such as the cell nucleus, various organelles, a cell membrane and cytoskeleton. These structures, based on an external flow of molecules and energy, produce the components which, in turn, continue to maintain the organized, connected structure that gives rise to these components. In contrast, an allopoietic system uses its components to generate an organized structure other than itself.<sup>182</sup>

While it was newly introduced to biology in the 1970s, the concept of autopoiesis had long been part of the legacy of structuralism. A system manufacturing its own components is a prominent aspect in Saussure's structuralist linguistics, and found applications in sociology, namely in Niklas Luhmann's systems theory. One of the differences between structuralist systems and autopoietic systems, however, is that structuralism models systems as organizations that are frozen at a single moment in time. Autopoiesis, on the other hand, understands them as patterns of ongoing events that are continually changing, oscillating between different poles. In other words, the system

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<sup>181</sup> Cf. Humberto R. Maturana and Francisco J. Varela, *Autopoiesis and Cognition: the Realization of the Living*, with a preface to "Autopoiesis" by Sir Stafford Beer (Dordrecht, Holland and Boston, MA: D. Reidel Publishing Company, 1980), p. 82. See also the *Web Dictionary of Cybernetics and Systems* (<http://pespmc1.vub.ac.be/ASC/AUTOPOIESIS.html>).

<sup>182</sup> Maturana and Varela, p. 82.

perpetuates itself through its own operations. This, in turn, means that an autopoietic system is structurally determined, since it is the structure which determines its identity at any given moment.<sup>183</sup> This leads to the question of what structure is as opposed to the less rigid and permeable term “organization” John Mingers clarifies it as follows:

By organization Maturana refers to the relations between components that give a system its identity, that make it a member of a particular type. Thus, if the organization of a system changes, so does its identity. By structure, Maturana means the actual components and relations between components that constitute a particular example of a type of system. The organization is realized through the structure, but it is the structure that can interact and change. So long as the structural changes maintain the organization, the system’s identity remains.<sup>184</sup>

Essentially, then, form is content in an autopoietic system. Applied to poetry, we could say that a poem creates its own form; it arises from the interactivity of the parts. In his widely cited Marburg speech (1951) about problems of lyric poetry, “Probleme der Lyrik,” Benn expands and summarizes his views which represent the major positions of poetic activity in the twentieth century.<sup>185</sup> He affirms that form *is* in fact the poem:

Form, isoliert, ist ein schwieriger Begriff. Aber die Form *ist* ja das Gedicht. Die Inhalte eines Gedichtes, sagen wir Trauer, panisches Gefühl, finale Strömungen, die hat ja jeder, das ist der menschliche Bestand, sein Besitz in mehr oder weniger vielfältigem und sublimem Ausmaß, aber Lyrik wird daraus nur, wenn es in eine Form gerät, die diesen Inhalt autochthon macht, ihn trägt, aus ihm mit Worten Faszination macht. Eine isolierte Form, eine Form an sich gibt es ja gar nicht. Sie ist das Sein, der existentielle Auftrag des Künstlers, sein Ziel.

[Form, by itself, is a complicated term. But the Form *is* in fact the poem. A poem’s content, such as grief, a feeling of panic, drifts into finality, everyone has those, it is human inventory, human possession to more or less multifaceted and

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<sup>183</sup> Cf. Livingston, pp. 79-80.

<sup>184</sup> John Mingers, *Self-Producing Systems: Implications and Applications of Autopoiesis. Contemporary Systems Thinking* (New York: Plenum P., 1995), p. 29.

<sup>185</sup> Gottfried Benn, „Probleme der Lyrik,“ *Gesammelte Werke in vier Bänden*, ed. by Dieter Wellershoff. (Wiesbaden: Limes Verlag, 1960), I: 494-532.

sublime extent. But it becomes lyric poetry only whenever it takes a form which renders this content autochthonous, carries it, and turns it into fascination by means of words. There is no such thing as isolated form, form by itself. Form is Being, the artist's existential task, his object and goal].<sup>186</sup>

Benn is claiming is that language is, in a way, indigenous, or “native.” In strictly linguistic terms, this would mean that this language is from a linguistically distinct community, or system. We can take this supposition further by looking at the Greek root of the word *autochthon*, which in fact indicates something that has “sprung from the soil,” the Greek *auto-* + *khthon* meaning *earth*.<sup>187</sup> Clearly, what fascinates Benn is the organic nature of a poem, and the fact that it constitutes an intrinsic part of a larger system of organisms. The external form of the poem is thus far from being static because it is merely a surface phenomenon that hints at a deeper structuring principle which we access via each encounter with the poem in a slightly different way.

It is important to point out that this “living” system is organizationally closed yet interactively open, according to Maturana and Varela. What this means is explained by David Barndollar, in his 2004 dissertation entitled *The Poetics of Complexity and the Modern Long Poem* (as yet unpublished).<sup>188</sup> Barndollar exemplifies this concept and the properties of an autopoietic system by examining a human being's functioning in and with its environment, a notion which Niklas Luhmann refers to as “structural coupling.”<sup>189</sup> In *Meaning as Sociology's Basic Concept*, Luhmann argues that systems in

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<sup>186</sup> Benn, „Probleme der Lyrik,” pp. 507-508. My translation.

<sup>187</sup> Cf. “autochthon” in *The Concise Oxford Dictionary of English Etymology*, ed. by T. F. Hoad (Oxford: Oxford University Press, 1996), Oxford Reference Online.

<sup>188</sup> David Philip Barndollar (John Philip Farrell, and Adam Zachary Newton) *The poetics of complexity and the modern long poem* (thesis [Ph. D.], University of Texas at Austin, 2004).

<sup>189</sup> Luhmann, “Meaning as Sociology's Basic Concept,” *Essays on Self-Reference*, p. 22.

the medium of *meaning* are structurally coupled in the sense of symbiosis. There are only two systems that use meaning as a medium of autopoeisis. They are psychic systems (consciousnesses) and social systems (communication networks). Luhmann defines social systems as being in the environment of psychic systems, and vice versa.<sup>190</sup> Barndollar adopts these terms to his own purposes:

Through structural coupling, a system is linked to its environment while remaining separate from it. Humans, for example, are structurally coupled to the environment of the Earth, since without its atmosphere, gravitational field, and other physical elements humans could not continue to live (that is, operate autopoietically). It is impossible for systems to be structurally coupled to one another, both in the way that subsystems within a system are interrelated (e.g. the nervous system and the circulatory system with humans) and in the sense of symbiosis (i.e. two systems that depend on each other for their mutual survival).<sup>191</sup>

When speaking in terms of physical phenomena, the notion of two or more systems supporting one another is referred to as agonism. In biochemistry an agonist is described as a substance that initiates a physiological response when combined with a receptor. The term originates in the Greek word *agonistes*, meaning “contestant”; thus, agonistic relationships thrive on contest – they achieve common objectives through their competitive interaction.<sup>192</sup>

Clearly, *force* as the dominating concept in natural as well as social systems, is being replaced by what McCarthy calls *information communication* as “the new ordering principle of systems, communication, not in the human sense of understanding but of

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<sup>190</sup> Luhmann, “Meaning as Sociology’s Basic Concept,” pp. 21-79. Cf. Luhmann, *Art as a Social System*, especially chapter three “Medium and Form,” pp. 102-32.

<sup>191</sup> Barndollar, p. 18.

<sup>192</sup> Cf. “agonist,” *The New Oxford American Dictionary*, 2<sup>nd</sup> ed. by Erin McKean (Oxford University Press, 2005), Oxford Reference Online.



‘data transfer.’”<sup>193</sup> Thus, social systems are the communications themselves and use psychic systems as their environment, while psychic systems are the consciousnesses themselves and have social systems as their environment. Barndollar emphasizes that “social systems are not made up of people. They are made up of communications, and only communications.”<sup>194</sup>

Since only psychic systems but not social systems can be readers and are therefore relevant for this study, let us focus on Luhmann’s claim that – from the perspective of the reader – psychic systems (human groups) are closed to each other individually but open through the social system of communications. They receive messages and derive understandings from them on an entirely internal basis. Activated by external input, psychic systems now produce meanings of their own that are shared with the social system. Communication generates additional interaction so that the social system functions autopoietically. In his reflections on the communicative act, Ira Livingston calls attention to the role of difference in constituting meaning: “meaning is the interaction of difference within and difference between.”<sup>195</sup>

How does the implication of closure relate to other psychic systems and the interactive openness of the communicative network? In this regard, Barndollar’s comment is insightful:

It is not possible to know the mind of another person directly, though it is possible to perceive communications generated by that person; perception and communication are structurally coupled. Since the only way we can ascertain

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<sup>193</sup> McCarthy, *Remapping Reality*, p. 48.

<sup>194</sup> Barndollar, p. 19.

<sup>195</sup> Livingston, p. 42.

whether those communications accurately reflect the other's mind is through further communications, subject to the same restriction as the first set of communications, we can never know for certain whether our understanding matches the other person's – indeed, since we are different consciousnesses, our understandings could never exactly match. Now, obviously, we do communicate accurately about a wide variety of topics, and in terms of information, we can be confident in our ability to verify whether we have understood particular facts and data. This confidence stems from our sharing a great deal of context with our interlocutors, so to the degree that we share common ground with them, we can understand them. But as a general rule, this understanding is only more or less accurate, not absolute. In everyday situations, an approximate understanding may be sufficient; in complex situations, in which language may or may not mean what it appears to (e.g., while traveling in a foreign land where the language is unfamiliar; in diplomatic relations; in the interpretation of literature; in love and courtship), a misunderstood gesture or phrase may lead to a breakdown of communications.<sup>196</sup>

By relating communication networks to individual consciousness, Barndollar elucidates how tightly linked the two contexts are; without communication, human consciousness cannot evolve. In the case of reading a poem (i.e. perceiving a written communication), then, it is clearly impossible to determine with any degree of certainty whether a reader has understood “what the author meant” or “what the text really means.”<sup>197</sup> Clearly, the main difficulty to be overcome in the interpretation of any text, but much more so of poetry, is the difference between the context of the text's creation and the context of its reception/reading. Hence, contexts constitute various communication networks.

### 3.4.1 Context and Connectionism

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<sup>196</sup> Cf. Barndollar, pp. 19-20. Spanish philosopher José Ortega y Gasset makes the same argument in *Man and People* (New York: Norton, 1957).

<sup>197</sup> Cf. Barndollar, p. 20.

Context is defined by many factors; one of the most prominent is the historical. To overcome the aspect of historical contextuality, let us consider Hans-Georg Gadamer's approach. Known for saying that nothing exists except through language, Gadamer is also famous for his debate with Jürgen Habermas, in 1960, over the possibility of transcending history and culture in order to find a truly objective position from which to criticize society. Gadamer's philosophical objective, which he explains in *Wahrheit und Methode*, was to establish the nature of "philosophical hermeneutics," which Heidegger had initiated.<sup>198</sup> Seeking to fathom the nature of human understanding, Gadamer criticized in this book the common modern approach to the humanities, namely the one modeled on the rigorous, empirical methods of the natural sciences (e.g., positivism), coupled with Dilthey's claim that interpretation must entail the recovering of authorial intention.

In contrast to these positions, Gadamer, as had Herder and Schiller before him, argued that all people's consciousness is historically affected because everyone is embedded in the particular history and culture that shaped them. Thus, interpreting a text calls for what he considers a "fusion of horizons" into a single one:

Every encounter with tradition that takes place within historical consciousness involves the experience of a tension between the text and the present. The hermeneutic task consists not in covering up this tension by attempting a naïve assimilation of the two but in consciously bringing it out. This is why it is part of the hermeneutic approach to project a historical horizon that is different from the horizon of the present. Historical consciousness is aware of its own otherness and hence foregrounds the horizon of the past from its own.<sup>199</sup>

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<sup>198</sup> Hans Georg Gadamer, *Wahrheit und Methode: Grundzüge einer philosophischen Hermeneutik*, 2nd ed. (Tübingen: Mohr, 1965).

<sup>199</sup> Hans-Georg Gadamer, *Wahrheit und Methode (Truth and Method)*, transl. by Joel Weinsheimer and Donald G. Marshall. 2nd rev. ed. (New York: Crossroad, 1989), p. 306.

However, Gadamer admits that historical consciousness is itself merely something that is superimposed upon continuing tradition, and hence it immediately re-combines with what it has fore-grounded itself from, in order to become one with itself again in the unity of the historical horizon that it thus acquires. The obvious paradox in this statement is that the present itself is a product of history while the past can only be known in the present.

During the 60s, after having written in the tradition of existential phenomenology, the French philosopher Paul Ricoeur experienced a sort of “linguistic turn.” He concluded that to study human reality properly one had to combine phenomenological description with hermeneutic interpretation. For hermeneutics, whatever is intelligible is accessible to us in and through language, and with that all deployments of language calls for interpretation. From this it follows that there is no self-understanding that is not mediated by signs, symbols, and texts; in the final analysis self-understanding coincides with the interpretation given to these mediating terms.<sup>200</sup>

More simply, the *self* is basically a product of the never ceasing communication (via symbols, texts) between the “external” and the “internal.” Self-understanding is a continual process of oscillation between poles, between distancing and appropriation, in order to make something “one’s own.” While one would expect the act of appropriation, of “trying to understand” something to be a mental process, Ricoeur instead proposes that it is not so much a “taking hold of” but rather an act of “letting go.” He claims that what is “made our own” is not something mental, some blue-print supposedly hidden behind the text, but rather the projection of a world. However, this

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<sup>200</sup> See Paul Ricoeur, “On Interpretation,” *The Temporality of Action*, transl. by Kathleen Blamey and John B. Thompson (Evanston: Northwestern University Press, 1991), p. 15.

does not imply that a subject projects the *a priori* of his own understanding and interpolates this *a priori* in the text. Instead, Ricoeur proposes that “appropriation is the process by which the revelation of new modes of being – or, if you prefer Wittgenstein to Heidegger, new “forms of life” – gives the subject new capacities for knowing himself.”<sup>201</sup> This implies that the reader is broadened in his capacity to project himself by receiving a new mode of being from the text itself: “thus appropriation ceases to appear as a kind of possession, as a way of taking hold of [...] it implies instead a moment of dispossession.”<sup>202</sup> This basically means that what is initially perceived as the “self” needs to be given up in order for it to “receive a new mode of being,” for its full potential to be actualized.

The process of identifying the self in relation to the changing environment can be likened to a “Mündigwerdung,” to freeing oneself from dependence on an external authority. In his essay “Schreiben nach Auschwitz” (1990), Günter Grass speaks of the restrictions that are put on the individual by different instances of authority as a *Grenzsetzung*. Initiated by the recognition of borders, the process of becoming self-determining constitutes for Grass an ongoing liberation.<sup>203</sup> Becoming one “self,” is an ongoing process that is both forced and driven by the interaction between the individual and the conceived “borders” which constitute an incessant, oscillating movement, a

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<sup>201</sup> See Paul Ricoeur, *Hermeneutics and the Human Sciences: Essays on Language, Action, and Interpretation*, ed. & transl. by John B. Thompson (Cambridge and New York: Cambridge UP, 1981), p. 192.

<sup>202</sup> Paul Ricoeur, *Hermeneutics and the Human Sciences*, p. 192.

<sup>203</sup> Cf. Günter Grass, “Schreiben nach Auschwitz,” *Der Autor als fragwürdiger Zeuge*, ed. by Daniela Hermes (München: dtv, 1997), pp. 195-222.

driving force. Consider in this context also Karl Jaspers' comment that at all points we are "led to the frontiers, in order to obtain the most extreme horizons."<sup>204</sup>

The goal of the author, then, is to capture time ("die Zeit festzuhalten") in order to establish for himself – as well as for the conscious reader – a connection between history and the present.<sup>205</sup> History itself is an open-ended process, "the totality of life is an open whole"; it consists of human attempts to give meaning to life and therefore is never static.<sup>206</sup> Establishing this connection between history and present, or rather, locating the present within the process of history stimulates "Ich-Bildung" on the individual level, self-creation, autopoiesis in a more general sense. The action forces the 'I' (author and reader) to (non-permanently) locate itself, in relation to external factors. The "I" becomes an author himself, namely of himself/herself.

Ira Livingston projects the idea of the present as part of the process of history in the image of a family tree and thereby suggests the organic nature of these and thereby of history. As one looks forward in time from what appears to be the center (one's own position), one can imagine a first parent as the trunk of a tree that splits into many limbs, which in turn split into many more branches of offspring. However, if one were to look back, one also finds the trunk branching into roots and then into rootlets: two parents, four grandparents, eight great-grandparents, and so on. Livingston draws the following conclusion:

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<sup>204</sup> Karl Jaspers, *Vom Ursprung und Ziel der Geschichte* (München: R. Piper, 1949), quoted here in translation: *The Origin and Goal of History*, transl. by Michael Bullock (New Haven, CT: Yale University Press, 1953), p. 240.

<sup>205</sup> Grass, p. 217.

<sup>206</sup> Cf. Jaspers, p. 240.

If this observation gives even a moment of vertigo in wondering which end is up, it mainly functions to ground all branches and roots in the individual who is their unique center. In doing so, the familiar metaphor obscures what is otherwise quite obvious: that *unique* and *center* are wildly inappropriate, since every node of every root and branch of a single tree is also the node of other roots and branches of other trees, and that, taken together, the structure doesn't resemble a tree at all but a kind of web.<sup>207</sup>

Adopting Livingston's metaphor, what may seem, on first sight, like a set of two opposing forces (because pointing in different directions) is in fact a multitude of different influences which cause the subject to oscillate between an infinite number of poles.

In this context, it is interesting to note that Angus Fletcher compares the writing of a poem with meditation. In *New Theory*, he writes that "meditation ties directly to the most ancient of words for the middle, for measuring, and for medicine."<sup>208</sup> Fletcher refers to Eric Partridge, who in his etymological dictionary points out that, *meditation* is the thought-measuring of an idea, a fact, or a thing while the Latin term *medicus* denotes a measurer of man's ills and injuries.<sup>209</sup> Fletcher explains that meditation derives from Old English *median*, which means to judge, and more importantly is etymologically traceable to the ancient Greek *medesthai*, which means attend to or estimate. Partridge points to an essential component of the meditative process, claiming that it is loosely "medical" in the sense of attending carefully, such as an "attending physician."<sup>210</sup>

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<sup>207</sup> Livingston, p. 87.

<sup>208</sup> Fletcher, p. 192.

<sup>209</sup> Eric Partridge, *Origins: A Short Etymological Dictionary of Modern English* (New York, 1958), p. 393.

<sup>210</sup> Cf. the etymological dictionary's definition which supports Partridges' claim regarding the term "meditation," (<http://www.etymonline.com/index.php?term=meditation>).

Considering the fact that poetry is mostly thought to be deliberately inattentive, this reference to attentiveness is somewhat unexpected. With Fletcher we might ask nonetheless, “attentive in what sense?” Apparently the poet sees something, in the sense of examining closely, and in describing he basically offers a diagnosis. The implication is that an order is operative here, a hidden order.

German Modernist poet Gottfried Benn cultivated his own version of attentiveness in his very precise way of observing, analyzing and describing what he saw from a medical point of view. By training Benn was a doctor who specialized in venereal diseases. During his time as assistant doctor (1912/13) at the Berlin-Charlottenburg Westend hospital, Benn authored almost three hundred autopsy protocols. These were recently found in an external archive belonging to Berlin’s Charité Hospital by historian Christoph Hoffmann, who calls it a manner-of-death-cycle, devised by no one (“Todesarten-Zyklus, den niemand sich ausgedacht hat”).<sup>211</sup> Since 1912 is also the publication year of Benn’s collection of poem’s *Morgue*, it makes sense to assume that his medical work influenced if not determined his creative work. Hoffmann describes the language Benn uses in the protocols as elliptical and flat (“formelhaft”), and economical, attributes which are clearly reflected in Benn’s poetry as well. Perhaps the most interesting aspect Hoffmann calls attention to is what we might refer to as the *immediate* nature of an autopsy protocol:

Kaum eine Wissenschaft hat für ihre schriftlichen Erhebungen so viel Aufmerksamkeit entwickelt wie die Pathologie. Der Grund dafür ist einfach:

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<sup>211</sup> Christoph Hoffmann, „Benns Todesarten-Projekt,“ *Frankfurter Allgemeine Zeitung*, 13 May 2006, no. 111, p. 42. After having been forgotten for decades, Benn’s autopsy protocols were reintroduced and on public display in Berlin a few days after the above article was printed (May 21, 2006).



Beobachtungen lassen sich hier nicht ohne weiteres wiederholen. Vom Gegenstand der Untersuchung verbleiben Laboregebnisse, vielleicht ein Gewebeschnitt oder ein Präparat, aber sonst überdauert der tote Körper im Protokoll.

(Rarely has a science received as much attention for its written manifestations as is the case with pathology. The reason is obvious: observations cannot be repeated at random. What remains of the object of analysis are lab results, possibly a tissue sample or dissection, but other than that, the body is sustained only in the protocol).<sup>212</sup>

The similarity to poetry is striking: with an autopsy protocol in hand, a reader is able to conjure up an image of the deceased at a later point in time, an image based upon immediate findings recorded at a very unique point in the past that cannot be recreated identically. While the information recorded in the autopsy protocol is the same, these findings can later be applied to different contexts, for example in court. The same can be said of reading a poem: the reader creates his own interpretation of the web of words before him, making what is before him his own. What the reader in both cases does, or rather, is forced to do, is not so much a recreation of the *original* image (which is impossible) but an image, a creation in its own right. Thus, the reader creates another original image that relates to the current context.

Let us return to the author, however. In his autopsy protocols Benn was in the habit of always looking *for* something when he looked at someone or something, he was always diagnosing:

In mir entsteht immer eine Empfindung von ganz eigentümlichem Gefühlston, wenn ich mir Jacobsen vorstelle, wie er mit einem Mikroskop an der Arbeit ist und eine Zelle studiert: wie das Leben, aufgegipfelt in eines seiner subtilsten Exemplare, in dem das Seelische, das Zerebrale sich aufgefasert hat in seine feinsten und äussersten Vibrationen, sich über ein anderes Leben beugt: dumpf, triebhaft, feucht, alles eng beieinander, und wie doch beide zusammengehören und durch beide die *eine* Welle läuft und wie beide leibsverwandt sind bis in die chemische Zusammensetzung ihrer Säfte.

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<sup>212</sup> Hoffmann, p. 42. My translation.

[Imagining Jacobsen studying a cell with the microscope evokes most peculiar sentiments in me; the way one life – culminated in one of its subtlest specimen, in which the spiritual, the cerebral is dissipated, vibrated, into their most delicate and utmost fibers – bends over another life; this one dull, libidinal, damp, all close together, and how nevertheless both belong together, and how *one* wave runs through both, and how both bodies are related all the way to their juices’ chemical composition.]<sup>213</sup>

Clearly, he is not only diagnosing illness and death but also ascertaining the chemical composition of life, discovering the similarities between the transcendent and the cerebral (“das Seelische” and “das Zerebrale”). The brain and the soul, Benn claims, are fundamentally connected, with one and the same wave (“Welle”) flowing through them.

While this conjecture may seem at first sight to be somewhat far fetched, recent research in fact supports Benn’s theory. As brain imaging technology became more powerful during the last decade of the twentieth century, scientists used it to seek solutions to the deeper mysteries of consciousness. At the turn of the century, world-renowned neuroscientists Antonio Damasio (1999) and Nobel Laureate Gerald Edelman (2000) published separate but related acclaimed theories of the neurobiology of consciousness.<sup>214</sup> At the same time, biologists were striving to complete the genome project, which makes use of parallels discovered between DNA sequences and human language, both of which follow a similar “grammar.”<sup>215</sup>

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<sup>213</sup> Benn, “Gespräch,” (1910) *Sämtliche Werke*, Stuttgarter Ausg. (StA) / in Verbindung mit Ilse Benn, ed. by Gerhard Schuster (Stuttgart: Klett-Cotta, 1986-2003), VII/I: 168. Benn is referring to Danish natural scientist and poet Jens Peter Jacobsen. My translation.

<sup>214</sup> Antonio R. Damasio, *The feeling of what happens: body and emotion in the making of consciousness*. (New York: Harcourt Brace, 1999); Gerald M. Edelman and Giulio Tononi. *A Universe of Consciousness: how Matter becomes Imagination* (New York, NY: Basic Books, 2000).

<sup>215</sup> The Human Genome Project is a coordinated international project, begun in 1988, to map the entire human genome so that the genes could be isolated and sequenced. The full draft sequence was completed in 2000 and published in February 2001. The process of identifying the boundaries between genes and other features in raw DNA sequence is called genome annotation and is the domain of bioinformatics. The best current technologies for annotation make use of statistical models that take advantage of parallels between

Brain imaging technology allowed researchers to probe into areas that had long eluded exploration, such as the search for the underlying biology of religious belief and mystical experiences. In their 2001 publication *Why God Won't Go Away*, researchers Andrew Newberg and Eugene D'Aquili focus on the basic question of why religion and spirituality continue to thrive in an era of unprecedented scientific and technological enlightenment.<sup>216</sup> Their answer is basically that religion and spirituality are a natural outcome of the way our brain is organized to respond to the dangers and opportunities it confronts. In other words, the authors claim that transcendent beliefs are deeply rooted in the manner in which specific brain systems respond to internal and external stimuli.

An example for this fundamental connection is an especially intriguing discovery that emerged out of brain imaging studies Newberg and D'Aquili conducted with meditating Tibetan Buddhists and praying Franciscan nuns. The research focused on regions of the parietal lobes (in the top rear section of our brain) that orient us in and allow us to navigate through physical space. The left hemisphere segment of this system processes our inner sense of self, and the right hemisphere segment processes our outer sense of the surrounding environment, both important components of our consciousness.

What Newberg and D'Aquili discovered is that both hemispheric segments are normally quite active, but that they – especially the left hemisphere, namely the self segment – exhibit a marked decrease in neuronal activity during peak transcendent

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DNA sequences and human language, using concepts from computer science such as formal grammars. Cf. James Toriello, *The Human Genome Project* (New York: Rosen Pub. Group, 2003), pp. 5-49.

<sup>216</sup> Newberg, A., E. D'Aquili, and V. Rause, *Why God Won't Go Away: Brain Science and the Biology of Religious Belief* (New York: Ballentine Books, 2001). Andrew Newberg holds a joint appointment in the Medical School and Department of Religion, and (the late) Eugene D'Aquili was in the Department of Psychiatry at the University of Pennsylvania.

periods. In effect, the self/non-self system loses its ability to locate the mental border between self and the surrounding world. In a way, then, the system perceives the biological reality of an endless self that is embedded in all creation, or – if we were to speak in grammatical terms – within its context.<sup>217</sup>

If religion and spirituality are inherent results of the way our brain is organized, this would imply that the same is true for art as well. As a matter of fact, Gottfried Benn comments on an organic nature of art: “Artistik,” which means the creation of art, is for Benn mainly the conscious usage of available linguistic means, a kind of “experimenting” with language. Indeed, Benn uses the metaphor of a laboratory when he writes:

Es ist ein *Laboratorium*, ein Laboratorium für Worte, in dem der Lyriker sich bewegt. Hier modelliert, fabriziert er Worte, öffnet sie, sprengt, zertrümmert sie, um sie mit Spannungen zu laden, deren Wesen dann durch einige Jahrzehnte geht. (...) Silben werden psychoanalysiert, Diphthonge umgeschult, Konsonanten transplantiert. Für ihn ist das Wort real und magisch, ein moderner Totem.

[It is a *laboratory*, a laboratory of words, in which the lyric poet moves. Here, he molds, fashions words; he bursts them open, shatters them, in order to charge them with voltages whose essence will go through several decades. [...] Syllables are psychoanalyzed, diphthongs are reskilled, consonants transplanted. To the poet, the word is real and magical, a modern totem.]<sup>218</sup>

Just like a scientist in a laboratory, the poet experiments with words, their sounds, and their meanings. The words he/she creates are “magical,” a claim that conjures up the image of God creating man. The poet is thus God-like himself/herself in that he/she creates a miniature cosmos with every poem. In “Probleme der Lyrik” (1951), Benn

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<sup>217</sup> Newberg et al., p. 213.

<sup>218</sup> Gottfried Benn, „Marginalien,“ *Gesammelte Werke*, I:389 ff. My translation.

remarks that a modern poem is a vehicle for all the life struggles because it concentrates more energy on the problems and burning issues of the day than a novel does:

Im Gedicht spielen sich all diese Seinskämpfe wie auf einem Schauplatz ab, hinter einem modernen Gedicht stehen die Probleme der Zeit, der Kunst, der inneren Grundlagen unserer Existenz weit gedrängter und radikaler als hinter einem Roman oder gar einem Bühnenstück. Ein Gedicht ist immer die Frage nach dem Ich.

[In a poem, all these struggles of life are played out as in a showplace; behind a modern poem are the problems of the time, of art, of the inner foundations of our existence, but in much more dense and radical manner than behind a novel or, even more, a drama. A poem is always the question of and the quest for the Self.]<sup>219</sup>

In regards to what Benn refers to as essence (“gedrängter und radikaler”), we might then think of a poem as a DNA-like vortex made of numerous nucleotides, a “blueprint” that promises to hold answers to the question of who we are. The poet is attempting to answer this question by attempting to position the self, in a continual effort. Poetry thus serves as a kind of compass in an endless (because evolving) endeavor to locate the self, in relationship to its environment, to both the author as well as the reader – who in interpreting it becomes author himself.

### 3.4.2. Text and Interpretation

The autopoietic property of a poem as its defining aspect is perhaps most apparent when one tries to translate a poem, as opposed to translating prose. Translation is the interpretation of the meaning of a text in one language and the following production, in another language, of an equivalent text that, ideally, communicates the same message.

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<sup>219</sup> Gottfried Benn, „Probleme der Lyrik,“ in *Gesammelte Werke*, I:501-502. My translation.

Since different languages reflect different cultural and social histories, because of the holism of meaning, and because of the different associations and tone of different words, translation may be an ideal which can only be approached but never fully achieved. However, the so-called thesis of the indeterminacy of radical translation goes beyond this by claiming that radically different translations can be equally correct, thereby denying determinacy of meaning to the original expression.<sup>220</sup> Hence, according to this theory there is “wobble room” for interpretation, not only between the source text and the translated text, but even, and already, between the interpretation of the source text and the text itself. Poetry, because it consists of essences, rather than finished thoughts, leaves more room for creative movement on the part of the reader (it actually *forces* it) than prose can (or strives to).

Gottfried Benn’s claim that “Lyrik ist national” (poetry is “national”) while images, statues, and symphonies are “international” is based on the premise that colors and sound exist in nature, words do not: („Farben und Klänge gibt es in der Natur, Worte nicht“).<sup>221</sup> What he means by this is that the word is rooted in consciousness in the sense that a person’s consciousness defines each and every word (“Das Bewusstsein wächst in die Worte hinein, das Bewusstsein definiert die Worte”).

However, a word’s rootedness (Verwurzelung) is in fact not only national but based on many other factors as well.<sup>222</sup> This is apparent when we encounter a rhetorical

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<sup>220</sup> Cf. “translation,” *The Oxford Dictionary of Philosophy*. Simon Blackburn (Oxford: Oxford University Press, 1996), Oxford Reference Online.

<sup>221</sup> Benn, “Probleme der Lyrik,” *Gesammelte Werke*, I:510.

<sup>222</sup> The German word „Verwurzelung“ is more fitting in this regard because it is more precise. The prefix “Ver-“ implies connections in *many* directions, a seemingly chaotic *web* of roots (Ver = thorough, through and through).

device such as metalepsis, which denotes a figure of speech in which one thing is referenced by something else which is only remotely associated with it. Often the association works through a different figure of speech, or through a chain of cause and effect. It can also refer to the combination of several figures of speech into an altogether new one. An example for metalepsis is the sentence “He has a lead foot.” The meaning, namely that “he drives fast” can be known only through an implied causal chain: Lead is heavy, a heavy foot would press down the accelerator which would then cause the car to speed up.

Angus Fletcher refers to metalepsis as a “mysterious” figure that “creates a magic effect in literature “because when a poet uses a word drawn from a previous poet, the second use is designed so that by evoking the first use, the repetition implies a magical anticipation.” It suggests a mysterious continuity, Fletcher claims, that is not linear and that “calls upon a primitive human understanding of synchronicity.”<sup>223</sup>

Hence, metalepsis works in a non-linear fashion and is based on the premise that parallel to genetic evolution, the human lineage added cultural evolution, and the two forms of evolution are linked, a phenomenon biologist Edward O. Wilson refers to as “gene-culture coevolution.”<sup>224</sup> Wilson justifies this claim by pointing out that just as natural selection is the determining factor in genetic evolution, “certain cultural norms also survive and reproduce better than competing norms, causing culture to evolve in a track parallel to and usually much faster than genetic evolution.”<sup>225</sup> Language, religion,

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<sup>223</sup> Fletcher, p. 202.

<sup>224</sup> Cf. Wilson, pp. 138-140.

<sup>225</sup> Wilson, p. 139.

myths, and art are all productive and therefore individually evolving components of the whole of that which we call “culture,” and represent the causal connection between semiotics and biology.

### 3.4.3. Poetic Creation as Natural Phenomenon

As previously argued, Gottfried Benn also sees a connection between language and science. With his characterization of the poem as an experiment, Benn opens up new possibilities of poetic form as well as provides new topoi for the 20th century. Here again, Benn emphasizes the autopoetic character of the artistic process – hence, the act of creation itself becomes the topic/object of the poem – the poem refers to itself. Art, then, experiences itself as content. Benn explains:

Artistik ist der Versuch der Kunst, innerhalb des allgemeinen Verfalls der Inhalte sich selber als Inhalt zu erleben und aus diesem Erlebnis einen neuen Stil zu bilden, es ist der Versuch, gegen den allgemeinen Nihilismus der Werte eine neue Transzendenz zu setzen: die Transzendenz schoepferischer Lust.

[Artistry is art’s attempt to experience itself as content, within the general abasement of contents, and to create a new diction from this experience. It is the effort to counter the general nihilism of values with a new transcendence: the transcendence of creative lust.]<sup>226</sup>

This new way of interpreting reality naturally beckons the question what this reality is. In fact for Benn, reality, as could be expected, is positively named “Ausdruckswelt” (world of expressions) as opposed to “Scheinwelt” (world of appearances).<sup>227</sup>

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<sup>226</sup> Benn, „Probleme der Lyrik“, *Gesammelte Werke*, I:500. My translation.

<sup>227</sup> This positive valuation of „Ausdruckswelt“ leads him towards Schopenhauer’s philosophy of art.



Poetry is thus a return of life over reflection: “Es ist wie ein Kreis, der sich schliesst: das Resultat millionenjähriger Entwicklungen, das Hirntier, das Zerebralgeschöpf, nun wird es wieder zurückgezogen zum Vegetativen, Pflanzlichen.” (it is like a circle that closes: the result of millions of years’ of development, the brain-animal – the cerebral being – now it is drawn back into the vegetative.”) And he adds, emphasizing the idea of returning home: “zurückgezogen, zu allem, das anheimgegeben ist an Tag und Nacht und Glut und Frost; nun sitzt es da, wie nie aufgestört aus der Seligkeit gehirnloser Urahnen, wie heimgekehrt (drawn back to everything that is exposed to and dependent on day and night, on blazing heat and severe frost; there it is now, as if it had never been disturbed from its ancestors’ brainless bliss, as if returned home).<sup>228</sup> Returning home (“heimkehren”) is equivalent to seeing something in its purest form.

Was heisst das denn eigentlich: Dichten, und um was handelt es sich, wenn man irgend etwas beschreiben will? Feiner, flüchtiger, und nie gesagter Dinge will man doch habhaft werden und sie so aufgewahren, dass sie den Schmelz nicht verlieren, den sie trugen, als sie zu uns kamen.

[What does it mean, really: to write poetry? What do you call it when you are trying to describe something? What you mean to capture are delicate, fleeting, and never before uttered things, that you must preserve in a way that they do not lose the nuances they carried when they came to us.]<sup>229</sup>

Writing at the same time as Benn, the American Modernist poet Wallace Stevens recognizes the need to excavate a new self, one that is stripped of what he refers to as “varnish and dirt.” He exemplifies this notion in the metaphor of restoring a painting: “If

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<sup>228</sup> Benn, “Dialog,” StA, VII/I:169. My translation.

<sup>229</sup> Benn, “Dialog,” StA, VII/I:166. My translation.

you take the varnish and dirt of generations off a picture, you see it in its first idea.”<sup>230</sup> In other words, the poem’s theory calls for the poem’s own destruction. In order to excavate the essence, i.e. the nucleus which contains the entire potential of meaning, said meaning – in the form of logical correspondence – must be destroyed before it can be constructed anew.

And we can be sure that it *will* be constructed anew, since our urge, our need indeed, to give form to what seems chaotic defines our life. This search for form, or rather, the need to introduce order to anything we are confronted with becomes astonishingly apparent in Noam Chomsky’s example of a meaningless sentence which nevertheless turned out to all the more meaningful: “Colorless green ideas sleep furiously.”<sup>231</sup> Livingston points out:

It [the sentence] seems to suggest that some ideas that are lively but relatively new and untried (green) and apparently invisible or easy to ignore or emotionally neutral (colorless) nonetheless must struggle desperately or violently (furiously) to remain unconscious (sleep). Of course, what Chomsky seemed to *mean* was that the sentence is meaningless, and this is precisely the anxious disavowal that seems to underlie the blithe confidence of rationalist science; to disavow contradiction and metaphor is to “sleep furiously.”<sup>232</sup>

Obviously, then, a word put in a specific context can mean more than originally implied, and even a single word by itself will provoke an array of associations depending on the background and present state of the observing individual. Gottfried Benn exemplifies this concept in the English word “nevermore“:

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<sup>230</sup> Holly Stevens, ed., *The Letters of Wallace Stevens* (Berkeley: University of California Press, 1966), pp. 426-427.

<sup>231</sup> Noam Chomsky, *Syntactic Structures* (The Hague/Paris: Mouton, 1957), p. 15.

<sup>232</sup> Livingston, p. 41.

„nevermore“ mit seinen zwei kurzen verschlossenen Anfangssilben und dann dem dunklen strömenden „more“, in dem für uns „das Moor“ aufklingt und „la mort“, ist nicht „nimmermehr“ – „nevermore“ ist schöner. Worte schlagen mehr an als die Nachricht und den Inhalt, sie sind einerseits Geist, aber haben andererseits das Wesenhafte und Zweideutige der Dinge der Natur.

[‘nevermore’ with its two short, closed beginning syllables, followed by the dark, surging “more,” which for us “the moor” resound, and “la mort.” It is not [merely] “nimmermehr” – “nevermore” is more beautiful. Words strike up more than message and content; they are spirit on the one hand, but, on the other hand, they possess the essential and ambiguous quality of things found in the natural world.]<sup>233</sup>

What is quite stunning in this quotation is the realization that while the term „nevermore” clearly has different connotations for different readers, the number of potential meanings is in this case increased by the fact that Gottfried Benn is not a native speaker of the English language. In fact, he could have derived “his” meaning of the word even without knowing the German equivalent of “nevermore,” indeed without even being familiar with the word’s English pronunciation. This suggests that we can create meaning even when we are not aware of the original intention of an author/ a word/ a poem. If we add to the phonetics the context, the word’s possible connotations are expanded even more.

In the case of a poem, the number of contexts expands exponentially as well. As has been established, a word accrues meaning through the context it is presented in and at some point – through gene-culture co-evolution – it is seemingly “locked” into a certain meaning, which implies that it is static, or, to put it drastically, “dead.” In a poem, much more so than in prose, the structure of a word’s syntactical and semantic (i.e. traditional) context is dissolved. The technique of montage disengages existing connections; grammatical, syntactic as well as semantic associations within words are set free, called into question or perhaps even dissolved altogether. In that it produces fragments, montage

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<sup>233</sup> Benn, “Probleme der Lyrik,” in *Gesammelte Werke*, I:511. My translation.

interrupts a text's linearity: words are liberated from their traditional frame of reference/usage. Hence, a montage-poem is not a traditional descriptive or narrative kind of poem but, rather, it reflects generally on itself by turning attention back to itself. There is constant movement, though not of the linear kind and it is precisely this movement that induces, forces in fact, the creative impetus; it creates entirely new connections between words and their associations.

It is for this reason that in most cases, a montage-poem's "structure" relies entirely on the moving, wave-like energy created by rhetorical, rhythmical, and phonetic strategies (such as anaphors, assonances, and alliterations) rather than on traditional poetic order, namely rhyme and meter. In other words, this surge of energy which Benn calls "Form" replaces traditional grammatical, syntactical, and logical order, or, as Edgar Lohner puts it: "Die grammatische Beziehungslosigkeit wird zum artistisch Beziehungsvollen," (the lack of syntactical connections results in semantic associations).<sup>234</sup>

Benn likens this need for form which is most prominent in a poem (as opposed to prose) to a natural concept. The impetus to structure and grow is a natural one, and is intrinsic to poetry. For this reason Benn asserts that all creation is a striving for form. Within this system, man is the „cry for expression," and the only steps towards structuring our world and lives that we know of are the social structure of a state and art, („Schöpfung ist das Verlangen nach Form, der Mensch ist der Schrei nach Ausdruck, der

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<sup>234</sup> Edgar Lohner, *Passion und Intellekt. Die Lyrik Gottfried Benns* (Neuwied: Luchterhand, 1961), p. 150. My translation.

Staat ist der erste Schritt dahin, die Kunst der zweite, weitere Schritte kennen wir nicht”).<sup>235</sup>

In the search for and continuous re-creation of form, the art of poetic creation, then, proves to be a natural phenomenon. If we were to take Benn’s statement a step further and interpret his admittedly ambiguous choice of the word “Schöpfung” as “genesis” we could claim that the traditional belief of creation as a divine act can now be construed as a natural one. As part of the organic process of life, the author essentially creates another organism, an autopoietic system, in the form of a poem.

The continuous oscillation between imagination and reality, between abstraction and specificity and between indeterminacy and completion, constitutes the process of defining the nature of the relationship between self and world. Much like a compass, poetry can aid both the poet as well as the reader (who essentially becomes poet himself) in this quest for order, for meaning, and thus ultimately for self-definition, in that it can point to sporadic centers in an ongoing oscillation between poles.

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<sup>235</sup> Benn, *Rede auf Stefan George* (1934), StA, IV:108.

## CHAPTER IV

### CONSTITUTING THE SELF: EMERSON AND NIETZSCHE

»Seht euch vor«, sagt Emerson, »wenn der große Gott einen Denker auf unsern Planeten kommen läßt. Alles ist dann in Gefahr. Es ist, wie wenn in einer großen Stadt eine Feuersbrunst ausgebrochen ist, wo keiner weiß, was eigentlich noch sicher ist und wo es enden wird. Da ist nichts in der Wissenschaft, was nicht morgen eine Umdrehung erfahren haben möchte [...]; alle Dinge, die dem Menschen zu dieser Stunde teuer und wert sind, sind dies nur auf Rechnung der Ideen, die an ihrem geistigen Horizonte aufgestiegen sind und welche die gegenwärtige Ordnung der Dinge ebenso verursachen, wie ein Baum seine Äpfel trägt. Ein neuer Grad der Kultur würde augenblicklich das ganze System menschlicher Bestrebungen einer Umwälzung unterwerfen.«  
– Friedrich Nietzsche, *Unzeitgemässe Betrachtungen*.<sup>236</sup>

In previous chapters I have argued that in any system, be it a biological cell, an ant colony, human society, or the entire universe, it is not merely the different parts that make up the whole of the system, but the interactions between those parts. As Saussure demonstrated in the model of language, nothing can be defined in a vacuum because it is only by comparison that we can determine what we are looking at. In other words, to be able to analyze, to define a phenomenon, we need to view within its context or environment.

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<sup>236</sup> Friedrich Nietzsche, *Sämtliche Werke: Kritische Studienausgabe*, ed. by Giorgio Colli and Mazzino Montinari, 15 vols., (Munich: Deutscher Taschenbuch Verlag, 1999), I: 426. The original quotation by Emerson can be found in „Circles“: “Beware when the great God lets loose a thinker on this planet. Then all things are at risk. It is as when a conflagration has broken out in a great city, and no man knows what is safe, or where it will end. There is not a piece of science, but its flank may be turned to-morrow; there is not any literary reputation, not the so-called eternal names of fame that may not be revised and condemned [...] The things which are dear to men at this hour are so on account of the ideas which have emerged on their mental horizon, and which cause the present order of things as a tree bears its apples. A new degree of culture would instantly revolutionize the entire system of human pursuits,” (Ralph Waldo Emerson, Alfred Riggs Ferguson, and Jean Ferguson Carr, *The Collected Works of Ralph Waldo Emerson*, 3 vols., (CW), [Cambridge, Mass: Belknap Press of Harvard University Press, 1979], pp. 179-190. Here p. 183.

However, we have also seen that this context is constantly shifting; it is by no means stable ground. Hence, whatever has been determined in relation to its context must in fact be re-determined indeterminately. The need for re-contextualization can be considered a universal truth, since it is true on all scales in the biological as well as the social realm. Context is a construction, then, not a given. N. Katherine Hayles calls this phenomenon “denaturing,” as was explained in the previous chapter of this dissertation. Hayles defines postmodernism as the realization that what has always been thought of as the essential, unvarying components of human experience are not natural facts of life but social constructions.<sup>237</sup> From this it follows that to define the self, one cannot depend on context of whatever ilk. However, nothing can be defined without taking context into account; instead of relying on a traditional reference point, one must create one’s own context.

If complexity theory is applicable to the human being’s neural system and to life itself, then it stands to reason that it is also applicable to human products such as literature and art, the purpose of which is to create, to breathe life into material artifacts. Both Ralph Waldo Emerson and Friedrich Nietzsche provide us with examples of this connection between the physical and the psychic spheres. Each asks how the findings of science shed new light on the human experience and the force behind creativity, whether in nature or art.

In offering an overview of the tenor of the time, this chapter provides the grounds upon which Nietzsche’s “Wille zur Macht,” and other terms are to be redefined in the

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<sup>237</sup> N. Katherine Hayles, *Chaos Bound* (Ithaca, NY: Cornell University press, 1990), p. 265. Consider also that if context can be constructed, then it can also be controlled. For the implications of context control, see *Chaos Bound*, p. 274ff.

context of complexity theory. Considering Nietzsche's intense interest in Emerson's writings and what can legitimately be called his appropriation of many Emersonian ideas, several of Ralph Waldo Emerson's writings on nature, on the poet, on art, as well the question of how these topics relate to each other, will constitute an important backdrop for this new interpretation of creativity. This is especially enlightening considering the fact that while Nietzsche read Emerson in German translation, Emerson had – in turn – been influenced by German thinkers and authors himself, namely Kant and Goethe, by way of Coleridge's and Carlyle's translations.<sup>238</sup>

Before looking at man's creations, however, we must look at man himself. Consider again the changing context, and the premise that follows, namely that the meaning of life, of being human, must also be continually redefined. In an age in which human existence has been robbed of context, of stable ground, man must create his/her own ground to stand on. Both Emerson and Nietzsche deal with precisely this issue, in that they both believe in and insist on the power of self-reliance and of realizing one's true potential. In other words, it is not a state of "being" that is the goal but rather, a process of becoming through continual self-creation.

#### 4.1. Drawing a New Circle: Ralph Waldo Emerson

He [man] is the compend of time; he is also the correlative of nature. His power consists in the multitude of his affinities, in the fact that his life is intertwined with the whole chain of organic and inorganic being.

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<sup>238</sup> Cf. Stanley Hubbard, "Nietzsche und Emerson," *Philosophische Forschungen*, ed. by Karl Jaspers (Basel: Verlag für Recht und Gesellschaft AG., 1958), p. 2.



Ralph Waldo Emerson was among the writers to influence Friedrich Nietzsche, preceding him by a generation, acknowledges the fluctuations that constitute life, as well as its organic form. Considered by many critics the most significant American writer and the wellspring of American modernism, Emerson forged an American Romanticism, namely transcendentalism that emphasized creativity as a channel for divine inspiration and stressed the visionary, prophetic voice and the organically evolving form. During his lifetime, he influenced major writers such as Henry David Thoreau, Margaret Fuller, Walt Whitman, and Emily Dickinson. Theodore Dreiser, Robert Frost, and Wallace Stevens are among the American writers who have testified to Emerson's influence on their art.

Throughout his work, Emerson argues that the source of “power” is the divinity in man. With the publication of *Nature* in 1836, he first announced his credo of idealism and self-reliance. However, what Emerson calls “self-reliance” is actually premised on the transformation of the self into a conduit to the “Over-Soul,” or inner god. In general, Emerson stands for resistance against system building and for a radical openness to the promptings of one’s own native intelligence. Therefore, his project is deeply antipathetic to the tenor of much of contemporary theory because his writing argues for a human center, as later does Nietzsche’s. In *Nature* Emerson breaks with tradition, complaining that “tradition characterizes the preaching of this country, that it comes out of the

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<sup>239</sup> Ralph Waldo Emerson, Alfred Riggs Ferguson, and Jean Ferguson Carr, *The Collected Works of Ralph Waldo Emerson*, 3 vols., (CW), (Cambridge, Mass: Belknap Press of Harvard University Press, 1979), II: 20.

memory, and not out of the soul.”<sup>240</sup> This antithesis between “memory” and “soul” would later constitute the root of Nietzsche’s rejection of the traditional moral values postulated by the Christian church.

Both Emerson and Nietzsche reacted to the scientific theories of their days.<sup>241</sup> Concurrently with the industrial revolution and evolving capitalism there developed an intellectual and artistic hostility towards this industrialization of life which was embodied in the Romantic Movement. Its major exponents, such as Blake, Coleridge, Wordsworth and Keats, had stressed the importance of nature in art and language, in contrast to a world of machines and factories. Emerson’s vision followed this Romantic tradition which claimed that while science hands to humanity the tools of thought, these tools eventually alienate humanity from nature. Thus, modern science launches social progress but prompts a crisis since materialism denigrates the human spirit.

Emerson, however does embrace science as the most promising of the new alternatives to theology because – as he had said in his first lecture – “the greatest office of natural science (and one which as yet is only begun to be discharged)” was “to explain man himself, because knowledge of all the facts of nature will give man his true place in the system of being.”<sup>242</sup> Emerson argues against a purely empirical “use” of nature, claiming that it would be a misunderstanding of research into nature to forget that there

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<sup>240</sup> On October 28, 1832, Emerson’s deep antipathy to the “tyranny of the past” lead him to resign from the pastorate of Second Church in Boston and from the Unitarian ministry altogether. See introduction to the 1985 edition of *Nature* by Jaroslav Pelikan (Boston, MA: Beacon Press, 1985), p. 44.

<sup>241</sup> Emerson was actually a contemporary of Darwin; they died just eight days apart. However, Emerson’s *Nature* appeared almost a quarter century before *The Origin of Species* of 1859, and any reciprocal influence is uncertain, (Pelikan, p. 6).

<sup>242</sup> Ralph Waldo Emerson, *The Early Lectures of Ralph Waldo Emerson, 1833-1842* (EL), ed. by Stephen E. Whicher, Robert E. Spiller and Wallace E. Williams (3 vols). (Cambridge, Mass: The Belknap Press of Harvard University Press, 1959-71), I: 23.

was not only “a relation of use” but also “a relation of beauty” between man and nature and that it was this latter connection as well that lead him to science.<sup>243</sup> He is thus aiming to establish a connection between the sciences and the humanities and takes a stand against one-sided interpretations of both the natural as well as the spiritual life of man:

In that deep force, the last fact behind which analysis cannot go, all things find their common origin. For, the sense of being which in calm hours rises, we know not how, in the soul, is not diverse from things, from space, from light, from time, from man, but one with them, and proceeds obviously from the same source whence their life and being also proceed.<sup>244</sup>

From these comments it can be inferred that a reciprocal relationship exists between the design and beauty of nature and the eye of the beholder: “It is certain that the power to produce this delight, does not reside in nature, but in man, or in a harmony of both.” This notion of harmony, or, as he sometimes calls it, “proportion,” is both: a predicate of external nature, seen as beauty, as well as a predicate of human nature. It is the interaction of the two.<sup>245</sup>

Like Goethe, who claimed that all that can be found “outside” is also inside, Emerson seized on the Greek idea that the natural world, rightly studied, unlocks the soul, and that the soul, once opened, yields truths about the moral structure of the universe.<sup>246</sup> “The ancient Greeks,” Emerson said, “called the world *κοσμος* [order], beauty.”<sup>247</sup> In his dialogue *Gorgias*, Plato’s Socrates argues that the soul, like the world,

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<sup>243</sup> Emerson, EL, I: 48.

<sup>244</sup> Emerson, “Self Reliance,” CW, II: 27-51. Here p. 37.

<sup>245</sup> Emerson, EL, I: 48.

<sup>246</sup> Cf. Tantilillo, pp. 91-92.

<sup>247</sup> Emerson, *Nature*, CW, I: 8-45. Here p. 12.

possesses its own *cosmos*, its own pattern of beauty and order.<sup>248</sup> However, according to Emerson, we often become conscious of this interior order only when we are confronted with something in our everyday life that startles us into self-perception. Emerson believed that what is “outside” teaches us to understand and also how to make use of what is “inside.” Therefore, if a man thought hard enough about the natural architecture that awed and inspired him he would find that it impressed him precisely because it disclosed to him a corresponding architecture within himself.

Man must trust his instincts, rather than others’: “A man should learn to detect and watch that gleam of light which flashes across his mind from within, more than the lustre of the firmament of bards and sages.”<sup>249</sup> Emerson insists that if one has the courage to trust oneself, one will come to credit the truth of one’s intuitions, and in doing so will catch a glimpse of something more, namely a connection. We would find that there is an idea of order at work both in the universe and our own soul. The wise man, according to Emerson, discovers, in his efforts to become better acquainted with himself, that he is not an accident of biology, a chance concatenation of atoms; but that he instead has a purpose and a destiny:

There is a time in every man's education when he arrives at the conviction that envy is ignorance; that imitation is suicide; that he must take himself for better, for worse, as his portion; that though the wide universe is full of good, no kernel of nourishing corn can come to him but through his toil bestowed on that plot of ground which is given to him to till. The power which resides in him is new in nature, and none but he knows what that is which he can do, nor does he know until he has tried.<sup>250</sup>

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<sup>248</sup> The Greek term “cosmos” [κόσμος] is in fact translated as *order, arrangement, ornaments*. A “cosmos” therefore, is an orderly or harmonious system. See *The Concise Oxford Dictionary of English Etymology*, ed. by T. F. Hoad (Oxford: Oxford University Press, 1996), Oxford Reference Online.

<sup>249</sup> Emerson, “Self-Reliance,” CW, II: 27.

<sup>250</sup> Emerson, “Self-Reliance,” CW, II: 27.

Every individual's purpose, then, is to strive to use their potential. This purpose then provides the strength to endure doubt and criticism (originating both internal and external), as it takes not only effort but also courage to counter a society that supports contradictory values. Nietzsche's *Genealogie der Moral* clearly echoes Emerson's reproach against a society that according to him is "in conspiracy against the manhood of every one of its members." It becomes obvious in the following quotation that Emerson defines "manhood" in a very elementary, as well as elemental way:

Society is a joint-stock company, in which the members agree, for the better securing of his bread to each shareholder, to surrender the liberty and culture of the eater. The virtue in most request is conformity. Self-reliance is its aversion. It loves not realities and creators, but names and customs.<sup>251</sup>

In other words, nothing is at last sacred but the integrity of one's own mind. The "sacredness of tradition," must be identified for what it is, namely a historical evolution of customs, rather than a sacred entity. That these ideas helped inspire Nietzsche's perspectivism is quite obvious and becomes even more so in the following passage where Emerson very explicitly states that what we consider "good" or "bad" are relative terms:

On my saying, What have I to do with the sacredness of traditions, if I live wholly from within? my friend suggested,— "But these impulses may be from below, not from above." I replied, "They do not seem to me to be such; but if I am the Devil's child, I will live then from the Devil." No law can be sacred to me but that of my nature. Good and bad are but names very readily transferable to that or this; the only right is what is after my constitution, the only wrong what is against it.<sup>252</sup>

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<sup>251</sup> Emerson, "Self-Reliance," CW, II: 29.

<sup>252</sup> Emerson, "Self-Reliance," CW, II: 30.

The attributes “good” and “bad” are transferable because one is necessarily part of the other: “every sweet hath its sour; every evil its good.”<sup>253</sup> This same dualism underlies the nature and condition of man. Emerson’s reasoning for what might be called „perspectivism“ is based on his view of nature, where every one thing is based on its opposite: “*polarity*, [original emphasis] or action and reaction, we meet in every part of nature; in darkness and light; in heat and cold; in the ebb and flow of waters; in male and female [...] An inevitable dualism bisects nature, so that each thing is a half, and suggests another thing to make it whole.”<sup>254</sup> However, Emerson is quick to add that what we might perceive as dualism is, in fact, a multitude of facets, each of which is contained in every other:

Whilst the world is thus dual, so is every one of its parts. The entire system of things gets represented in every particle. There is somewhat that resembles the ebb and flow of the sea, day and night, man and woman, in a single needle of the pine, in a kernel of corn, in each individual of every animal tribe.<sup>255</sup>

Nature, then, is opposed to conformity and not only favors but also perpetuates diversity. Again, Emerson transfers his insights on nature to the human, social realm when he postulates: “I hope in these days we have heard the last of conformity and consistency.”

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In speaking out against conformity and consistency in this way, Emerson propagates creating one’s own context, even if this means affronting and reprimanding “the smooth

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<sup>253</sup> Emerson, “Compensation,” CW, II: 58.

<sup>254</sup> Emerson, “Compensation,” CW, II: 57.

<sup>255</sup> Emerson, “Compensation,” CW, II: 57. The notion of every component of a system representing the whole of the system, and vice versa, is the principle behind the Mandelbrot set. Cf. Benoit B. Mandelbrot *Fractals and Chaos: The Mandelbrot Set and Beyond: Selecta Volume C*. (New York: Springer, 2004).

<sup>256</sup> Emerson, “Self-Reliance,” CW, II: 35.

mediocrity and squalid contentment of the times, and hurl in the face of custom, and trade, and office, the fact which is the upshot of all history, that there is a great responsible Thinker and Actor working wherever a man works.”<sup>257</sup>

Man must make the world his own, and in order to do so he must become aware his own potential before he can realize it. Civilization has lifted man in a sense; however, in the process, he has lost his grounding, that is, the basis to stand on: “The civilized man has built a coach, but has lost the use of his feet.”<sup>258</sup> Man needs to be grounded in the present. In order to do so, however, he must overcome what is holding him back. Emerson claims that man “postpones or remembers,” he is living in either the future, or the past. Instead of living in the present, he “with reverted eye laments the past, or, heedless of the riches that surround him, stands on tiptoe to foresee the future. He cannot be happy and strong until he too lives with nature in the present, above time.”<sup>259</sup>

Rather than being defined by his time, that is, generally speaking, the context, man is to tell time himself. The image that comes to mind here is that of a gnomon, that part of the sundial that tells time. Much like a gnomon then, man should be a kind of societal observer and commentator who (in interaction with the sun, that is, nature) determines “what time it is” culturally speaking.<sup>260</sup>

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<sup>257</sup> Emerson, “Self-Reliance,” CW, II: 35.

<sup>258</sup> Emerson, “Self-Reliance,” CW, II: 48. Cf. Nietzsche’s, Benn’s, and Wallace Stevens’ insistence on man’s connection to the earth on which I elaborate in the following chapters.

<sup>259</sup> Emerson, “Self-Reliance,” CW, II: 39.

<sup>260</sup> Obviously, the notion of the gnomon in turn brings to mind Nietzsche’s Zarathustra-figure, who is societal observer and prophet in one. Cf. McCarthy’s interpretation of the gnome Oskar Matzerath (in G. Grass’ novel “The Tin Drum”), who marks time in an eternal present, (*Remapping Reality*, pp. 280-282 and 316-318).

In the vision that concludes *Nature*, the commanding eye learns to see not by observation but by its own creative light. Emerson in fact personifies the stoic, which Nietzsche later will embody in the figure of Zarathustra. Both are to “open the resources of man,” and to tell their contemporaries that “they are not leaning willows, but can and must detach themselves.”<sup>261</sup> Much like a prophet himself, Emerson foresees (because he knows for himself) that with the exercise of self-trust, new powers will appear:

The objection to conforming to usages that have become dead to you is, that it scatters your force. It loses your time and blurs the impression of your character. If you maintain a dead church, contribute to a dead Bible-society, vote with a great party either for the government or against it, spread your table like base housekeepers, – under all these screens I have difficulty to detect the precise man you are. And, of course, so much force is withdrawn from your proper life.<sup>262</sup>

Interestingly, Emerson concludes his argument as follows: “that a man is the word made flesh, born to shed healing to the nations, that he should be ashamed of our compassion.”<sup>263</sup> Nietzsche will later take up this outrage over misplaced compassion (“Mitleid”), mainly in the “Genealogie der Moral.” For Nietzsche, the notion of compassion, cultivated by Christianity, has tainted and effectively weakened mankind in that it runs counter to its natural impetus, namely the will to power.

#### 4.1.1. Poetry as Miniature Cosmos

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<sup>261</sup> Emerson, „Self-Reliance,“ CW, II: 43. Cf. Nietzsche’s *Zarathustra*, who vehemently refuses being used as a crutch by his followers since they are supposed to learn to “walk” on their own: “Ich bin ein Geländer am Strome: fasse mich, wer mich fassen kann! Eure Krücke aber bin ich nicht,“ (Nietzsche, KSA, IV: 47).

<sup>262</sup> Emerson, “Self-Reliance,” CW, II: 32. Nietzsche will, of course, take what Emerson refers to as the death of “church,” and personify the church in the figure of God Himself when he proclaims that “God is dead.”

<sup>263</sup> Emerson, “Self-Reliance,” CW, I: 43-44.



In his essay “Circles,” Emerson proposes to conceive of the natural world as “a system of concentric circles, and we now and then detect in nature slight dislocations, which apprise us that this surface on which we now stand is not fixed, but sliding.”<sup>264</sup> He admits that “every thing looks permanent” but is quick to add “until its secret is known.” The secret can be summed up in his assertion that there are no absolutely no fixtures in nature. Rather, the universe is fluid and therefore volatile.<sup>265</sup> In other words, Emerson is claims that everything has the same center but evolves outward from it, in a circular motion – clearly reminiscent of the discussion of the perfect symbol for growth, the spiral.

Any perceived permanence then, must necessarily be an illusion, and a fatal one at that: “Nothing is secure but life, transition, the energizing spirit. People wish to be settled; only as far as they are unsettled is there any hope for them.”<sup>266</sup> Instability and non-conformity (originality) are vital in nature as well for the growth of a human being, as Emerson relates in “Circles,” since “the soul's advances are not made by gradation, such as can be represented by motion in a straight line; but rather by ascension of state, such as can be represented by metamorphosis, – from the egg to the worm, from the worm to the fly.”<sup>267</sup>

There is a vital force that perpetuates this metamorphosis, both in nature as well as in the human being which is a part of nature and, in itself, also contains the whole of

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<sup>264</sup> Emerson, “Circles,” CW, II: 186.

<sup>265</sup> Emerson, “Circles,” CW, II: 179.

<sup>266</sup> Emerson, “Circles,” CW, II: 189.

<sup>267</sup> Emerson, “The Over-Soul,” CW, II: 163.

nature. This vital force, or “Kraft” (“power”) as Nietzsche calls it, is for Emerson the divine impulse, the soul: “With each divine impulse the mind rends the thin rinds of the visible and finite, and comes out into eternity, and inspires and expires its air. It *converses* with truths that have always been spoken in the world” [my emphasis].<sup>268</sup>

Yet words by themselves can do only so much to open up the mind: music, for Emerson, is as essential to poetry as language. He followed the Greeks in arguing that a poem, like the soul itself, resembles a living organism, a pattern of reason ordered by rhyme and rhythm. Like the Greeks, Emerson insisted that the music of poetry is itself a profound educational force. It “is not metres, but metre-making argument”— word and music together – “that makes a poem,” Emerson said: “a thought so passionate and alive, that, like the spirit of a plant or an animal, it has an architecture of its own, and adorns nature with a new thing.”<sup>269</sup> Thus, the virtue of the classic poets lies in their patterns of words and rhythms which form a miniature cosmos, “an abstract or epitome of the world.”<sup>270</sup> Because its structure resembles that of both the universe and the soul, poetry, as a work of art, “throws light upon the mystery of humanity.”<sup>271</sup>

When it comes to trying to find out the deeper order of the self which connects us to the universe, nothing, Emerson claims, beats poetry. This is because the poet is able to communicate his intimations of order with living words – words that “would bleed if you

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<sup>268</sup> Emerson, “The Over-Soul,” CW, II: 163.

<sup>269</sup> Emerson, “The Poet,” *Essays*, Second Series (1844).

<sup>270</sup> Emerson, *Nature*, CW, I: 16.

<sup>271</sup> Emerson, *Nature*, CW, I: 16.

cut them.”<sup>272</sup> Poetry, he argues, “unlocks our chains,” and the “poets are thus liberating gods.”<sup>273</sup> A master poet like Shakespeare is a supreme “translator of things in your [own] consciousness.”<sup>274</sup> The need to unlock our chains is a natural one:

The one thing which we seek with insatiable desire is to forget ourselves, to be surprised out of our propriety, to lose our sempiternal memory, and to do something without knowing how or why; in short, to draw a new circle. Nothing great was ever achieved without enthusiasm.<sup>275</sup>

However, this enthusiasm is not easy to attain or retain since one is abandoning the safeness of the shore in order to dive into some rather murky waters. The outcome of this journey is indeterminate: “Do not require a description of the countries towards which you sail.”<sup>276</sup> Again, however, Emerson affirms that this is in fact what life is all about: the “way of life is wonderful: it is by abandonment.”<sup>277</sup>

Poetry thus unlocks our chains because it forces us to “think outside the box,” it forces us to purge ourselves from our past and thereby opens our mind, enabling it to make new connections, not in a vertical but in a lateral movement.

#### 4.2. Between Science and Literature: Friedrich Nietzsche

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<sup>272</sup> Emerson, “Montaigne; or, the Sceptic,” in *Representative Men* (1850): “Cut these *words*, and they would *bleed*; they are vascular and alive” [original emphasis]. Cf. further Zarathustra’s postulate “Schreibe mit Blut!,” („Write with/in blood“), Nietzsche, KSA, IV: 48.

<sup>273</sup> Emerson, “The Poet,” *Essays: Second Series*, CW, III: 17.

<sup>274</sup> Emerson, “Intellect,” CW, II: 201.

<sup>275</sup> Emerson, “Circles,” CW II: 190. Nietzsche will echo this with his own, though very similar credo of life-affirmation when he encourages laughter and dance (see section 4.2.)

<sup>276</sup> Emerson, “The Over-Soul,” CW, II: 168.

<sup>277</sup> Emerson, “Circles,” CW, II: 190.

Emerson's trans-Atlantic impact on the German thinker Friedrich Nietzsche has long been acknowledged though not thoroughly explored. European scholarship in the first half of the twentieth century established to some extent the depth of Emerson's influence throughout Nietzsche's career.<sup>278</sup> Stanley Hubbard's 1958 publication was the first to take note of the affinities between the two. Nietzsche not only mentioned but praised Emerson in his journals and letters; his earliest philosophical essays, "Fatum und Geschichte" and "Willensfreiheit und Fatum," were, as their titles suggest, syntheses of Emersonian topics and ideas. Nietzsche calls Emerson the "master of prose" ("Meister der Prosa")<sup>279</sup> in *Die Fröhliche Wissenschaft* and, as Stanley Hubbard points out, also refers to him as "the gay one" ("der Heitere"), who simply does not know how old he already is and how young he will once be ("wie alt er schon ist und wie jung er noch sein wird").<sup>280</sup>

The first in-depth study of the kinship between the American essayist and the German philosopher was tackled by George Stack in 1992.<sup>281</sup> Stack traces the sources of ideas and theories that have long been considered the exclusive province of Nietzsche to the often surprisingly radical writings of the American, thus presenting a new perspective on Nietzsche's philosophy. Stack depicts how the rich theoretical ideas and literary

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<sup>278</sup> For a general overview, see Stanley Hubbard, „Nietzsche und Emerson,“ *Philosophische Forschungen Neue Folge*, vol. 8, ed. by Karl Jaspers (Basel: Verlag f. Recht und Gesellschaft AG., 1958); Irena S. M. Makarushka, *Religious imagination and language in Emerson and Nietzsche* (Hampshire: Macmillan Press and New York: St. Martin's Press, 1994); and David Wittenberg's *Philosophy, Revision, Critique: Rereading Practices in Heidegger, Nietzsche, and Emerson* (Stanford, Calif.: Stanford University Press, 2001).

<sup>279</sup> Friedrich Nietzsche, „Die fröhliche Wissenschaft,“ KSA III: 448.

<sup>280</sup> Nietzsche, „Götzendämmerung,“ KSA, VI: 120; cf. Hubbard p. 6.

<sup>281</sup> George J. Stack, *Nietzsche and Emerson. An Elective Affinity* (Athens: Ohio University Press, 1992).

images of Emerson entered directly into the existential element of Nietzsche's thought and hence into the stream of what had been considered a distinctively European intellectual movement.

David Mikics' recent publication *The Romance of Individualism in Emerson and Nietzsche* (2003) constitutes the most up to date and perhaps most thorough investigation of important affinities between Emerson and Nietzsche.<sup>282</sup> In his wide-ranging work the author first specifies and then investigates a number of important connections between Emerson and Nietzsche and outlines a dynamic relation in which Nietzsche struggles with Emerson's influence and example in order to develop his own path. The central connection Mikics explores is their shared pursuit of individuality; a condition he argues they associate with freedom and originality as well as with a kind of integrity in one's actions and beliefs, all the while remaining open to change and transformation. Accordingly, he claims that for both Emerson and Nietzsche humans do not yet exist as "fully created."<sup>283</sup>

#### 4.2.1. Nietzsche and Biologism

During the later half of the nineteenth century there was a general interest in relating scientific methods to literary creation and criticism. Hippolyte Taine's *Philosophie de l'art* (1865), a work which Nietzsche owned, constituted one of the first

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<sup>282</sup> David Mikics, *The Romance of Individualism in Emerson and Nietzsche*, Series in Continental Thought, 31, (Athens, Ohio: Ohio University Press, 2003).

<sup>283</sup> Mikics, p. 1.

post-Darwinian attempts to account for the artistic impulse and to describe and categorize art in terms of the influence of heredity and the environment on the human organism.<sup>284</sup> Similarly, Émile Zola roughly developed the analogy between literary creation and experimental method in the writing of his *Roman Experimental*, published in 1880.

Appropriating many of the scientific discoveries of his age, Friedrich Nietzsche aimed at establishing a link between the biological and the social realms, the former supporting his ideas regarding the latter. It is for this reason that John McCarthy refers to Nietzsche's "medial position – between the external and the internal, between science and literature, between myth and reality."<sup>285</sup> Nietzsche made his own the concept of the organism as a struggle of parts, and this forms part of what he calls the "physiology of power" – it constitutes his attempt to describe organic processes in terms of the activity of a "will to power" operating in nature.<sup>286</sup>

Gregory Moore, in a very thorough analysis of what he calls "Nietzsche's biologism" suggests that Nietzsche probably first became aware of the debates surrounding the theory of evolution through Friedrich Lange's *Geschichte des Materialismus (History of Materialism)*, a work that exerted a considerable influence on Nietzsche's thought.<sup>287</sup> Containing a lengthy discussion of the theory of evolution, it most likely provided Nietzsche with his first introduction to the main issues in the

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<sup>284</sup> Hippolyte Taine, *Philosophie de l'Art* (Paris: Baillière, 1865).

<sup>285</sup> McCarthy, *Remapping Reality*, p. 112.

<sup>286</sup> Cf. Nietzsche, *Nachgelassene Fragmente Herbst 1885 bis Herbst 1887*, KSA, XII: 96.

<sup>287</sup> Gregory Moore, *Nietzsche, Biology, and Metaphor* (Cambridge, UK: Cambridge University Press, 2002), p. 34.

controversies surrounding Darwin's ideas.<sup>288</sup> It is, of course, important to remember, as that when Nietzsche speaks of evolution, he has in mind principally human evolution.<sup>289</sup> Even more specifically the evolution of exceptional individuals, since he does not show interest in the future advancement of the entire species: "Daß es eine *Entwicklung* der ganzen Menschheit gebe, ist Unsinn: auch gar nicht zu wünschen," (That there is an evolution of the whole of humanity, that is nonsense: and not even desirable).<sup>290</sup>

Evolution is neither progressive, nor is it a linear development. Rather, it is a movement which is random, conflicting, and, most of all, continually oscillating between synthesis and dissolution. Moore points out that one of the most consistent themes in Nietzsche's writings on biology is his frequently repeated assertion that an organ's present function cannot account for its development; he believes instead that form is anterior to function. This means that, since organic structures are in a perpetual state of flux and have passed through various intermediate stages of development, the function which those structures perform is also constantly evolving and changing. Function arises as a result of a provisional equilibrium between power structures, determined and re-determined according to the changing hierarchical relationship between these rival centers of power. The apparent purposiveness of randomly arising variations is simply an

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<sup>288</sup> Moore adds that in his chapter entitled "Darwinism and Teleology," and in a passage later underlined by Nietzsche, Lange also discusses the forerunners of the modern conception of the organism, the earliest of which, he claims, was Goethe: "Every living thing," he teaches, "is not a single thing, but a plurality; even in so far as it appears to us as an individual, it still remains a collection of living independent beings." See Friedrich Lange, *History of Materialism*, trans. by E. C. Thomas, 3 vols. (London: Trübner, 1877–81), vol. III.

<sup>289</sup> Moore, p. 34.

<sup>290</sup> Nietzsche, *Nachgelassene Fragmente Herbst 1884 bis Herbst 1885*, KSA, XI: 481.

expression for an arrangement of spheres of power and their interplay: “ein *Ausdruck* für eine Ordnung von Machtsphären und deren Zusammenspiel.”<sup>291</sup>

That this same principle can be applied to the social realm, including human history, constitutes the main task of many of Nietzsche’s writings. He states quite explicitly:

„Entwicklung“ eines Dings, eines Brauchs, eines Organs ist demgemäss nichts weniger als sein *progressus* auf ein Ziel hin, noch weniger ein logischer und kürzester, mit dem kleinsten Aufwand von Kraft und Kosten erreichter *progressus*, sondern die Aufeinanderfolge von mehr oder minder tiefgehenden, mehr oder minder von einander unabhängigen, an ihm sich abspielenden Überwältigungsprozessen [...] Die Form ist flüssig, der „Sinn“ ist es aber noch mehr... Selbst innerhalb jedes einzelnen Organismus steht es nicht anders: mit jedem wesentlichen Wachstum des Ganzen verschiebt sich auch der „Sinn“ der einzelnen Organe.

[Development’ of a thing, a custom, an organ does not in the least resemble a *progressus* towards a goal, and even less the logical and shortest *progressus*, the most economical in terms of expenditure of force and cost. Rather, this development assumes the form of the succession of the more or less far-reaching, more or less independent processes of overcoming which affect it (...) The form is fluid, but the “meaning” even more so... Even within each individual organism the situation is no different: with each essential stage of growth of the whole, the “meaning” of the individual organs also changes.]<sup>292</sup>

However, our intellect is strongly inclined to strive towards proving equilibrium, towards “being.” It is not designed to understand the notion of becoming: “Unser Intellekt ist nicht zum Begreifen des Werdens eingerichtet, er strebt die allgemeine Starrheit zu beweisen, Dank seiner Abkunft aus Bildern.”<sup>293</sup> We are, in fact, living in an imaginary

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<sup>291</sup> Nietzsche, *Nachgelassene Fragmente Herbst 1887 bis März 1888*, KSA, XII: 386.

<sup>292</sup> Nietzsche, *Zur Genealogie der Moral*, KSA, V: 313. Translation by Horace B. Samuel, *The Philosophy of Nietzsche* (New York: The Modern Library, 1954). All following translations of Nietzsche are from this volume unless otherwise noted.

<sup>293</sup> Nietzsche, *Nachgelassene Fragmente Frühjahr 1881 bis Sommer 1882*, KSA, IX: 500.



world of stagnation because our senses can only conceive of a variety of images, forms, and substances in a linear manner, testament to our vertical way of thinking:

Unsere Sinne zeigen uns nie ein Nebeneinander sondern stets ein Nacheinander. Der Raum und die menschlichen Gesetze des Raumes setzen die Realität von Bildern Formen Substanzen und deren Dauerhaftigkeit voraus, d.h. unser Raum gilt einer imaginären Welt. Vom Raum, der zum ewigen Fluß der Dinge gehört, wissen wir nichts.

[Our senses never indicate to us anything in a side-by-side manner but always in succession. Space and human laws of space presuppose the reality of images, forms, substances and their permanence; that is, our space is applies to an imaginary world. Of space which is part of the eternal flow of things we know nothing.]<sup>294</sup>

As a matter of fact, then, Nietzsche refers here to the coherence theory of truth, which is governed not by identical correspondence but by coherence and is not necessarily linear but allows contradiction.<sup>295</sup> From this it follows that “true reality,” in that it represents life in its actual organic structure, must be non-linear and complex, because it is irreducible. We must therefore move from a mechanistic to a systemic approach: instead of reducing something to understand it, we must attempt to put it in a larger context. It is not reduction, then, that leads to understanding, but expansion.

#### 4.2.2. Nietzsche’s Vitalism: the *Will to Power*

At the very heart of Nietzsche’s agenda lies the concept of the “will to power” a term which I would like to relate here to the formerly discussed idea of vitalism. As

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<sup>294</sup> Nietzsche, *Nachgelassene Fragmente Frühjahr 1881 bis Sommer 1882*, KSA, IX: 500. My translation. For the following interpretation of Nietzsche’s *Zarathustra*, see also chapter six in McCarthy, *Remapping Reality* (pp.231-264).

<sup>295</sup> As opposed to the Platonic correspondence theory of truth according to which and object is represented when it is reconstructed in a linear fashion, as I explain in previous chapters.

described earlier, vitalism refers to a vital force which produces life. Where, however, does this force originate? Fritjof Capra, in attempting to answer this question, can only reinforce that it cannot be explained by means of mechanical rules.<sup>296</sup> Clearly, then, what is termed „vitalism“ produces and enhances life by means of a force which cannot be measured in traditional terms and at the very bottom of which lies an impulse that can be compared – if one were to speak of a conscious being – a will to live. However, what initiates this will, what is its impetus? The term “will” itself is the essence of self-initiative and self-determination, meaning it presupposes existence, since what does not exist, cannot will („denn: was nicht ist, das kann nicht wollen“).<sup>297</sup> In the second part of this statement, however, Nietzsche asserts that once life exists, it can no longer strive to live: „was aber im Dasein ist, wie könnte das noch zum Dasein wollen?“<sup>298</sup>

Thus, will is contingent upon life as life is contingent upon will. From this it follows that once an organism is alive, it no longer needs will to live but rather, to survive. As the German equivalent „Über-leben“ suggests, this drive must necessarily stem from a will to “rise above.” Therefore, Nietzsche postulates that it is in fact always the will to power („Wille zur Macht“) that drives us; since only where there is life, there is also a will: but not will to live but – so I teach you – will to power („Nur, wo Leben ist, da ist auch Wille: aber nicht Wille zum Leben, sondern – so lehre ich’s dich – Wille zur Macht!“).<sup>299</sup> He likens this force to a natural process:

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<sup>296</sup> Fritjof Capra, *The Web of Life: a New Scientific Understanding of Living Systems* (New York: Anchor Books, 1996).

<sup>297</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV:149.

<sup>298</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 149.

<sup>299</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 149.

in der Natur herrscht nicht die Nothlage, sondern der Ueberfluss, die Verschwendung, sogar bis in's Unsinnige. Der Kampf um's Dasein ist nur eine Ausnahme, eine zeitweilige Restriktion des Lebenswillens; der grosse und kleine Kampf dreht sich allenthalben um's Übergewicht, um Wachstum und Ausbreitung, um Macht, gemäss dem Willen zur Macht, der eben der Wille des Lebens ist.

[In nature it is not conditions of distress that are dominant but overflow and squandering, even to the point of absurdity. The struggle for existence is only an exception, a temporary restriction of the life-will. The great and small struggle always revolves around superiority, around growth and expansion, around power, in accordance with the will to power which is the will of life].<sup>300</sup>

To be absolutely clear, then, *life itself* is essentially the will to power [„Leben selbst ist Wille zur Macht“]<sup>301</sup> because the basic impetus in nature is towards an increase in life (i.e. diversity) and this process never stops since no power in nature is ever stagnant:

Ein labiles Gleichgewicht kommt in der Natur so wenig vor, wie zwei congruente Dreiecke. Folglich auch kein Stillstand der Kraft überhaupt. Wäre der Stillstand möglich, so wäre er eingetreten!

[An unstable equilibrium is as nonexistent in nature as two congruent triangles do not exist. Hence, there is absolutely no stasis of power. If stagnation were possible it would have occurred!]<sup>302</sup>

It is, of course, absolutely vital to nature that stagnation does not occur because it would necessarily mean death of the system.

Obviously, this will to power can be interpreted positively or negatively, depending on perspective, that is, whether one is exerting power or is being suppressed. In other words, no definite value can be attributed to this power; it is all a matter of perspective. From a position of power, one can influence one's environment; however, if one is subordinate to a source of power, one is being determined from the outside.

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<sup>300</sup> Nietzsche, *Die fröhliche Wissenschaft*, KSA, III: 585.

<sup>301</sup> Nietzsche, *Jenseits von Gut und Böse*, KSA, V: 27.

<sup>302</sup> Nietzsche, *Nachgelassene Fragmente Frühjahr 1881 bis Sommer 1882*, KSA, IX: 516.

Logically, then, the subordinate organism is not able to realize its full potential. In other words, one does not become what one is, “man wird“ nicht also nicht „was man ist,“ since one is not only subordinate but at the same time coordinated with other subordinates within a system. As part of a system, of course, the individual (if it can even be considered as such at this point) is now merely playing a teleologically determined role, the goal of which is to the wellbeing and growth of the system as a whole. It is important to note, however, that Nietzsche does assert that the commander, too, must do everything which ensures the survival of the obedient element, is consequently itself conditioned by its existence. For if a subordinate organ should atrophy, or a dominant one enjoy absolutely unrestrained growth, the entire organism would collapse.<sup>303</sup>

#### 4.2.3. Self-Reliance and Self-Organization

Considering further that the will to power – in the recipient’s case – is suppressed by such a system, the system itself is not considered by Nietzsche as conducive to life as such but rather an illness. Accordingly, Nietzsche argues in „Vom Nutzen und Nachteil der Historie für das Leben“ that history is useful only if it enhances life, i.e. the past is to „strengthen“ the present and future:

daß die Kenntnis der Vergangenheit zu allen Zeiten nur im Dienste der Zukunft und Gegenwart begehrt ist, nicht zur Schwächung der Gegenwart, nicht zur Entwurzelung einer lebenskräftigen Zukunft.<sup>304</sup>  
[...]

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<sup>303</sup> This precise principle is exemplified in the example of the rabbits in chapter II of this dissertation.

<sup>304</sup> Nietzsche, *Unzeitgemässe Betrachtungen*, KSA, I: 271. My translation.

Das Übermaß von Historie hat die plastische Kraft des Lebens angegriffen, es versteht nicht mehr, sich der Vergangenheit wie einer kräftigen Nahrung zu bedienen.<sup>305</sup>

[the knowledge of the past is, at all times, desired only as a service to the future and the present and not as a means of weakening the present; not for uprooting a vital future.]

[...]

[The excess of history has offended the physical power of life; it no longer knows how to make use of history merely as a nourishing fare.]

This statement implies that history (the past) can neither be merely forgotten – Nietzsche calls this “unhistoric” („das Unhistorische“) – nor can it be preserved and looked up to in an uncritical manner – which he calls “overhistoric” (das „Überhistorische“). Rather, the past must be “kritisch verurteilt,” meaning that history must be critically examined and questioned. In other words, history must be actively appropriated, and not accepted or dismissed but interpreted. Interpretation is active reception, and since interpretation is dependent upon perspective, history as a constant entity cannot exist.

In an analogy to the ancient Greeks, Nietzsche lays out his agenda. He refers to German education and religion as a sort of „collective chaos of all foreign countries, of all of antiquity“ (“ein in sich kämpfendes Chaos des gesamten Auslandes, der gesamten Vorzeit”) which needs to be organized as the Greeks had done. This need for *self-organization* he then claims, is in fact required of every individual:

Dies ist ein Gleichnis für jeden einzelnen von uns: er muss das Chaos in sich organisieren, dadurch dass er sich auf seine echten Bedürfnisse zurückbesinnt. Seine Ehrlichkeit, sein tüchtiger und wahrhaftiger Charakter muss sich irgendwann einmal dagegen sträuben, dass immer nur nachgesprochen, nachgelernt, nachgeahmt werde.

[This is a parable for every one of us: he must organize the chaos within him by recalling in himself his own real needs. His honesty, his proficient and genuine

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<sup>305</sup> Nietzsche, *Unzeitgemässe Betrachtungen*, KSA, I:329. My translation.

character must at some point begin to resent the constant repetition, relearning, and imitation.]<sup>306</sup>

“Schreibe mit Blut,” “write with (your own) blood,” is Nietzsche’s postulation since only what is written in blood is essence: “Von allem Geschriebenen liebe ich nur Das, was Einer mit seinem Blute schreibt. Schreibe mit Blut: und du wirst erfahren, dass Blut Geist ist,” („of all that is written I love only what one has written with his own blood. Write with blood: and you will find that blood is spirit”).<sup>307</sup>

Nietzsche’s plea in favor of honesty corresponds to his charges against his contemporaries (as well as, presumably, his readers today) that the so-called „truths“ are in fact lies. He refers here to Christian religion and the value system it entails and with which we have been indoctrinated. The antipodes „good“ and „evil,“ Nietzsche claims, need to be overcome since they do not constitute absolute values but are in fact relative; they are mutually dependent. Nietzsche expresses this concept in the metaphor of a tree, which grows not only in one direction (i.e. that which we can easily see), namely upwards, but also downwards. In fact, without growth of the roots, upward growth is not possible: „es ist mit dem Menschen wie mit dem Baume. Je mehr er hinauf in die Höhe und Helle will, um so stärker streben seine Wurzeln abwärts,“ („it is with man as with the tree. The more he seeks to reach high and light, the more his roots strive downwards.”)<sup>308</sup>

Therefore, instead of relying on a transcendental belief system in the form of the soul (which, after „God’s death,“ is no longer available as a „crutch“), man is to believe

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<sup>306</sup> Nietzsche, *Unzeitgemässe Betrachtungen*, KSA, I: 324. My translation.

<sup>307</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 48. My translation.

<sup>308</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 51. My translation.

in his body, and thereby in the vital forces of life itself.<sup>309</sup> This endeavor, as has been explained earlier, is dependent upon the will to power because it is the ultimate power behind all life and form. In relying on the earth instead of heaven, and on oneself rather than a spiritual liberator, man himself becomes creator; he (re-)creates himself;

Euer Geist und eure Tugend diene dem Sinn der Erde, meine Brüder: und aller Dinge Werth werde neu von euch gesetzt! Darum sollt ihr Kämpfende sein!  
Darum sollt ihr Schaffende sein!

[Let your spirit and your virtue be devoted to the meaning of the earth, my brothers; and the value of all things will be determined anew - by you! Therefore, you shall be fighters! Therefore you shall be creators!]<sup>310</sup>

#### 4.2.4. Self-Creation, or: The Art of Interpretation

Because everything is in flux, the phenomena we refer to as *the* world and *the* text are, in fact, equally indeterminate and need to constantly be reinterpreted. Nietzsche's preferred style of writing, in the form of the aphorism, is a prime example for the need of interpretation. Simply reading an aphorism is not doing it justice, Nietzsche claims; only through the art of interpretation ("die Kunst der Auslegung") can a text truly be understood.<sup>311</sup>

The same can be said for the individual human life determining itself within its boundaries. For Nietzsche, becoming who you are, in other words, realizing your potential is not only necessary, it is the essence of life. "How one becomes what one is," in fact constitutes the subtitle of his intellectual autobiography, *Ecce Homo* (1888). This

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<sup>309</sup> Cf. Nietzsche, *Die fröhliche Wissenschaft*, KSA, III: 480.

<sup>310</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 100. My translation.

<sup>311</sup> Nietzsche, *Zur Genealogie der Moral*, KSA, V: 255.

laconic formulation reveals Nietzsche's agenda. While human potential is existent within a person ("was man ist"), it must be cultivated in order for it to be actualized. The goal is not a particular state of being, but a process of continuously becoming. Thus, Nietzsche likens man to the act of going over, claiming that man is a bridge, not a purpose, man is like a rope tied between animal and overman.<sup>312</sup> In *Also sprach Zarathustra*, Nietzsche formulates the steps through which one can become "Übermensch," which literally means "beyond human." Also translated as "superhuman" the German term coined by Nietzsche has often been misinterpreted. The most common misconception arises from the Nazis' usurpation and distortion of his concept of Herrenvolk ("master race"). Some scholars therefore prefer the translation as "overman," since the point of the *Übermensch* is not that man is to strive to rise above others but that man needs to overcome *himself*.

The "overman" is contrasted by Nietzsche with the exemplar of the "last man" (der letzte Mensch), who is the antithesis of the *Übermensch*. A weak-willed individual, last man is tired of life, takes no risks, and seeks only comfort and security. Contrary to this passive mindset, the overman distinguishes himself not only by his awareness of the fact that any presumed state of achievement is self-deception, that he can never live up to his own aspirations, that he can never achieve permanent equilibrium but also by his firm belief in the force of life. The overman is incessantly moving forward as opposed to static. Stasis can be understood in the same sense as Watson had described the term for stasis or entropy: it is life-destroying rather than life-enhancing. Nietzsche explains: "Evil I call it and misanthropic, all this teaching of the one, the plentiful, of the static, the

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<sup>312</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 16. My translation.



satisfied and the immortal!”<sup>313</sup> According to Nietzsche, man is destined to tap into his potential, a process that involves an ongoing battle with the last man within himself; namely that part of him inclined to ‘settle’ in a state of content and thereby – doom himself to stagnation. Fulfillment is not a state of being for Nietzsche but a process, namely an autopoietic one: „What is happiness to me! [...] I have long ceased to long for happiness, I long for my creation,” (“Was liegt am Glücke! [...] ich trachte lange nicht mehr nach Glücke, ich trachte nach meinem Werke.”)<sup>314</sup>

Man must accept that he will always be a “work in progress” – and that he himself is the artist, the creator, creating none other than himself. Nietzsche illustrates this in the metaphor of bearing a child, symbolizing pure potential: For the creator himself to be the child that is newly born, he must be willing to be the bearer and her pain.<sup>315</sup> This process of self-creation is clearly a painful one, since to “creating” oneself anew is necessarily preceded by the destruction of the old in a process of overcoming: man is something that shall be overcome,” (“der Mensch ist etwas, das überwunden werden soll.”)<sup>316</sup> Nietzsche captures this concept brilliantly in the image of the flame when he postulates that we must be willing to burn to death in our own flame in order to be reborn. Only if we become ash first we can be renewed, (“Verbrennen must du dich wollen in deiner eigenen Flamme: wie wolltest du neu werden, wenn du nicht erst Asche geworden bist!”)<sup>317</sup>

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<sup>313</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 110. My translation.

<sup>314</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 408. My translation.

<sup>315</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 111. My translation.

<sup>316</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 14. My translation.

<sup>317</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 82.

The process of creation is thus preceded by an act of burning, of “purging.” What is it which must be burned? It is that which holds man back from becoming, the illusion of transcendence. God for Nietzsche is dead because people have ceased to believe in him, but he still exists as a shadow within people who hold true to the religious teaching, embodied in the traditional, Christian value system. Nietzsche claims that these are unconscious human habits that are not elements of human nature but rather, products of historical evolution. In his chapter “In the happy Isles” (“Auf den glückseligen Inseln”) Nietzsche, in the figure of Zarathustra, challenges the inhabitants, who are living in a kind of muffled bliss, to imagine living life without the protection and security provided by their traditional moral system: “God is a thought that makes all that is straight, crooked; and all that stands still, twirling. What? Time could be gone and immortality would be but a lie?”<sup>318</sup> God’s death, of course, puts man himself in charge of his own fate. Without transcendental belief to give his life meaning, man is now thrown back onto himself, in a rather crude awakening.

At the bottom of this re-evaluation of values that Nietzsche calls for, lies his conviction, best summed up in the question he poses in *Genealogie der Moral*:

Man nahm den Wert dieser “Werte” als gegeben, als tatsächlich, als jenseits jeder Fragestellung; man hat bisher nicht im entferntesten daran gezweifelt und geschwankt, “den Guten” für höherwertig als “den Bösen” anzusetzen, höherwertig im Sinne von Förderung, Nützlichkeit, Gedeihlichkeit in Hinsicht auf den Menschen überhaupt (die Zukunft des Menschen eingerechnet).

[The value of these „values“ was taken for granted as an indisputable fact, which was beyond all question. No one has, up to the present, exhibited the faintest doubt or hesitation in judging the “good man” to be of a higher value than the “evil man,” of a higher value with regard specifically to human progress, utility, and prosperity generally, not forgetting the future.]<sup>319</sup>

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<sup>318</sup> Nietzsche, Werke, *Also sprach Zarathustra*, KSA, IV: 109. My translation.

<sup>319</sup> Nietzsche, *Zur Genealogie der Moral*, KSA, V: 253.

The “Mensch überhaupt”(man in general) is man in his totality. The path to excavating this totality can lie in neither one of the extremes, rather both ‘good’ and ‘evil’ are part of the whole, as Nietzsche exemplified in the image of the tree, cited earlier. He continues this particular statement elsewhere by asserting that the roots that are striving downwards and thus towards the earth, they are striving “towards evil,” (“in’s Böse”).<sup>320</sup>

However, Nietzsche envisages man not as made up of merely two opposing forces, but instead, of a multiplicity of “souls,” (“wahrlich, durch hundert Seelen gieng ich meinen Weg und durch hundert Wiegen und Geburtswehen”).<sup>321</sup> The human being is for him a part of the plurality of living beings which, partly struggling with one another, partly adjusted and subordinated to one another, unintentionally affirm the totality by affirming their individual existence.<sup>322</sup> Therefore, in order to discover oneself in one’s totality, the multiplicity of the self must be embraced because it is, in fact, a prerequisite for creativity: I tell you: you must still have chaos within you in order to give birth to a dancing star,” (“Ich sage euch: man muss noch Chaos in sich haben, um einen tanzenden Stern gebären zu können”)<sup>323</sup> In other word, rather than about the quality of the actions themselves, Nietzsche is concerned with the question how *all* of one’s actions can be conciliated into one productive unity.

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<sup>320</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 51.

<sup>321</sup> Nietzsche, *Also Sprach Zarathustra*, KSA, IV: 111.

<sup>322</sup> Cf. Moore, who also points out that in formulating his model of the organism, Nietzsche drew heavily on the work of the embryologist Wilhelm Roux. See Wilhelm Roux, *Der Kampf der Theile im Organismus* (Leipzig: Wilhelm Engelmann, 1881).

<sup>323</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 19. My translation.

This unity of the self, which constitutes true identity, is not something given but something that must be achieved; it is not a state of being but a continual process of integrating one's facets with one another, as opposed to someone who is preconditioned and merely playing a role. While success consists in having the minimum level of discord among the maximum number of diverse tendencies, Nietzsche emphasizes the dynamic nature of this process of becoming:

Alles geht, alles kommt zurück; ewig rollt das Rad des Seins. Alles stirbt, alles blüht wieder auf, ewig läuft das Jahr des Seins. Alles bricht, alles wird neu gefügt; ewig baut sich das gleiche Haus des Seins. Alles scheidet, alles grüßt sich wieder; ewig bleibt sich treu der Ring des Seins. In jedem Nu beginnt das Sein; um jedes Hier rollt sich die Kugel Dort. Die Mitte ist überall.

[Everything goes, everything returns; eternally rolls the wheel of being. Everything dies, everything blossoms again; eternally the year of being runs. Everything breaks, everything is joined anew; eternally the same house of being builds itself. Everything parts, everything greets every other thing again; eternally the ring of being remains faithful to itself. In every Now, being begins; around every Here rolls the sphere There. The center is everywhere.]<sup>324</sup>

Clearly then, arriving at an absolute center state cannot possibly be the desired goal since it would mean death of the system. The act of burning, creating anew, burning, creating, etc. is ongoing, it is a struggle; therefore the middle cannot be constant but rather, it is constantly in flux: it is everywhere. In other words, what are perceived as centers are merely periodic instances that are neither constant nor definite. Much like a Phoenix, man is to die in his own flame only to recreate himself, again and again. What he must burn is that which has alienated him from his own instincts, which has, in effect, denatured him, in Hayles' sense of the word.

Therefore, the only way to find identity in the sense of excavating the true self is to not only accept but embrace multiplicity. Like Nietzsche proposed, this process of

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<sup>324</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV: 272-273. My translation.

rebirth requires a form of purging. Thus, the answer lies in acceptance of one's multiplicity and in expansion of the soul, moving outward and forward, rather than inward and backward. The locus of this continual innovation is an "in-between-space," as McCarthy pointedly remarks:

The best interpreter, therefore, is the one who suffers a thousand burdens and struggles to gain insight. *Zarathustra* (1882-85) and *Beyond Good and Evil* (1886) force us by their very style to see things in an unaccustomed way. It is not simply a matter of adopting a perspective proffered by Nietzsche, but rather of finding a medial perspective between the positions of author and reader. That in-between-space is the site of innovation. And that space is constantly shifting.<sup>325</sup>

#### 4.2.5. Nietzsche's Aesthetics

In *Nietzsche Contra Wagner*, Nietzsche claims that aesthetics is nothing but applied physiology.<sup>326</sup> In an extremely revealing note written between summer 1871 and the beginning of 1872, he writes, more explicitly: "Aesthetics only has meaning as natural science: like the Apollonian and the Dionysian," ("Aesthetik hat nur Sinn als Naturwissenschaft: wie das Apollinische und das Dionysische").<sup>327</sup>

In *Die Geburt der Tragödie*, Nietzsche elaborates his conception of a "Kunsttrieb" operating in nature, and beyond the realm of human agency.<sup>328</sup> Moore traces the origin of the term "Kunsttrieb" back to one whom he calls "perhaps the most

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<sup>325</sup> McCarthy, *Remapping Reality*, p. 120.

<sup>326</sup> Cf. The following statement by Nietzsche, which implies that he was planning on writing a „physiology of aesthetics“: „Auf diesen Gesichtspunkt werde ich ein andres Mal zurückkommen, im Zusammenhang mit noch delikateren Problemen der bisher so unberührten, so unaufgeschlossnen Physiologie der Ästhetik,“ *Zur Genealogie der Moral*, KSA, V: 356.

<sup>327</sup> Nietzsche, *Nachgelassene Fragmente Herbst 1869 bis Herbst 1872*, KSA, VII: 395. My translation.

<sup>328</sup> Cf. Moore, p. 89.

important and influential nineteenth-century figure to advance a system of evolutionary aesthetics,” the German biologist Ernst Haeckel. His monistic philosophy, an idiosyncratic blend of *Naturphilosophie* and Darwinism, seeks to account not only for the existence of “natural beauty” – that is, the awe-inspiring symmetry and order of living structures produced by the processes of evolution – but also for the origin of human invention. Both, Haeckel claims, are the visible manifestation of an intrinsic creative force operating throughout the universe: the *Kunsttrieb*. Moore adds, however, that the concept of the *Kunsttrieb* was originally coined by the natural theologian Hermann Samuel Reimarus in his *Allgemeine Betrachtungen über die Triebe der Thiere, hauptsächlich über ihre Kunst-Triebe* (1760). In this context, it explained certain spontaneously creative behavior observable in animals, referring for example to those instincts which prompt a bird to build its nest or the beaver its dam. The latter is in fact the sense in which Schopenhauer employs the term in his chapter entitled “Vom Instinkt und Kunsttrieb” in the second volume of *Die Welt als Wille und Vorstellung*. Moore points out that gradually, the term began to be applied by eighteenth-century aestheticians such as Friedrich Schiller to man’s impulse to produce fine art.<sup>329</sup>

As Moore saliently comments, the Apollonian and Dionysian *Kunsttriebe* are thus to be understood “scientifically;” they are intended as poetic symbols of natural processes:

Even in the published text, the ‘Apollonian’ and ‘Dionysian’ *Birth of Tragedy* retains the conceptual ambiguity of *Kunsttrieb*, which, in the nineteenth century,

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<sup>329</sup> Moore, p. 92.

had currency in both metaphysics *and* biology, and slips easily between the two semantic fields.<sup>330</sup>

Both aesthetic states, Nietzsche explicitly declares, are accompanied by physiological phenomena, by dream and intoxication.

The Dionysian *Kunsttrieb*, is a kind of sublimation of the libidinous, primal urges of man, the panhetaeric animality celebrated by primitive cults. Because such art originates in an unleashing of the lower drives, it is able to reveal and simultaneously to transfigure our shared experience and bestial origins. It achieves this through the transference of the original dreams and states of intoxication experienced by the artist. This process provides the basis for an account of how aesthetic judgments are formed by the receiver of art. These judgments are not the products of conscious reflection, but arise as a result of the ‘arousal of the artistic capacity’ in the spectator by means of transferal:

Die unbewußte formenbildende Kraft zeigt sich bei der Zeugung: hier doch ein Kunsttrieb thätig. Es scheint der gleiche Kunsttrieb zu sein, der den Künstler zum Idealisiren der Natur zwingt und der jeden Menschen zum bildlichen Anschauen seiner selbst und der Natur zwingt.

[The force that unwittingly creates form is apparent in procreation; here, the Kunsttrieb (urge to create) is active. It seems to be the same “Kunsttrieb” which compels the artist to idealize nature, and compels every man to look upon himself and nature.]<sup>331</sup>

In other words, the spectator becomes artist: the work of art exerts a direct influence on the physiology of the receiver, in much the same way as Nietzsche envisages the effects of rhythm on the human body, and in the same way the wave picks up water molecules.

Wir leben allerdings durch die Oberflächlichkeit unseres Intellekts in einer fortwährenden Illusion: wir brauchen, um zu leben, in jedem Augenblicke die Kunst. Unser Auge hält uns an den Formen fest. Wenn wir es aber selbst sind, die

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<sup>330</sup> Moore, p. 92.

<sup>331</sup> Nietzsche, *Nachgelassene Fragmente Herbst 1869 bis Herbst 1872*, KSA VII: 397. My translation.

allmählich uns dies Auge anezogen haben, so sehen wir in uns selbst eine Kunstkraft walten. Wir sehen also in der Natur selbst Mechanismen gegen das absolute Wissen.“

[However, by means of the superficiality of our intellect we live in a perpetual illusion: we need art at every moment in order to live. Our eye holds us close to the forms. But if it is ourselves who have over time cultivated this eye, then we see an artistic force at work within ourselves. Thus, we see mechanisms against absolute knowledge in nature itself.]<sup>332</sup>

From this can be inferred that perception is itself a creative process. All physical stimuli from the surrounding environment are interpreted and understood in a subjective manner; the outside world, namely time, space, motion, for any organism is created *by* that organism *for* that organism. And each organism (each atom of each molecule) is co-mingling with all others in an interpretive artistic exchange. Creation and re-creation occurs everywhere, all the time, and guided by nothing besides the will to power. The most complex schemes supervene upon even more complex schemes involving the simplest of components, engaged with each other and affecting the various levels, driven by ongoing conflict and struggles of will.

In “Über Wahrheit und Lüge im aussermoralischen Sinne,” Nietzsche refers to the drive to produce metaphors as an absolutely fundamental one: “that fundamental human impulse to create metaphors, which cannot be left out of consideration for even a second because this would mean leaving out human beings themselves,” (“Jener Trieb zur Metapherbildung, jener Fundamentaltrieb des Menschen, den man keinen Augenblick wegrechnen kann, weil man damit den Menschen selbst wegrechnen würde.”)<sup>333</sup> This drive, this instinct, as one might call it, is the biological basis for the creativity which

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<sup>332</sup> Nietzsche, *Nachgelassene Fragmente Sommer 1872 bis Ende 1874*, KSA, VII: 435.

<sup>333</sup> Nietzsche, *Nachgelassene Schriften 1870-1873*, KSA: I: 887.



Nietzsche sees manifested not only in the metaphors arising from linguistic invention, but those involved in cognition as well.

Nietzsche employs the concept of metaphor in the original, non-allegorical sense of *metapherein*, of transference.<sup>334</sup> The mental representations generated from these nervous impulses represent the first step in a two-stage process of metaphorical transference. Language arises as the second step, when the mental image is transmuted into a sound or utterance:

Die Aneignung eines fremden Eindrucks durch Metaphern.  
Reiz Erinnerungsbild durch Metapher (Analogieschluß) verbunden.  
Resultat: es werden Ähnlichkeiten entdeckt und neu belebt. An einem Erinnerungsbilde spielt sich der wiederholte Reiz noch einmal ab. Reiz percipirt jetzt wiederholt, in vielen Metaphern, wobei verwandte Bilder, aus den verschiedenen Rubriken, herbeiströmen. Jede Perception erzielt eine vielfache Nachahmung des Reizes, doch mit Übertragung auf verschiedene Gebiete.

[The acquisition of foreign impressions through metaphors.  
Stimulus Memory-image connected through metaphor (analogy).  
Result: similarities are discovered and revived. The repeated stimulus recurs, again, in a memory-image. Attraction now perceives again, in many metaphors – by witnessing related images, from different categories stream towards it. Every perception achieves a multiple imitation of the original stimulus, but transferred onto different realms.]<sup>335</sup>

For Nietzsche, the activity of the *Kunst-* or *Metaphertrieb* is not characterized by freedom at all; it is, rather, a force of nature. While it appears on the surface to be a conscious, nondeterministic aspect of human freedom in the manner in which Kant imagines it, the artistic or cognitive process springs rather from the unseen, unfelt ‘endless activity’ deep within the human organism; the artistic process is physiologically absolutely determined

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<sup>334</sup> Moore, p. 101.

<sup>335</sup> Nietzsche, *Nachgelassene Fragmente Sommer 1872 bis Ende 1874*, KSA, VII: 490. My translation.

and necessary: “The artistic process is entirely specific and necessary, physiologically” (“Der künstlerische Prozeß ist physiologisch absolut bestimmt und nothwendig.”<sup>336</sup>)

The activity of the Metaphertrieb establishes an aesthetic way of relating the artistically creative subject and the world, a kind of stammering translation into a different language. In other words, thought does not adequately represent the world; we are left with stimuli, not complete cognitions. Language, as the physical expression of thought, is a system of arbitrary symbols – representing sensory phenomena. But these symbols represent subjective modifications of our sensory modalities rather than any object in the external world, and do not coincide with the original stimulus, which is inaccessible to us and, ultimately, indefinable by us. This notion, namely that the original idea, the original meaning, the absolute essence therefore, can never be known in its totality, was laid out in detail in previous chapters.

#### 4.3. Art as a Life Process

Nietzsche’s concept of art extends far beyond the notion of only humans as artists, and art in the literal sense. The human artist is only one part, one reflection of a greater system in which not only humans, but all things exist in symbiotic exchange, living through creative interpretations, forming illusions, construing their world, their reality. Through cycles of self-organization and self-reorganization, through a Phoenix-like process of death and rebirth, the artist exists in a symbiotic exchange with all existence. Thus, the world is a work of art that gives birth to itself.

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<sup>336</sup> Nietzsche, *Nachgelassene Fragmente Sommer 1872 bis Ende 1874*, KSA, VII: 446. My translation.

Art is a means of creating meaning for life, and since meaning is preceded by form, and form by life, art in fact creates life. In much the same way, the creativity of the *Kunsttrieb*, which is manifested in the development of new organic structures, in new forms of life, and, at the highest point of evolution, in the autopoietic organs of (human) perception and cognition, is a means of attaining a kind of metaphysical redemption. In autopoietic manner, form is able to create its own organs:

Das Erwachen des Kunsttriebs differenziert die animalischen Geschöpfe. Daß wir die Natur so sehen, so künstlerisch sehen, theilen wir mit keinem Thier. Aber es gibt auch eine künstlerische Gradation der Thiere. Die Formen zu sehen ist das Mittel, über das fortwährende Leiden des Triebes hinauszukommen. Es schafft sich Organe.

[The awakening of the „Kunsttrieb“ is what differentiates animalistic creatures. The fact that we perceive nature, perceive it artistically, we do not share with any animal. But there is also an artistic gradation among the animals. To be able to perceive forms is the means of overcoming the incessant suffering of the drive. It creates organs for itself.]<sup>337</sup>

Thus, “with the organic the artistic also begins.”<sup>338</sup> In other words, Nietzsche views evolution as an artistic process, and vice versa. He interprets evolutionary history as one aspect of a universal, cosmic becoming, as the unfolding of certain creative forces immanent in nature, as a kind of endogenous propelling organisms towards ever higher levels of structural complexity. Art, such as poetry, constitutes not only major but necessary parts of human consciousness.

The same is true for rhythm, since it is fundamental to the processes of life. Physiologically, life is a continual rhythmic motion of the cells. Therefore the influence of rhythm from the outside of a body may be seen as a minute modification of that

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<sup>337</sup> Nietzsche, *Nachgelassene Fragmente Herbst 1869 bis Herbst 1872*, KSA, VII: 397. My translation.

<sup>338</sup> Nietzsche, *Nachgelassene Fragmente Sommer 1872 bis Ende 1874*, KSA, VII: 436. My translation.

rhythmic motion. This notion is clearly reminiscent of the solitary wave, the soliton, in that both have the power to affect a body directly by momentarily (but perpetually) disrupting and re-determining the various internal cellular rhythms of the organism. In fact, Nietzsche himself even relates rhythm to waves when he talks about the waves of rhythm (“Wellenschlag des Rhythmus“).<sup>339</sup> As “acting out of rhythm,” dance is therefore the expression of one’s own and newly determined rhythm; evolved from the interaction between internal (man’s) and external (nature’s) heartbeat. For this reason, Zarathustra postulates that he would only believe in a God who knew how to dance („Ich würde nur an einen Gott glauben, der zu tanzen verstünde“).<sup>340</sup>

The ensuing symbiosis is one of continuous productivity and potential, manifested in a creative and self-determined mind Nietzsche refers to as the “free spirit:”

wäre eine Lust und Kraft der Selbstbestimmung eine Freiheit des Willens denkbar, bei der ein Geist jedem Glauben jedem Wunsch nach Gewißheit den Abschied gibt, geübt, wie er ist, auf leichten Seilen und Möglichkeiten sich halten zu können und selbst an Abgründen noch zu tanzen. Ein solcher Geist wäre der freie Geist par excellence.

[if we were to imagine a zest and force of self-determination, a freedom of will, based on which a spirit would dismiss any belief and wish for certainty; practiced, as he is, in keeping his balance on thin ropes and unlikely possibilities, and to dance, even by the abyss. Such a spirit would be the free spirit par excellence.]<sup>341</sup>

What Nietzsche provides here are what he perceives to be characteristic traits of a maximally creative personality. Interestingly, Nietzsche’s observations are right on target; it is quite stunning to take a look at this point at the characteristics of both creative artists and scientists, compiled by Frank Barron. Among others, he lists “freedom from

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<sup>339</sup> Nietzsche, *Die Geburt der Tragödie*, KSA, I: 33. My translation.

<sup>340</sup> Nietzsche, *Also sprach Zarathustra*, KSA, IV:49.

<sup>341</sup> Nietzsche, *Die fröhliche Wissenschaft*, KSA, III: 583. My translation.

convention, independence of judgment, interest in contradictions, disorder, and imbalance, profound commitment to the search for aesthetic and philosophic meaning in all experience, the courage to burn bridges, to strike into new territory with no hope of going back, and last but not least, a spirit of zest and appreciation, however somber the vision or doomed the voyage.”<sup>342</sup> What both Emerson and Nietzsche claim, then, is that every one of us has the potential to create one’s own context, namely by questioning the prevailing one. The goal is to be a constant seeker, as Emerson claimed himself to be: “I unsettle all things. No facts are to me sacred; none are profane; I simply experiment, an endless seeker, with no Past at my back.”<sup>343</sup>

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<sup>342</sup> Frank Barron, “Bisociates: Artist and Scientist in ‘The Act of Creation,’” *Astride the Two Cultures. Arthur Koestler at 70*, ed. by Harold Harris (New York: Random House, 1976), pp. 37-49.

<sup>343</sup> Emerson, “Circles,” p. 188.

## CHAPTER V

### SELF AND WORLD IN FRAGMENTS: GOTTFRIED BENN

Die Dinge dringen kalt in die Geschichte  
und reißen sich der alten Bindung fort,  
es gibt nur ein Begegnen: im Gedichte  
die Dinge mystisch bannen durch das Wort.  
(Reality, turn loose from its foundation,  
thrusts coldly forth, demanding to be heard:  
there is but one – the poem’s – confrontation  
that bans reality with mystic word.)  
– Benn, „Gedichte“<sup>344</sup>

At the turn to the twentieth century, under the Wilhelminean regime, the atmosphere was one of tension and transition in Germany. In contrast to the politically complacent attitude at the beginning of the century, several discoveries in the sciences, as well as in psychology served to question deeply held beliefs. For example, in his “Mutationstheorie” (1901), Hugo de Vries had taken Darwin’s evolutionary theory a step further, proving that species do not only develop in small, gradual steps but that new species could in fact arise in single jumps (saltationism). In physics, Ernest Rutherford discovered that atoms could be split, Max Planck learned that their rays were not steady but acted in jolts in his Quantentheorie (1900), and Albert Einstein developed his special relativity theory (1905) that redefined space, time, mass, and energy.<sup>345</sup>

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<sup>344</sup> Gottfried Benn, “Gedichte,” *Sämtliche Werke*, Stuttgarter Ausgabe (StA), in Verbindung mit Ilse Benn, ed. by Gerhard Schuster, 7 vols., (Stuttgart: Klett-Cotta, 1986-2003), I:186, ll. 5-8. Translation by Karl F. Ross, *Gottfried Benn. Prose, Essays, Poems*, ed. by Volkmar Sander (New York: Continuum, 1987), p. 219.

<sup>345</sup> Cf. Roy Porter, *The Cambridge History of Science*, vol. 5: The Modern Physical and Mathematical Sciences (Cambridge: Cambridge University Press), specifically pp. 331-360.

The new terminology (evolution, jumps, jolts, relativity) is testament to the shift from what had been thought of as firm laws of established patterns to models and hypotheses of mutable dynamics. While these changes affected man's environment, Sigmund Freud's psychoanalysis soon debunked the firm belief that man – at least – knew him/herself. With his "Theory of Dreams" (1900), Freud revealed, for instance, that there are areas of the human being that were beyond his/her control but that nevertheless influence him/her. Hence, like de Vries, Rutherford, Planck and Einstein, Freud pointed to areas and possibilities that had previously remained unacknowledged and difficult to hear because they undermined traditional beliefs.

Even if the general public was most likely unaware of these specific discoveries, it nevertheless shared in the sense of exploration, nervous tension, and the need for new answers. Friedrich Nietzsche was one of the first to attempt to provide new answers, by calling for a reevaluation of values, as was exemplified in the previous chapter. His claim that any judgment depends on the observer's perspective gave way to a new individualism that finds its way into art as well. In opposition to classical aesthetics' ideals of beauty and harmony, which no longer seemed applicable to reality and had therefore become rather stale, there developed an aesthetic of the ugly, of disharmony, and negativity.

Topics and themes which had been taboo provided provocation and were treated as such, in un-aesthetical manner. While the French symbolists, especially Rimbaud and Mallarmé, had already publicized an aesthetic of the ugly, their depictions of death and

decay still have an air of beauty and melancholy.<sup>346</sup> During early German Expressionism, however, all the shocking, revolting details of human life and death were exposed. This “dethroning” of the human being went hand in hand with the negation of metaphysical transcendence. The actual question, namely what a human being actually is, is posed implicitly.

Not surprisingly, Gottfried Benn’s first volume of poems, *Morgue*, published in 1912, triggered an outrage. Critics were appalled by what they considered a sick, perverted, and disrespectful treatment of the human being.<sup>347</sup> At the same time, it seems the approach Benn took to depicting the human being was a natural outcome, an extension in fact, of his professional occupation as a doctor. Benn was raised as the son of a Lutheran minister in the German village of Mansfeld, an area which is now part of Poland. He was educated privately and in the Gymnasium in Frankfurt an der Oder. In 1903, following his father's wishes, he entered the University of Marburg to study theology and philosophy. But he soon switched to medicine at the Kaiser Wilhelm Akademie, a part of the University of Berlin, and upon graduating focused on the study of venereal diseases and dermatology as a medical doctor until the end of World War I.<sup>348</sup>

After his graduation from medical school in 1912, Benn was called to active military duty. After his discharge from the military he was employed as an assistant at the Pathological Institute of the Berlin West-End Hospital, where he performed hundreds of

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<sup>346</sup> Cf. Anton Kaes, “Vom Expressionismus zum Exil,” *Geschichte der deutschen Literatur*, ed. by Ehrhard Bahr, (3 vols.), 2nd ed. (Tübingen und Basel: Francke, 1998), III: 257.

<sup>347</sup> Cf. Kaes, “Vom Expressionismus zum Exil,” III: 258.

<sup>348</sup> Cf. Douglas Messerli, ed., *The PIP Anthology of World Poetry of the 20th Century*, vol. 2 (Los Angeles: Green Integer: 2001).



autopsies.<sup>349</sup> The impressions of this employment are reflected in his poetry, especially in the poems of *Morgue* which he wrote during this time.

Benn's third collection of poetry after *Morgue* and *Söhne* (*Sons*, dedicated to Else Lasker-Schüler), *Fleisch* (Flesh), was published in 1917. This book continued his prevailing deep sense of cynical melancholy. Over the next several years, his poetry continued to appear in expressionist journals as he came to be recognized as a major avant-garde writer. During this time he continually moved toward Nietzschean ideas that interpreted art as a counterweight to nihilism.

The influence of Friedrich Nietzsche's philosophy on Benn's aesthetics has been discussed in various studies. For Benn, Nietzsche was the beginning of a new era in German literature.<sup>350</sup> Gerhard Loose published a collection of quotations which examined (though in quantitative manner) Benn's reception of Friedrich Nietzsche in an initial investigation of the connection in 1961.<sup>351</sup> Bruno Hillebrand offered a detailed discussion of the artistic and metaphysical aesthetics of both Benn and Nietzsche in 1966, and Theo Meyer contributed to Nietzsche's vitalism Benn's statically regressive outlook in 1971.<sup>352</sup>

More recent analyses of Nietzsche's influence on Benn include Alexander Daboul's investigation of artistic nihilism (1995), and Bruno Hillebrand's discussion of

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<sup>349</sup> Cf. the discovery of Benn's autopsy protocols discussed in chapter three.

<sup>350</sup> Cf. Benn's comments about Heinrich and Thomas Mann: „Ahnen hatten sie hierzulande nur einen, der aber geistig geschlagen war und nichts galt: *Nietzsche*,“ („Rede auf Heinrich Mann,“ *Gesammelte Werke* (GW), I: 410-418. Here p. 412.

<sup>351</sup> Cf. Gerhard Loose, *Die Ästhetik Gottfried Benns* (Frankfurt a.M.: V. Klostermann, 1961).

<sup>352</sup> Cf. Bruno Hillebrand, *Artistik und Auftrag. Zur Kunsttheorie von Benn und Nietzsche* (München: Nymphenburger Verlagshandlung, 1966); see also Hillebrand's essay „Gottfried Benn und Friedrich Nietzsche,“ in *Gottfried Benn*, ed. by Bruno Hillebrand (Darmstadt: Wissenschaftliche Buchgesellschaft, 1979); cf. Theo Meyer, *Kunstproblematik und Wortkombinatorik bei Gottfried Benn* (Köln: Böhlau, 1971).

Nietzsche's general reception among German writers, with a chapter on his European reception (2000).

This study of Benn examines closely three of his poems, each of which represents a different stage in a mediation of destruction and recreation. Since Benn's poems are often programmatic texts closely related to his essayistic work, his essays provide both a matrix for interpreting his poems as well as an elucidation of connections between Benn's artistry and Nietzsche's philosophy.

### 5.1. "Karyatide": The Nietzschean Intertext

Benn appears to have always been very fond of the poem "Karyatide" which appeared in 1915. In *Lebensweg eines Intellektualisten*, he comments on its emergence as symptomatic of the eruptive process of creation to which he attributed his early poetry.<sup>353</sup>

#### Karyatide

Entrücke dich dem Stein! Zerbirst  
die Höhle, die dich knechtet! Rausche  
doch in die Flur! Verhöhne die Gesimse –  
sieh: Durch den Bart des trunkenen Silen  
aus seinem ewig überraschten  
lauten einmaligen durchdröhnten Blut  
träuft Wein in seine Scham!

#### Bespei die Säulensucht: Toderschlagene

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<sup>353</sup> See Benn, *Lebensweg eines Intellektualisten*: „An ein anderes Vorkommnis erinnere ich mich aus Brüssel. Ein Septembertag ich war Oberarzt am Gouvernement und mit einem Auftrag zu einer anderen Behörde geschickt. Die Straße zu gehen war kurz, doch von den Horizonten brach das Dionysische, die Stunde war zerstückt und bronzen, Verbranntes überall, auf ihrer Kuppe hatte ein Feuer gewütet, Jahr und Leben hinüber, das Vorspiel war aus, das Ende nahte, das Opfer, aber man mußte sich fassen -: nur einen Blick noch aus diesem Licht, einen Atem noch aus dieser Stunde – und:“Sieh dieses Sommers letzten blauen Hauch/auf Astermeeren an die fernen/baumbräunen Ufer treiben; tagen/sieh diese letzte Glück-Lügenstunde/unserer Südlichkeit/hochgewölbt –,“ StA 4:178.

greisige Hände bebten sie  
verhangenen Himmeln zu. Stürze  
die Tempel vor die Sehnsucht deines Knies,  
in dem der Tanz begehrt!

Breite dich hin, zerblühe dich, oh, blute  
dein weiches Beet aus grossen Wunden hin:  
sieh, Venus mit den Tauben gürtet  
sich Rosen um der Hüften Liebestor –  
sieh des Sommers letzten blauen Hauch  
auf Astermeeren an die fernen  
baumbraunen Ufer treiben; tagen  
sieh diese letzte Glück–Lügenstunde  
unserer Südlichkeit  
hochgewölbt.<sup>354</sup>

The poem is a beseeching appeal to the Caryatid, a female statue that is one of several that together hold up a roof-like structure. Caryatids were popular in the architecture of the *Gründerzeit* which might explain why they caught Benn's attention. The best-known example of the use of Caryatids in Greek antiquity was the south porch of the Erechtheion in Athens (421–407 B.C.), where six figures supported its roof.<sup>355</sup>

The urgent nature of the appeal to the Caryatid is evident in the accumulation of forceful imperatives forms of the verbs throughout the three stanzas of the poem: “entrücke,” “zerbirst” (1), “rausche” (2), “verhöhne” (3) in the first stanza; “bespei” (8), “stürze” (10) in the second, and again in the last: “Breite dich hin, zerblühe dich, oh blute” (13). Considering that Benn openly favored nouns over verbs due to their superior ability to “carry meaning,” this amassing of verbs certainly merits a closer look.<sup>356</sup>

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<sup>354</sup> Gottfried Benn, *StA*, I: 38. For complete translations poems discussed in this chapter see appendix. Whenever I cite merely excerpts, the translation is provided within the text.

<sup>355</sup> Cf. „Karyatides“ in *Pauly's Real-Encyclopädie der classischen Altertumswissenschaft*, ed. by August Friedrich von Pauly, Georg Wissowa, and Wilhelm Kroll, 24 vols (Stuttgart: Alfred Druckenmüller Verlag, 1894-1978), here vol. X: 2 (1919).

Demonstrating the kind of prophetic incantation Nietzsche's *Zarathustra* projects, the speaker in this poem is urging the stone figure to *move*, to break away from its current static position. As a matter of fact, then, the speaker is attempting to breathe life into the marble statue, to release it from its binds, from the weight of the roof. What becomes apparent when we imagine the stone figure stepping out from underneath the "roof" is that it is only a roof because it is being held up by the Caryatid. This implies that it is less shelter, even though it is at first perceived that way, than it is a burden that can and should be cast off.

Silens are described as the imaginary male inhabitants of the wild that are half man, half animal and display an unrestrained desire for sex and wine, represent a sort of primordial vitalism. It is for this reason that they are generally depicted naked but perhaps also because they purportedly conducted mystic initiation rituals (depicted, for example, in Plato's *Leges*) into a community of both this world and the next. In addition, *Silenus* is reported to be the educator of Dionysus.<sup>357</sup> As such, he is even described being endowed with wisdom that enables him to see through the vanities and pettiness of human life.<sup>358</sup> The silen is about to initiate the Caryatid into a new form of life, a baptism that is complete with wine instead of holy water. At the same time, the wine is

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<sup>356</sup> Cf. *Probleme der Lyrik*, and especially *Epilog und lyrisches Ich* (1921/27): "Worte, Worte – Substantive! Sie brauchen nur die Schwingen zu öffnen und Jahrtausende entfallen ihrem Flug," StA, III: 133.

<sup>357</sup> Cf. Richard A. S. Seaford's article on "satyrs and silens," *The Oxford Companion to Classical Civilization*, ed. by Simon Hornblower and Antony Spawforth (Oxford: Oxford University Press, 1998), Oxford Reference Online.

<sup>358</sup> Cf. „Silenos und Satyros,“ in *Pauly's Real-Encyclopädie*, vol. III: A,1(1927).

reminiscent of the Eucharist, which is also fitting since it is traditionally held transcendent beliefs that are to be laid to rest.

The statue is urged to spit on the “column mania” (“Bespei die Säulensucht”), on the obsession, the addiction (“Sucht”), to uphold traditional beliefs and to thereby put them – literally and metaphorically – on a pedestal, even though they have no validity and were put in place a long time ago by old and seemingly doomed hands. The builders of this shrine cannot be anything but doomed of course because the temple they raised reaches out to “impenetrable, cloudy skies” that offer neither solace nor salvation, an echo of Nietzsche’s proclamation that “God is dead.”

Caryatids are generally depicted with one knee bent and the foot turned outward, as in movement. Benn emphasizes this fact here as the Caryatid’s knee longing to dance which implies that the knee is by nature meant for movement, not for stasis, and definitely not for kneeling in adoration. Considering the speaker’s message to the Caryatid it may seem surprising that the poem is not in free verse but demonstrates a certain metric regularity. However, the large number of verbs and especially the enjambments add considerable dynamic to the poem.<sup>359</sup> Beginning with the colon in line four and parallel to the depiction of the silen, the meter changes, thus imitating the rhythm of the silen’s dance.

It is thus the antagonism between the traditional metric form and the free form which expresses the speaker’s appeal to the Caryatid (and the reader) to break free from

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<sup>359</sup> Steinhagen counts 15 enjambments in twentytwo verses. Cf. Harald Steinhagen, “Aufstand gegen Apoll” in *Interpretationen. Gedichte von Gottfried Benn*, ed. by Harald Steinhagen (Stuttgart: Reclam, 1997), pp. 30-43. Here p. 34.

its architecture, both metaphorically as well as literally, and to partake in an intoxicated dance. The antagonism is detectable on more than the level described; it is also applicable to what many contemporaries conceived of as the Wilhelmine stasis in both art and social life. On yet another level, the Caryatid as a static column on the one hand and as ecstatic dancer on the other, also represent the Apollonian and the Dionysian spheres that Nietzsche had elaborated on in his *Geburt der Tragödie* and elsewhere. The appeal to the Caryatid to break out of established patterns and to recognize and re-establish its original essence, namely dance, are mirrored rhythmically in that the iambic meter is replaced by a self-contained, dynamic, and erratic rhythm that imitates the Caryatid's dance. In following this interpretation we can determine that the poem rejects the Apollonian notion of a "principium individuationis" and with it an entirely rational, predictable, and therefore static understanding of life. Favored is instead the Dionysian notion of exuding the self in a sort of irrational, spontaneous combustion.

Vital in this process are both wine and blood; the wine in fact springs from the silen's blood. Both are inextricably linked to sexuality ("Schat") and the body, as representatives of an intense, all-encompassing, and original form of living (l. 6). The image of wine dripping into the silen's sex organ also seems to allude to a sort of cerebral fertility or richness which can be attained only in a state of intoxication or during and after reconciliation with the body. At the same time, the reference to blood also evokes associations with the blood thirst of the maenads and thus reconciles both the life enhancing and life destroying aspects of life.

Stepping out from underneath the shelter (whether real or imagined) is a frightening prospect and it requires sacrifice: the Caryatid must be willing to bleed, to

spread out, to “bloom to death,” (“ausbreiten, zerblühen, bluten”). “Zerblühen” is of course a neologism with a more radical connotation than the common word “verblühen.” What comes to mind is another German word with the prefix “zer-“: “zerstören” (to destroy). The Caryatid must be willing to destroy itself, to “loose” itself in order to actually find its authentic self.

We have seen in the last chapter that Emerson affirms that this process is in fact what life is all about: the “way of life is wonderful: it is by abandonment.”<sup>360</sup> The same is true for Nietzsche, who reinforces this view when he claims that “creating” oneself anew is necessarily preceded by the destruction of the old in a process of overcoming: “der Mensch ist etwas, das überwunden werden soll.”<sup>361</sup> Nietzsche conjures up the image of the flame to capture this concept: “Verbrennen must du dich wollen in deiner eigenen Flamme: wie wolltest du neu werden, wenn du nicht erst Asche geworden bist!”<sup>362</sup>

Just as Emerson argued that poetry unlocks our chains, so the speaker in Benn’s poem is unlocking the Caryatid’s chains, urging it to purge itself from the restraints of the traditional architecture it is still upholding. The same is true, of course, for the reader: thinking “outside the box” opens our mind, enables us to make new connections, in a manner that could be described as centrifugal and that is again reminiscent of the spiral-shape. Real “life,” then, is attainable not through transcendental beliefs, imaginable as a vertical line (depicted in the building of the temple towards the sky), but in a “spreading out” and thus a lateral motion.

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<sup>360</sup> Ralph Waldo Emerson, “Circles,” p. 190.

<sup>361</sup> Nietzsche, „Also sprach Zarathustra,“ IV: 14.

<sup>362</sup> Nietzsche, *Also sprach Zarathustra*, KSA IV: 82.

As already argued, “spreading oneself out” (“sich-Hinbreiten”), opening oneself in this way, carries with it increased vulnerability. That is why the Caryatid is referred to as “soft” and “full of wounds” (“weiches Beet aus großen Wunden”). The speaker projects several images in the following lines that all seem to point to the Caryatid’s newly gained fertility, both on a physical as well as a mental level (Venus and her doves). While the rose is typically a symbol of love and fertility and in this context also symbolizes rebirth, an idea that is fortified by the images of changing seasons that are introduced with the word “summer.” The notion of the body’s close association with the earth is reinforced in the movement of the “blue haze” (“blauer Hauch”) that finally drifts to the “fall-foliage-colored shores,” rather than upwards, as would traditionally be the case.

A new day dawns (“tagen,” l. 19), elucidating Benn’s reversal of the traditional light/darkness imagery, since the irrational is associated here with liberation and light. In contrast, the rational sphere is coupled with stasis and darkness at the beginning of the poem. While the skies were cloud-covered earlier in the poem, the imagery of summer (“Sommer,” “blau,” “Südlichkeit”) is now re-enforced through the accumulation of *Umlauts* in the last three lines which establish a distinct atmosphere of levity. Bernhard Sorg encourages this interpretation, claiming that in Benn’s poems the „gravity of a complex and cerebral imagery“ is contrasted with the „southern“ imagery, manifest in a „dreamlike correspondence of the I and the world.“<sup>363</sup>

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<sup>363</sup> Bernhard Sorg, „In Bennis Gedichten wird dieser Schwere einer komplexen und zerebralen die ‚südliche‘ Bildlichkeit kontrastiert, eine erträumte Übereinstimmung von Ich und Welt,“ *Das Lyrische Ich: Untersuchungen zu deutschen Gedichten von Gryphius bis Benn* (Tübingen: Niemeyer, 1984), p. 186.



Of course, if we take into consideration that what is dawning is the “last happy hour of lying” (“die letzte Glück-Lügenstunde”) of this “southernness,” we are inclined to think of the last image as a mere vision, rather than reality. Indeed, Steinhagen interprets the poem “Karyatide” as the aesthetic expression of a utopian vision of reality. As such, Steinhagen adds, the poem is not propagating an actual solution to the dilemma of modern society but, rather, offers a rather gloomy and disillusioned ending.<sup>364</sup>

The speaker’s frustration is, admittedly, easily detectable, both in the imagery of the last stanza as well as in the vehemence of the speaker’s appeals to the marble statue. However, the “Südlichkeit” remains “ours” (“unsere”) and is “vaulted high.” Considering further that the possessive pronoun “our” (indicating a connection between Venus, the Goddess of love and fertility, as well as a representative of the world of myth) in combination with “southernness” and “vaulted high” can be read as distinct markers of fertility and pregnancy, I propose to interpret the ending of “Karyatide” more positively than Steinhagen.

While the speaker has become aware that regression is not the answer, the images of pregnancy indicate hope, namely for the potential that lies in the future, not in the past. Read through this lens, the poem depicts the speaker’s realization that looking to the past is of no use for the present; the Caryatid must be freed from the constraints of history and tradition that have bound it. The true nature of the Caryatid is dance rather than stagnation, and it is this movement that offers promise in the last line.

## 5.2. “Das späte Ich“ and the Dilemma of Modern Man

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<sup>364</sup> Cf. Steinhagen, p. 42.

The poem „Das späte Ich“ was originally published in February of 1922 in *Gesammelte Schriften*, under the title „Der späte Mensch.“ Maria Fancelli points out that the title “Das späte Ich” is based on a second publication (1927) in *Gesammelte Gedichte*. In comparing the two versions Fancelli ascertains that only the section containing the first two stanzas remained the same.<sup>365</sup> Based on her evaluations of both versions, she proposes to view the poem “Das späte Ich” as a mediator between the “expressionist-dionysian phase” and the “adventure of the static and apollonian poetry.”<sup>366</sup>

### Das späte Ich

#### I

O du, sieh an: Levkoienwelle,  
der schon das Auge übergeht,  
Abgänger, Eigen-Immortelle,  
es ist schon spät.

Bei Rosenletzttem, da die Fabel  
des Sommers längst die Flur verließ –  
moi haïssable,  
noch so mänadisch analys.

#### II

Im Anfang war die Flut. Ein Floß Lemuren  
schiebt Elch, das Vieh, ihn schwängerte ein Stein.  
Aus Totenreich, Erinnern, Tiertorturen  
Steigt Gott hinein.

Alle die großen Tiere: Adler der Kohorten,  
Tauben aus Golgathal –  
Alle die großen Städte: Palm- und Purpurborden –  
Blumen der Wüste, Traum des Baal.

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<sup>365</sup> Cf. Maria Fancelli, „Das späte Ich,“ *Interpretationen. Gedichte von Gottfried Benn*, ed. by Harald Steinhagen (Stuttgart: Reclam, 1997), pp. 61-72.

<sup>366</sup> Fancelli, p. 70. My translation.

Ost-Gerölle, Marmara-Fähre,  
Rom, gib die Pferde des Lysippus her –  
letztes Blut des weißen Stiers über die schweigenden Altäre  
und der Amphitrite letztes Meer –

Schutt. Bacchanalien. Propheturen.  
Barkarolen. Schweinerein.  
Im Anfang war die Flut. Ein Floß Lemuren  
Schiebt in die letzten Meere ein.

III  
O Seele, um und um verweste,  
kaum lebst du noch und noch zuviel,  
da doch kein Staub aus keinen Feldern,  
da doch kein Laub aus keinen Wäldern  
nicht schwer durch deine Schatten fiel.

Die Felsen glühn, der Tartarus ist blau,  
der Hades steigt in Oleanderfarben  
dem Schlaf ins Lid und brennt zu Garben  
mythischen Glücks die Totenschau.

Der Gummibaum, der Bambusquoll,  
der See verwäscht die Inkaplatten,  
das Mondchâteau: Geröll und Schatten  
uralte blaue Mauern voll.

Welch Brüderglück um Kain und Abel,  
für die Gott durch die Wolken strich –  
kausalgenetisch, haïssable:  
das späte Ich.

In three sections, “Das späte Ich” provides us with a dissection of the subject, regarding both the content as well as the form of the poem. Even though the speaker addresses a “du,” the poem appears like a dramatic monologue as opposed to a dialogue, possibly because the “du” is never identified. The “du,” and with that the reader, is asked to perceive three different kinds of flowers within the first section; first a “wave of gillyflowers,”<sup>367</sup> This image, as well as that of the peculiar neo-logism “Eigen-

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<sup>367</sup> „Levkoie“ is another word for „Weißveilchen,“ a flower stemming from the Mediterranean area that was introduced in Germany around the sixteenth century, *Etymologisches Wörterbuch der deutschen Sprache*:

Immortelle,” and as that of the last roses (“Rosenletztem”) all evoke the notion of life past its prime which is then summed up in “es ist schon spät” (4). As its name suggests, the “Immortelle” is a flower that keeps its petals eternally and for this reason is a favorite in graveyards. In the context of this poem, and in combination with “Eigen-,” the image that is evoked is a somewhat cynical one perhaps: though the (“modern”) “I” conceived of itself as immortal it is forced to accept that it is going to die. The word “Abgänger” adds another dimension to death by indicating that something was, in fact, never born and never fulfilled expectations.

Rather than focusing on the withering of autumn and the desire for the plentitude of summer, Benn “undercuts the potential for sentimentality by limiting the perspective to the over-ripeness and decay associated with late summer.”<sup>368</sup> Instead, Benn seems to analyze what brought about this failure to even be born. “Moi haïssable,” taken from Pascal’s *Pensées*, gives a first hint of the contempt that seems to be directed back at the speaker. The “late I,” then, is the object of scorn; it could not reach its potential and is doomed to die because it was and still is “so mädisch analys.”<sup>369</sup> Because it is “wildly” analytical, overly rational perhaps, “das späte Ich” has deteriorated and is now wallowing in its own juice, “nur sich selbst erlebend.” In this regard, Benn’s comment in a letter to Edgar Lohner is significant:

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*Etymologisches Wörterbuch der deutschen Sprache*, ed. by Friedrich Kluge and Elmar Seebold (Berlin and New York, De Gruyter, 1995), p. 573.

<sup>368</sup> Matthew Lee Kaplan, *The Rhetoric of Subjectivity: Studies in the Poetry of Gottfried Benn and Wallace Stevens*. Doctoral Dissertation (The University of North Carolina at Chapel Hill, 1993), p. 24.

<sup>369</sup> Sander translates „das späte Ich“ as „the late Ego.“ I prefer to translate it as “I” because of its relative neutrality.

das späte Ich ist ein einsames Ich, auf sich selbst gestellt und nur sich selbst erlebend [...] In dieselbe Richtung zielt der reichlich unpassende Ausdruck „Abgänger“ in der gleichen Strophe, d.h. der Mensch ist ein Samenerguß ohne Befruchtungswillen und Befruchtungsmöglichkeit, er geht in die Nacht, aus dem Traum, ins Nichts und kennt keine Gemeinschaft, auch keine geschlechtliche mehr [...] Der Extreme in seiner Finallage gibt auch die Liebe nicht mehr ab, er behält sie für sich selbst.

[the late I is a lonely I, answering to itself and experiencing only itself [...] It is this same direction in which the thoroughly inappropriate term ‘drop-out’ in the same stanza is aimed. It means that man is an ejaculation of seed without the will or the means to fertilize. He goes into the night, from a dream, into nothingness and knows nothing of co-existence, not even the sexual kind [...]. The most extreme case in its final stage does not even share love but keeps it for himself.]<sup>370</sup>

In its ability to analyze reductionalistically, “Das späte Ich” dissects the world in order to find answers to its existence and relationship to the world. By breaking apart the connections between itself and the other, it has disengaged previous links to the other objects and is inherently isolated.<sup>371</sup> Consider Benn’s view of the history of the “ich” for an explanation, which he lays out in his essay “Das moderne Ich” (1919):

Der Veränderung des Weltbildes, ausgehend von der durchauspluralistischen Weltauffassung des Animismus: die Welt zerklüftet in unzählige objective Einzelexistenzen, unter denen das Ich, ein Einzelwesen wie jene, keine irgendwie ausgezeichnete Stellung einnimmt, über des Polythesismus allmählich sich verschärfende Trennung [...] bis zu des Monotheismus Einheitsidee: der Welt von *einem* Willen, *einem* Gesetz geregelt, von *einem* Prinzip des Lebens geseelt, geht eine Entwicklung des Lebensgefühls des Menschen parallel, indem das Ich Zug für Zug jenen Gedanken des Subjektivismus in sich bildet, daß die ganze äußere Welt als ein inneres Erlebnis ihm gegeben ist.

[The alteration in worldview that begins with the completely pluralist outlook of animism: the world, shattered into numerous objective single-existences, among which the I, a single being like every other, occupies no particular position, then onto the increasing divide of polytheism [...] and to monotheism’s idea of unity: the world of *one* will, ruled by *one* law, spirited by *one* principle of life. All this

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<sup>370</sup> Benn, in a letter to Lohner, dated 19. February, 1952, *Gottfried Benn, Ausgewählte Briefe. Mit einem Nachwort von Max Rycher* (Wiesbaden: Limes, 1957), pp. 226ff. My translation. See also Benn, *Zur Problematik des Dichterischen*, StA, III: 243.

<sup>371</sup> Cf. Prigogine and Stengers’ claim that reductionism isolated man from nature.

runs parallel to the development of a human attitude that allows the I, step by step, to create the idea of subjectivism within itself, proffering that the whole external world is given to him as an inner experience].<sup>372</sup>

The whole universe, Benn claims, is mirrored within man. Throughout his writings, Benn deals with this development of the conscious and the relationship between the I and the world. The place of its origin is pre-classical Greece, where the animistic soul of the primitives is first associated with the rise of the rationalist principle.<sup>373</sup> The “Ich” is “late,” then, because it belongs to the last phase of human existence.<sup>374</sup> In the first two stanzas of this poem, Benn provides is a diagnosis of the constitutive elements of this period of modernity. The “Ich” is in utter isolation after a fall from earlier periods in which it existed not as a separate entity (which Benn claims makes it non-existent) but as an integral part of the system of nature. In the following excerpt, he sheds light on the interconnectedness of the I and the world that has been lost:

Das Ich ist eine späte Stimmung der Natur und sogar eine flüchtige, Innen und Außen erst spät geschieden [...] Das Ich gehört nicht zu den überwältigenden klaren und primären Tatsachen, mit denen die Menschheit begann, es gehört zu den bedingten Tatsächlichkeiten, die Geschichte haben, es tritt hinzu, es tritt auf innerhalb eines Früheren.

[The I is a late mood/mode of nature, a fleeting one at that, with the Outside and Inside divided up only late (...) The I is not one of the overwhelming, clear, and primary facts with which man began. Instead it is part of the contingent actualities that have a history – it is added, it emerges within an earlier form].<sup>375</sup>

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<sup>372</sup> Benn, *Das moderne Ich* (1919), StA, III: 104. My translation.

<sup>373</sup> Cf. Benn, *Der Garten von Arles* (1920), StA, III: 110-119.

<sup>374</sup> I should point out that in German, the term „late,“ in connection with a name, does *not* indicate that person’s demise.

<sup>375</sup> Benn, *Zur Problematik des Dichterischen* (1930), StA, III: 242. My translation.

Hence, the first section of “Das späte Ich” is an example of precisely what it ironizes – packaged in a parody, rather than an elegy. We could say with Kaplan that it is a depiction of “the result of subjectivity pushed to its limits.”<sup>376</sup> The I has divorced itself from its context, and is now dissecting itself in the same manner it has torn the world apart in a search for scientific truths. As a result, “we end up with a persona that is one part surgeon, one part audience and one part specimen.”<sup>377</sup>

Section two with its four stanzas gives a sketch of the development of the “Ich” within various mythological systems that gave shape to it. Benn starts off with the Christian faith: “Im Anfang war die Flut.” Curiously, he references the deluge of the Old Testament rather than the Word in the gospel according to John.<sup>378</sup> From an evolutionary point of view, of course, water is the beginning of all life. On this water a raft of lemurs is pushing off from the shore. Lemurs are spirits of the dead, caught between this world and the afterlife, and are therefore also considered to be a sort of midway point between apes and men.<sup>379</sup>

But the image of the flood is not restricted to the Bible: Ovid, for example, tells the story of Deucalion and Pyrrha in the *Metamorphoses*. They also make a new beginning after a deluge by planting stones that metamorphose into a new race of men,

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<sup>376</sup> Kaplan, p. 27

<sup>377</sup> Kaplan, p. 27

<sup>378</sup> Kaplan reminds us that “Im Anfang war die Flut” could also refer to Goethe’s *Faust*, which contains the sequence “Im Anfang war das Wort,” “Im Anfang war der Sinn,” and, finally, “Im Anfang war die Tat.” (Kaplan, p. 34).

<sup>379</sup> “lemur,” *The Concise Oxford Companion to Classical Literature*, ed. by M.C. Howatson and Ian Chilvers (Oxford: Oxford University Press, 1996), Oxford Reference Online. Ovid gives an account of the ritual of exorcizing the ghosts in *Fasti*.

which is what Benn seems to be alluding to when he mentions the Elk that was impregnated by a stone. Next, God enters what seems like another version of Noah's ark, and with him embark all that are important ("alle die großen Tiere," II, 5), namely the eagle and the dove. Fancelli suggests that these opposites (predator and prey) most likely represent the two opposing powers of the Roman Empire and Christianity.<sup>380</sup>

As if we were on the float as well, we then take in the panorama of the big cities on the shore, "Palm- und Purpurborden – Blumen der Wüste (...) Marmara-Fähre," allusions to the resurrection of Jesus Christ and to hope in an arid wasteland. It seems that we are eastwardbound, or moving backward in history on a raft engulfed by a stygian flood. The allusion to the "Marmara-Fähre" is again reminiscent of an in-between state, first in the image of the ferry, which oscillates between poles, and also between two worlds and cultures, since the Sea of Marmara is the sea that separates Asia and Europe.

What we pass on the raft are various manifestations of human belief systems – but their altars are silent (II,11). Baal, the Babylonian deity which was often represented as a steer ("letztes Blut des weißen Stiers," II, 11) could also be taken as a metaphor for a kind of eternal recurrence, or a new beginning.<sup>381</sup> The notion of renewed life is also

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<sup>380</sup> Fancelli, p. 67. Let me add that "die großen Tiere" is in German a very common (and often slightly sarcastic) term for an important person. "Ein großes Tier" is thus the equivalent of a VIP. Interpreted in this way, Benn is expressing his contempt for these "important" religions.

<sup>381</sup> Baal's greatest battle was with Death (Mot) who at one point seems to have defeated him. Baal is condemned to descend to the depths of Death's throat, taking the rains, clouds, and other storm god characteristics with him. The result in the world was horrendous drought and devastation until Baal's sister Anat descended, split him in two, ground him up, and sowed him as seed. This in turn brought about the resurrection of Baal and the return of life to the earth. However, the defeat of death and periods of prosperity and fertility are never permanent, and in time Mot would challenge and probably defeat Baal again. Hence, the Baal cycle is a continuous story of life, death, and rebirth. Cf. *The Oxford Companion to World Mythology*, ed. by David Leeming (Oxford: Oxford University Press, 2004), Oxford Reference Online.



evident in the dove, both in an allusion to the Old Testament (the dove bringing an olive branch) as well as to the New Testament, where it is the traditional symbol of the Holy Spirit, the incarnation of Christ and mediator between God and men. Benn's alteration of Golgatha, the location of Christ's crucifixion, is startling but could be interpreted as a juxtaposition of opposite poles as well: by fusing the word with the German term "Tal" (valley), Benn contradicts historical facts, namely that Golgatha is a hill, not a valley and thereby produces a certain tension between spheres, that of the human and that of the deity.

David Kaplan makes an interesting and valuable point regarding the line "Rom, gib die Pferde des Lysippus her-". The works of Lysippus survived Rome only in marble copies of the bronze originals, a fact which makes Kaplan believe that Benn is emphasizing the "inauthenticity of the surviving copies and using Rome as the interlocutor."<sup>382</sup> In doing so, Benn punctuates the literariness of the whole second section, in which he evokes an array of mythical contexts, all of which oppose the anthropocentric view of the modern world. And again we find a kind of bridge, a mediator here since Lysippus is credited with radically transforming Greek sculpture's central genre, the male nude. At the same time, however, Lysippus' commitment to the subjective severely compromised any shared artistic values that existed and, in effect, undermined the arts' social foundations.<sup>383</sup>

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<sup>382</sup> Kaplan, p. 29.

<sup>383</sup> Cf. Andrew F. Stewart, "sculpture, Greek," *The Oxford Companion to Classical Civilization*, ed. by Simon Hornblower and Antony Spawforth (Oxford: Oxford University Press, 1998). Oxford Reference Online.

All that is left of the catalogue of religions and myths is a pile of debris, made up of the images just depicted. They are now merely “Schutt. Bacchanalien. Propheturen./Barkarolen. Schweinerein” (II,13-14), a collage of satirized nouns that clearly indicate the author’s contempt. We can assume with Kaplan that “Schweinerein,” which means not only filth but also indecency, could imply that the rubble of the mythologies is “an off-color joke [...] played on humanity.”<sup>384</sup> “Barkarole” is the song of a gondoliere, and is most likely an indication that we are traveling on the river Styx.<sup>385</sup>

“Propheturen” might refer to the oracle’s loss of self during the time god speaks through her, a notion on which Benn himself sheds some light:

Wir tragen die frühen Völker in unserer Seele, und wenn die späte Ratio sich lockert, in Traum und Rausch, steigen sie empor mit ihren Riten, ihrer prälogischen Geistesart und vergeben eine Stunde der mythischen Partizipation.

[We carry in our soul the early peoples, and whenever the late ratio is loosened, during dream and intoxication, they rise with their rites, their pre-logical spirit, and offer an hour of mythical participation].<sup>386</sup>

The “Ich” that is present in this second section of the poem is one that is reflecting the myth of a collective unconscious, a repository of images that is present in all people. Present in their minds, as well as in their bodies because man registers all of these changes in his memory, in his myths, sagas and epics, while the body summarizes the changes in its rudiments: “[die Persönlichkeit] verzeichnet alle diese Wendungen: geistig

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<sup>384</sup> Kaplan, p. 39.

<sup>385</sup> Cf. “barcarolle,” *The Concise Oxford Dictionary of Music*, ed. by Michael Kennedy (Oxford: Oxford University Press, 1996), Oxford Reference Online.

<sup>386</sup> Benn, *Der Aufbau der Persönlichkeit* (1930), StA, III: 271. My translation.

im Gedächtnis der Menschheit, den Urmythen, Ursachen, Urepen und der Körper summiert sie in seinen Rudimenten“].<sup>387</sup>

What Benn seems to be claiming is that science, which has accompanied Western thought for centuries, cannot provide answers for what R. W. Emerson had labeled the “over-soul.” Instead, Benn appears to favor a theory that is based on an organic cycle of emergence and destruction of succeeding epochs, each of which has left traces in human memory.<sup>388</sup> Access to past generations liberates the unconscious, and reunifies the body with nature. In his essays, Benn denounces the attempt to separate the intellect from the body as an idea of the Enlightenment that modern science adopted. Instead, Benn claims that body and soul cannot be separated, a notion he discusses in detail in *Der Aufbau der Persönlichkeit*. In this essay he draws attention to the importance of the *entire* organism since the body reconnects us to what we otherwise can only sense, namely our affinity with the universe:

Die biologische Grundlage der Persönlichkeit ist nicht wie eine frühere wissenschaftliche Periode annahm, das Großhirn, sondern der ganze Organismus [...] Der Körper ist der letzte Zwang und die Tiefe der Notwendigkeit, er trägt die Ahnung, er träumt den Traum [...] Es gibt [...] nur eine Ananke: den Körper.“

[the biological basis of the development of a personality is not, as was assumed by a former era, the cerebrum, but the entire organism (...) the body is the last force and the depth of necessity, it carries the foreboding, it dreams the dream (...) there is only one ananke: the body].<sup>389</sup>

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<sup>387</sup> Benn, *Der Aufbau der Persönlichkeit*, StA, III: 266. Cf. Edward O. Wilson’s ideas on gene-culture co-evolution, which I discuss in chapter three.

<sup>388</sup> Cf. Benn, *Der Aufbau der Persönlichkeit*, especially pp. 265-269.

<sup>389</sup> Benn, *Zur Problematik des Dichterischen*, StA, III: 246. My translation.

It is only through the body, then, in a state of dream or intoxication (or death) that we can tap into the totality of being. This locus provides the soul with a certain wholeness, in that it connects it with the organic circle of life. The soul, Benn asserts, longs for something more profound and deeper than recognition, something that provides it with wholeness and perfection. Only this wholeness allows us to tap into the spheres of an “ancient totality,” where thought becomes part of what Benn calls “the dark circle of organicism”.<sup>390</sup>

On this journey, presumably on the river Styx, the soul appears like a being between life and death, though closer to death. The author addresses the soul (III,1), lamenting rather cynically its total state of decay, barely alive and still too much.<sup>391</sup> Fancelli notes how the poem’s lines at the beginning of section three formally correspond to its message: by establishing a completely enclosed hermetic space for the soul (III, 3-4) the notion of nothingness is reflected in the repetitive words as well as in the fourfold negation.<sup>392</sup>

If we expected this “soul” to arrive to a dismal welcome at Tartarus, however, we are surprised as merely the fanfares are missing: (III, 6). Fancelli remarks that Benn is evoking the colors of the south here (“blue,” and “glowing”).<sup>393</sup> Indeed, in “Probleme der Lyrik,” Benn refers to the color blue as “the ultimate south-word” (“das Südwort

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<sup>390</sup> Benn, *Zur Problematik des Dichterischen*, StA, III: 242. My translation.

<sup>391</sup> As Kaplan rightly points out, however, “there is no pretence of a dialogue; this is obviously a dramatic monologue,” (p. 41).

<sup>392</sup> Fancelli, pp. 67 and 69.

<sup>393</sup> Cf. Fancelli, p. 68.

schlechthin”) and, more importantly, as the main means for “breaking through and disrupting context after which self-ignition begins,” (“das Hauptmittel zur ‚Zusammenhangsdurchstoßung‘, nach der die Selbstentzündung beginnt“).<sup>394</sup> Perhaps we can apply the image of self-ignition directly to the second stanza of section three; we have thus allusions to a purgatory fire and dream and of course to death (“Hades,” “Totenschau,” and “Oleander,” a poisonous plant). Kaplan interprets these lines, as asserting that the mythic world could not be recreated, the persona cannot fully accept death for that would mean silence. In other words, though the subject is split by self-analysis (section I) or revealed as a trope (section II), Benn cannot fully destroy it since that would mean the end of creation and of poetry. For this reason Kaplan insists that the images of death are sublimated as the visions of a dream (“steigt dem Schlaf ins Lid”) and – as the play on words ‘Lid/Lied makes clear – as art.<sup>395</sup> The “I” expresses itself artfully in the dreams of sleep.

While this stanza might inspire some hope, irony and cynicism are again prevalent in the last two stanzas. Stanza three underscores the impossibility of recreating the lost world described in the second section; it is even mocking the fact that of the formerly grandiose château only rubble and shadows remain. The term “Bruderglück” is a somewhat unexpected term for describing the murderous relationship of Cain and Abel. In this context, however, it makes us all the more aware of a time *before* the break, before Cain killed his brother and became an outcast. Man is Cain, then, who is now exiled from

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<sup>394</sup> Benn, “Probleme der Lyrik,” GW, p. 512. The image of self-ignition brings to mind Nietzsche’s aphorism of the flame („Verbrennen mußst du dich wollen in deiner Flamme“). My translation.

<sup>395</sup> Kaplan, p. 44.

the myth-centered collective and thoroughly isolated.<sup>396</sup> All that is left for “das späte Ich” is to continue playing its role in full consciousness that everything is in vain and ephemeral.

In both form and content, “das späte Ich” is an attempt to expose the fracturing of the “Ich” both diachronically and synchronically. The poem is self-referential. It reflects on itself by conjuring up associations that evoke in the reader sense of the “common soul,” the loss of which the poem itself laments.<sup>397</sup> Yet, the very consciousness of that loss enhances the value of the “I” because it is now capable of constructing a genuine sense of the interconnectedness of everything.

### 5.3. Into Nothingness

„Singen – das heißt Sätze bilden, Ausdruck finden, Artist sein,” (to sing means to form sentences, to find expression, to be artist”), Benn claimed.<sup>398</sup> Of course, even without his definition of the term, we can safely assume that he is invoking the traditional poet of the pre-modern era, who knows nothing of the painful partition between the subject and the world that the modern poet experiences. Instead, he “sings” of their unity. In “Der Sänger,” first published in 1925, Benn attempts to re-establish the connection between subject and object/world, which makes it a programmatic text, perhaps even, as

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<sup>396</sup> Cf. Fancelli, p. 68 and Kaplan, p. 44.

<sup>397</sup> It is, presumably, also for this reason that Benn initially welcomed National Socialism as a vitalistic attack on European intellectualism and on the effete civilization rooted in it.

<sup>398</sup> Benn, *Kunst und Drittes Reich* (1941), StA, IV: 266-287. Here pp. 277, 278. My translation.

Marco Meli claims, “Benn’s most important statement concerning art theory” during the nineteen twenties, an aesthetic manifesto<sup>399</sup>:

Der Sänger

Keime, Begriffsgenesen,  
Broadways, Azimut,  
Turf- und Nebelwesen  
mischt der Sänger im Blut,  
immer in Gestaltung,  
immer dem Worte zu  
nach Vergessen der Spaltung zwischen ich und du.

Neurogene Leier,  
fahle Hyperanämien,  
Blutdruckschleier  
mittels Koffein,  
keiner kann ermessen  
dies: dem einen zu,  
ewig dem Vergessen  
zwischen ich und du.

Wenn es einst der Sänger dualistisch trieb,  
heute ist er Zersprenger  
mittels Gehirnprinzip,  
stündlich webt er im Ganzen  
drängend zum Traum des Gedichts  
seine schweren Substanzen  
selten und langsam ins Nichts.<sup>400</sup>

Oskar Sahlberg proposes to view this poem together with Benn’s other poems written during the twenties as a transition in the sense that the author is seeking an intermediary position between what Sahlberg calls “regression and intellect,” an oscillation between Dionysian and Apollonian tendencies.<sup>401</sup> On top of that, we get the

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<sup>399</sup> Cf. Marco Meli, „Das Manifest eines modernen Lyrikers,“ *Interpretationen*, pp. 88-99. Here p. 89.

<sup>400</sup> Benn, StA, I: 55.

<sup>401</sup> Oskar Sahlberg, „Benns Ekstasen,“ *Gottfried Benn 1886-1956. Referate des Essener Colloquiums*, ed. by Horst Albert Glaser (Frankfurt am Main: Lang, 1989) pp. 213-228. Here p. 213.

impression that the pre-logical existence the speaker is yearning for in “Der Sänger” is attainable only through ecstasy which in turn is provoked by drugs (“Koffein”) and goes hand in hand with the subject’s dissipation and destruction of the self. The Drunkenness or “Rausch,” implied in the second stanza, aids in breaking down the rational exterior of the human brain in order to allow access to the primitive residue of the collective unconscious.<sup>402</sup> Early in his career, in *Gespräch* (1910), Benn himself emphasized the circular, organic notion that is prevalent in the poem, namely in the terms “Keime” and “Begriffsgenesen.” Recall at this point also Benn’s own comment that life is like a closing cycle, returning to the vegetative and organic. Es ist wie ein Kreis der sich schließt (...) nun wird es zurückgezogen zum Vegetativen, Pflanzlichen,” Clearly, the emphasis in describing the world in this poem is on the organic principle of life, on the cycle of destruction and rebirth.<sup>403</sup>

Next among the accumulation of nouns in the first three lines is modern America (“Broadways”) and “Azimut,” which seems to suggest a change in direction (that in turn rhymes with the poet’s vital “blood”).<sup>404</sup> The singer-poet blends these various aspects of modern life with “creatures of turf and fog,” which are most likely a reference to mythology. He blends all these ingredients *in* and thereby *with* his blood, always “forming” (“immer in Gestaltung,”) towards the word, towards new meaning.

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<sup>402</sup> Cf. “Zersprengtes Ich” in the poem “Kokain” (Benn GW, III: 52, l. 13)

<sup>403</sup> Benn, *Gespräch*, StA 7/1:163-171. Here especially pp. 166-169.

<sup>404</sup> Cf. Else Buddeberg, „Der Gebrauch des Verbuns in der Gedichtgruppe ‚Spaltung‘“ in Else Buddeberg, *Studien zur lyrischen Sprache Gottfried Benns* (Düsseldorf: Pädagogischer Verlag, 1964) pp. 43-60. Here p. 47.



I should mention that the expression Benn uses “immer in Gestaltung” is quite ambiguous in the German; it can indicate that the poet is both shaping something (that is, the poem) as well as that he himself is being formed. Had Benn wanted to avoid this ambiguity he would have most likely used the gerund of the verb, “gestaltend” (“forming”). Since he did not do so, we can assume that he is in fact implying that not only the poem but the poet, the creator, is also being continually reshaped towards new meaning. Blood, often a metaphor for the “elemental life” in Benn’s poems – is not only elevated to the status of “fermenting medium for artistic activity,” as Theo Meyer suggests, but the product of this concoction, namely the poem, will necessarily be an insoluble mixture of all ingredients of which the poet himself is one.<sup>405</sup>

Through the medium of poetry, the poet aims to mend the split between the I and the world that emanated from the rationalist thinking of Socrates, through Enlightenment rationalism to the modern ruptured I. Meli draws the connection between content and form when he proposes that the dualistic structure between subject and object, which had been synthesized harmoniously, is now expressed in the structure of the monologue.<sup>406</sup> Benn himself refers to this development as depersonalization, or “Entfremdung der Wahrnehmungswelt” (“alienation of the perceptual world”), which he claims has led to a disease: “Nervenschwäche, Ermüdbarkeit, Psychasthenie” (“neurasthenia, easy tiring, psychasthenia”).<sup>407</sup> This diagnosis attributes the loss of self to the same “disease” N. Katherine Hayles refers to as the denaturing of the human being.

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<sup>405</sup> Theo Meyer, *Kunstproblematik und Wortkombinatorik bei Gottfried Benn* (Köln: Böhlau, 1971), p. 227.

<sup>406</sup> Cf. Mario Meli, “Das Manifest eines Modernen Lyrikers,” *Interpretationen*, pp. 88-99. Here p. 92.

<sup>407</sup> Benn, *Epilog und Lyrisches Ich*, StA, III: 129. My translation.

The prerequisite for achieving the former totality in the aesthetical product, the poem, is the forgetting of the split between I and you: “Das Vergessen der Spaltung/zwischen ich und du.” Clearly, this state of oblivion is equivalent to a state of inebriation that is provoked by caffeine, as Benn depicts in the second stanza, especially in “Blutdruckschleier/mittels Koffein.” Nietzsche readily comes to mind, who had already attributed to art the power of making man forget. Nietzsche is also Benn’s model for his „monological art.“ Distinguishing between referential art (art before witnesses) and monological art, Nietzsche claimed that only the latter enables the poet to forget the world because it is directed only at the poet himself. Monological art, then, and in our case poetry, is the means to both forget the division between I and world as well as to overcome it by creating totality anew. Writing poetry thus becomes a metaphysical activity, which Nietzsche had already declared in 1871; art, he claimed, was the highest task and the “intrinsic metaphysical activity” in life.<sup>408</sup>

The importance of the body is emphasized in the second stanza, which Benn draws attention to throughout his works, especially so in *Der Aufbau der Persönlichkeit* and *Zur Problematik des Dichterischen*:

Der Körper ist der letzte Zwang und die Tiefe der Notwendigkeit, er trägt die Ahnung, er träumt den Traum. Der Schwellungscharakter der Schöpfung ganz evident: in ihm erschuf sie ihre Korrelate und fordert in den Räuschen nach Gestalt. Alles gestaltet sich aus seiner Hieroglyphe: Stil und Erkenntnis, alles gibt er: Tod und Lust.

[The body is the last constraint as well as the depth of necessity; it carries intuition, it dreams the dream. Creation’s tumescent nature utterly evident: in the body, creation fashions its correlates and, in fits of ecstasy, demands form.

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<sup>408</sup> Nietzsche, *Die Geburt der Tragödie*, KSA, I: 24. My translation.

Everything shapes itself from the body's hieroglyph: diction and insight, the body provides everything: death and lust].<sup>409</sup>

The body is the one and only medium that enables us to at least experience memories of our former holistic existence in dream and ecstasy. From the body everything else emerges. In it life begins and ends. The body "provides" both death and the hunger for life and is thus the basis for all growth. It is the smallest common denominator that at the same time contains the code ("Hieroglyphe") for all of creation; it is irreducible and random, that is: maximally complex.<sup>410</sup>

The awareness of the division between subject and object is abolished in stanza two, and perhaps for this reason the world "Spaltung" is not repeated in the last two lines of the second stanza. Meli refers to the dual goals of poetic totalization as being "sammelnde Vision" ("an all encompassing vision") which he takes from Benn himself. It is the theme in the last stanza.<sup>411</sup> Here, Benn juxtaposes the traditional dualistic poet and the modern poet, who shatters and dissolves traditional contents and forms and then assembles them into a completely new whole in a dream.<sup>412</sup> Paradoxically, he does so by means of his brain, "mittels Gehirnprinzip" which got him into the dilemma in the first place. However, we must not forget that the mind is now helpful *only* under the influence of stimulants such as caffeine. Benn thus fuses the body and the mind into what he calls

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<sup>409</sup> Benn, StA, III: 246. My translation.

<sup>410</sup> Cf. my discussion of irreducibility in chapter three.

<sup>411</sup> Cf. Benn's poem „Meer- und Wandersagen,“ StA, I:62. Cf. Meli, p. 95.

<sup>412</sup> Angelika Manyoni proposes to view the reference to the traditional poet, as well as Benn's title of this poem to Goethe's ballad "Der Sänger." This is a surely a valid claim especially when we take into consideration the first version of this poem, which read "Einstmals sang der Sänger / über Lerchen lieb" (ll. 17,18) cf. Angelika Manyoni, *Consistency of Phenotype. A Study of Gottfried Benn's Views of Lyric Poetry* (New York: Lang, 1983), pp. 154-156.

“cerebral principle“ (“Gehirnprinzip”), which Meyer describes as the “symbiosis of biological substrate and pre-rational life.”<sup>413</sup>

The “Traum des Gedichts,” the primal vision if you will, invites recalling the previously cited passage that describes the mythical participation in dream and intoxication: The poet weaves together parts of the whole in a dream in another analogy for the body. The term “schwer” (heavy) connotes something more than the physical; the adjective also evokes a sense of what the poet weaves into the picture is profound and dark. The ambiguity of the word evokes an array of meanings that affect readers differently and at different times.

I have thus tried to establish in what way “forgetting” enables the self to not only capture but to be reincorporated into the sphere of totality, to reinstitute the unity of self and world, which Benn also refers to as “primacy of the whole,” namely *hen kai pan*, the presocratic philosophy.<sup>414</sup> Thus, the ending of “Der Sänger” can be read as a forward movement, which the word “ins” (into) clearly indicates. In a spiraling motion, the poet is weaving towards “nothingness” (“ins Nichts”).<sup>415</sup> While the ending of this poem seems once again to be ruled by disillusionment, we do well to recall that form evolves from chaos. In order for form to be realized anew, it must first dissipate:

Regressionstendenzen, Zerlösung des Ich! Regressionstendenzen mit Hilfe des Worts [...] das ist der Grundvorgang, der alles interpretiert: Jedes Es das ist der Untergang [...], jedes Du ist der Untergang, die Vermischlichkeit der Formen. ‚Komm, alle Skalen tosen Spuk, Entformungsgefühl‘ –

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<sup>413</sup> Meyer, p. 277.

<sup>414</sup> Cf. Benn, *Epilog und lyrisches Ich*, StA, III: 128.

<sup>415</sup> Cf. Meli (p. 96), and Reiniger,(p. 161) who argue that the poem ends on a regressive note.

[Regressional tendencies, dissipation of the self! Regressional tendencies supported by the word [...] that is the basic process that interpretes everything: Every It is demise [...], every You is demise, the diffusion of different forms. ‘Come, all scales are roaring chaos, unforaging’- ]<sup>416</sup>

Benn renders a picture of utter chaos. The dissipation of the self is admittedly ”ghostly” (“alle Skalen tosen Spuk”): but at the same time, this chaos represents pure potential. Thus, the term “Nichts“ is again ambiguous as it implies at the same time its own opposite: *everything*. For this reason Meli speaks of Benn’s “active nihilism” (“aktiver Nihilismus”).<sup>417</sup> Benn himself speaks of the power of nothingness which creates form through words, words that dissolve and coalesce (“schwer erklärbare Macht des Wortes, das löst und fügt. Fremdartige Macht der Stunde, aus der Gebilde drängen unter der formfordernden Gewalt des Nichts“).<sup>418</sup>

The word allows for the experience of regression into the pre-logical and ecstatic sphere. Benn describes just this process in his poem „Ein Wort,“ (1941):

Ein Wort, ein Satz—: aus Chiffren steigen  
Erkanntes Leben, jäher Sinn,  
die Sonne steht, die Sphären schweigen  
und alles ballt sich zu ihm hin.

[A word, a phrase—: from Cyphers rise  
Life recognized, a sudden sense,  
The sun stands still, mute are the skies,  
And all compacts it, stark and dense].<sup>419</sup>

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<sup>416</sup> Benn, *Epilog und Lyrisches Ich*, StA, III: 133. My translation.

<sup>417</sup> Meli, p. 97.

<sup>418</sup> Benn, „Probleme der Lyrik,“ GW, p. 513. My translation.

<sup>419</sup> Benn, “Ein Wort,“ StA, I: 198. Translation by Richard Exner, *Prose, Essays, Poems*, p. 221.

Clearly, there is a sense of recognition, coupled with a sense of familiarity of the state of pre-rational holism. All we are left with now, however, is a shattered sense of self, at the bottom of which lies its disease: over-individualization, („à bas die Kränke: Individuell“).<sup>420</sup>

The self is “forsaken.” Hence the title of Benn’s poem “Verlorenes Ich” (“Forsaken I”), published in 1943 in the collection *Statische Gedichte*. The following excerpts from the poem starkly elucidate the self’s fragmentation, reflected in the web of scientific and historical terms and images, as well as the unnatural and alienating punctuation throughout the poem:

Verlorenes Ich, zersprengt von Stratosphären,  
Opfer des Ion—: Gamma-Strahlen-Lamm—  
Teilchen und Feld—: Unendlichkeitsschimären  
auf deinem grauen Stein von Notre-Dame.

Die Tage gehn dir ohne Nacht und Morgen,  
die Jahre halten ohne Schnee und Frucht  
bedrohend das Unendliche verborgen—  
die Welt als Flucht.

[...]

Die Welt zerdacht. Und Raum und Zeiten  
und was die Menschheit wob und wog,  
Funktion nur von Unendlichkeiten—  
die Mythe log.

[...]

Ach, als sich alle einer Mitte neigten [...]   
Und alle rannen aus der einen Wunde,  
brachen das Brot, das jeglicher genoß—  
o ferne zwingende erfüllte Stunde,  
die einst auch das verlorne Ich umschloß.

[Forsaken I, in rout from stratospheres,  
The ion’s victim—: radiation’s sacrificial lamb—

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<sup>420</sup> Benn, „Chaos,“ StA, I: 79-80.

Particle and field—: infinity's chimeras  
On those grey stones of your new Notre Dame.

Your days go by without a night or morning,  
The years conceal, no snow, no fruit in sight,  
The infinite's dark threatening warning—  
The world as flight.

[...]

World thought to bits. Space and the ages,  
And what mankind groped for as guide,  
Infinities are now their gauges—  
The myth has lied.

[...]

Oh, when all wholly to one center tended [...]  
And all mankind from that one wound seemed welling,  
Breaking the bread that each one might partake—  
Oh distant hour, fulfilling and compelling,  
That even the forsaken did not forsake].<sup>421</sup>

The central theme in this poem is, again, the self is lost in time and space, which leaves it without Christianity as a reference point; the myth was a lie. Without the promise of redemption, it is no longer part of a holistic community, represented in the image of the last supper. The self has thought the world pieces and has failed in replacing Christianity with Science: rationally analyzing the remnants of the process of “Zerdenken” (to think apart) did not provide answers. The solution Benn proposes is to view the “particles” within their context, in their natural totality.

An especially curious and ambiguous term Benn uses in this poem is the chimera, typically interpreted as an individual composed of a mixture of genetically different cells; a supreme hybrid, so to speak.<sup>422</sup> However, it has been argued that, that precisely because

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<sup>421</sup> Benn, „Verlorenes Ich“ in StA, I:205-206. Translation by Robert M. Browning, *Prose, Essays, Poems*, pp. 225-227.

<sup>422</sup> The mythological figure of the chimera has a triple bodily nature, namely the head of a lion, the mid-section of a goat and the hindquarters of a dragon. Cf. Helen King, “chimera,” *The Oxford Companion to the Body*, ed. by Colin Blakemore and Sheila Jennett (Oxford: Oxford University Press, 2001), Oxford Reference Online.

of the uncertainty of her form, the chimera can also be interpreted as a creature of language, thus representing the power of the imagination, of fantasy and illusion. Read in this way, Benn's use of the word suggests his underlying belief in the power of art to achieve a new kind of transcendence. The chimera is thus a metaphor for the poet's power of imagination and, ultimately, for poetry itself, which provides connectivity and continually creates periodic centers and thus identity, in a world of chaotic flux.



## CHAPTER VI

### THE BLESSED RAGE FOR ORDER: WALLACE STEVENS

Wallace Stevens (1879-1955) finds his place as one of the most important American poets of the twentieth century, but it should be noted that he was also a very successful insurance executive. It is perhaps not surprising, then, that in his work he investigates and questions the relation between imagination and reality, which places him in the tradition of Ralph Waldo Emerson.<sup>423</sup>

Stevens was born in Reading, Pennsylvania, on October 2, 1879. He attended Harvard College where he wrote for, and for some time also edited, the *Advocate*. While at Harvard, he read Latin and Greek, besides studying the works and ideas of Darwin, Schopenhauer, Freud, Marx, as well Whitman and the Romantic poets. Without fully earning a degree, Stevens left Harvard in 1900 and moved to New York to work as a journalist. During this time, he returned to his home town frequently to reinvigorate his spirit on the wooded trails and among the fields that were growing increasingly sacred to him. The value of and the yearning for this landscape grew and would appear in numerous transformations in his poetry. At the same time he started feeling increasingly alienated from his family and their religious provincialism.<sup>424</sup>

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<sup>423</sup> For a short but detailed biography of Wallace Stevens, see *Wallace Stevens*, edited and with an introduction by Harold Bloom (Pennsylvania: Chelsea House Publishers, 2003), pp. 14-19.

<sup>424</sup> Cf. Bloom, *Wallace Stevens*, p. 15.

In 1901, Stevens followed his father's practical advice and enrolled in law school, passing the New York Bar exam in 1904. He worked as a law clerk for several different firms and finally took a position with the American Bonding Company in 1908. During these years, he absorbed New York's cultural offerings, attending musicals and theater productions as well as writing plays which he hoped to see staged.<sup>425</sup>

Stevens took a position as resident vice president with the Equitable Surety Company in 1913. Around the same time, he began sending his literary work to various editors. He was then writing regularly the poems which are now found in *Harmonium* but did not publish the collection until 1923. He pursued friendships with people in the art world but generally avoided the New York literary world of the time, though he did maintain long-lasting friendships with William Carlos Williams and Marianne Moore.

Even though *Harmonium* received mixed reactions – the *New York Times* review described the volume as “a glittering edifice of icicles” that “fails to affect the mind” or “arouse emotion” – the criticism mattered little to Stevens.<sup>426</sup> His career with the insurance company became both increasingly demanding and financially rewarding and he now had a wife and daughter, all of which changed his rhythm. He did not publish his

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<sup>425</sup> Cf. Bloom, *Wallace Stevens*, p. 16.

<sup>426</sup> In his review, entitled “Pure Poetry and Mr. Wallace Stevens,” literary critic Percy Hutchinson makes the prediction that “the very remarkable work of Wallace Stevens cannot endure. The verses which go to make up the volume *Harmonium* are as close to ‘pure poetry’ as one could expect to come. And so far as rhythms and vowels and consonants may be substituted for musical notes, the volume is an achievement. But the achievement is not poetry, it is a tour de force, a ‘stunt’ in the fantastic and the bizarre. From one end of the book to the other there is not an idea that can vitally affect the mind, there is not a word that can arouse emotion.” Of the poem “Hibiscus on the Sleeping Shores,” Hutchinson claims that “it is not actually music that one has here, but an imitation of music. And if there is a mood conveyed, the mood could have been equally as well conveyed by other lines equally languid of rhythm.” He concludes that there is “no doubt the theorists in poetry have enriched their craft, but at a disservice to themselves. Wallace Stevens is a martyr to a lost cause.” (cf. article by Percy Hutchinson, *The New York Times*, Aug. 9, 1931).

next collection of poems, *Ideas of Order*, until 1935. Even though the volume was considered to be lacking the “cynicism and abrasive humor of Stevens’ debut,” Stevens’ reputation was fully solidified after the next three releases (all by Knopf): *The Man with the Blue Guitar, and Other Poems* (1937), *Parts of a World* (1942), and *Transport to Summer* (1947).<sup>427</sup> He received numerous awards for his poetry, including the National Book Award in both 1950 and 1954, and the Pulitzer Prize a year later.

Even more so than the above mentioned poets and much like Gottfried Benn, Stevens made his work a locus in which to theorize about the art of poetry. Both Benn’s and Stevens’ poetry displays a skeptical view of language based on the notion that language itself is arbitrary. Thus, the problem of metaphor is central to Stevens’ work: how can we possibly know reality when the language we use to describe and name it already mediates us from it?

This kind of reasoning, or rather persistent doubting is apparent in the self-reflective poetry of Benn too. Poetic self-reflexivity, even though we tend to think of in terms of a circle, provides hermeneutical openness, a kind of sliding of signification among words that are exploited for their etymological riches.<sup>428</sup>

Not surprisingly, there is an array of studies that take into account Emerson’s impact on Stevens. However, Nietzsche’s influence on the poet, though its existence is not controversial, has not received much attention. B.J. Leggett gives perhaps the most comprehensive examination of Nietzsche’s influence on the American poet in *Early*

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<sup>427</sup> Bloom, *Wallace Stevens*, p. 18.

<sup>428</sup> Cf. my discussion of the *ourobos* and self-reference in Chapter three. See also Gottfried Benn’s statement on the etymological riches of the noun.

*Stevens. The Nietzschean Intertext* (1992). Of other Stevens' readers who are also in some way affiliated with Nietzsche's thought, Harold Bloom has placed the German in Stevens' canon.<sup>429</sup> Especially in Stevens' poem "Esthétique du Mal" Nietzsche's presence is universally noted.<sup>430</sup> Leggett specifically points out four books published since 1985 that "suggest that a Nietzschean heritage has now entered the authorized canon of Stevens criticism;" namely Rajeev Patke's *Long Poems of Wallace Stevens* (1985), Milton Bates' *Wallace Stevens: A Mythology of Self* (1985), Robert Rehder's *The Poetry of Wallace Stevens* (1988), and J.S. Leonard and C.E. Wharton's *The Fluent Mundo: Wallace Stevens and the Structure of Reality* (1988).<sup>431</sup>

Of the four, Leonard and Wharton's study stands out in that they claim that Nietzsche was not only a philosophical influence but "a poetic precursor." They demonstrate the same general pattern in Stevens' poetry that underlies the section "Von den drei Verwandlungen" ("three metamorphoses of the spirit") in Nietzsche's *Zarathustra*.<sup>432</sup> Since the publication of Leggett's study in 1992, a few unpublished

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<sup>429</sup> Bloom discusses Nietzsche's influence in the context of his own theory of reading, of which, Bloom claims, Nietzsche and Freud are the principal precursors; cf. Harold Bloom, *The Anxiety of Influence; a theory of poetry* (Princeton, N.J.: Recording for the Blind & Dyslexic, 2005), p. 8-9.

<sup>430</sup> See for example Bloom, *Poems of our Climate*, pp. 228-238, as well as Leggett's comments in *Early Stevens*, p. 12.

<sup>431</sup> Leggett, pp. 10-31.

<sup>432</sup> J.S. Leonard and C.E. Wharton, *The Fluent Mundo. Wallace Stevens and the Structure of Reality* (Athens: University of Georgia Press, 1988), p. 122. Leonard and Wharton actually assert that "no poet has dealt with these Nietzschean figures [death of God, solar images, three metamorphoses, and the eternal return] as explicitly, persistently, and insightfully as Stevens," pp. 103-104.

dissertations have dealt with the German philosopher's influence on Stevens, although that is not their main focus.<sup>433</sup>

Stevens himself mentions Nietzsche explicitly in his letters, most frequently in a dialogue initiated by Stevens' friend Henry Church in 1942, and continued intermittently for the following five years.<sup>434</sup> However, since the validity of Stevens' statements about Nietzsche is questionable, and since their content has no direct bearing on the topic of this investigation, I am not making use of them here.<sup>435</sup>

In this chapter I will outline some fundamental similarities in the philosophies of Emerson, Nietzsche and Benn as they relate to Stevens' work. Next, the most important issue must be discussed, namely how a philosophy that eliminates the old scaffolding of belief systems can become a source of consolation rather than despair. Further, I attempt to demonstrate how Stevens' work can be read through the filter of complexity theory. I am driven by the belief that Stevens rightly earns the title "connoisseur of chaos."<sup>436</sup>

#### "Sunday Morning": The Process of Overcoming<sup>437</sup>

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<sup>433</sup> John Marvin, "Nietzsche and Transmodernism: Art and Science beyond the Modern in Joyce, Stevens, Pynchon, and Kubrick," (thesis, Ph.D.), State University of New York at Buffalo, 2004; Darlene L. Bird "(Extra)Ordinary evenings in New H(e)aven: the Religious Element in the Poetics of Wallace Stevens," (thesis, Ph. D.), University of Glasgow, 2003; Wesley H. North, "Stevens, Santayana, and Nietzsche: Narcissus as the Mirror with a Voice" (thesis, Ph.D.), Texas A&M University, 1995; Glenn A. Kurz, "Of Being Numerous: Multiplicity and Form in Nietzsche, Freud, Wallace Stevens, and William Carlos Williams" (thesis, Ph.D.), Stanford University, 1995;

<sup>434</sup> Leggett provides a discussion of the letters between Stevens and Church, (pp. 34-41).

<sup>435</sup> Cf. Leggett, p. 33, and Bloom, who argues convincingly that Stevens is not to be trusted when he talks of his reading Nietzsche (Harold Bloom, *Wallace Stevens : the Poems of our Climate* [Ithaca, N.Y.: Cornell University Press, 1977], p. 252).

<sup>436</sup> Cf. the title to Stevens' poem "Connoisseur of Chaos," CPP, p. 194.

<sup>437</sup> All poems discussed in this chapter are printed in their entirety in the appendix.

“Sunday Morning,” first published in Harriet Monroe’s *Poetry* in 1915 and again in Stevens’ first collection of poems, *Harmonium* (1923), offers a substitute for the traditional Christian belief system. In its stead, the poem proposes a sort of paganism, or natural religion.<sup>438</sup> Janet McCann points to a note from 1928 in which Stevens himself asserts “the poem is simply an expression of paganism,” as well as to his indication (in 1944) that the assumption that the poem suggests “a naturalistic religion as a substitute for supernaturalism” was correct.<sup>439</sup>

In contrast to its theme is the poem’s traditional form; “Sunday Morning” consists of eight blank-verse stanzas of varying lengths. The poem develops in a kind of inner dialogue between a woman enjoying a peaceful Sunday morning, and her inner voice telling her to abandon her traditional belief system which, as she is aware, has become “complacent”:

Complacencies of the peignoir, and late  
Coffee and oranges in a sunny chair,  
And the green freedom of a cockatoo  
Upon a rug mingle to dissipate  
The holy hush of ancient sacrifice.  
She dreams a little, and she feels the dark  
Encroachment of that old catastrophe,  
As a calm darkens among water-lights.  
The pungent oranges and bright, green wings  
Seem things in some procession of the dead,

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<sup>438</sup> John Timberman Newcomb discusses Harriett Monroe’s reasons for “editorial butchery” in regards to “Sunday Morning.” I will discuss the impetus of this change later in this chapter. See J. T. Newcomb, *Wallace Stevens and literary canons* (Jackson: University Press of Mississippi, 1992).

<sup>439</sup> Cf. Janet McCann, *Wallace Stevens Revisited: “The Celestial Possible.”* (New York: Twayne Publishers, 1995), p. 8; Wallace Stevens and Holly Stevens, ed., *The Letters of Wallace Stevens* (New York: A.A. Knopf, 1966), pp. 250 and 464.

Winding across wide water, without sound.  
The day is like wide water, without sound,  
Stilled for the passing of her dreaming feet  
Over the seas, to silent Palestine,  
Dominion of the blood and sepulcher. (stanza I)

The first stanza makes clear the woman's understanding that the very life she is so thoroughly enjoying is transient. Stevens reflects the two opposing forces (life and death), as well as the two opposing voices (the woman's and her inner voice) in contrasts of bright and dark colors ("sunny," "bright-green" versus "dark" and "darkens"), and smells and sounds ("pungent oranges," "without sound"). Everything alive seems to her like "in some procession of the dead." Appropriately then, the sphere of death is associated with a creeping motion ("winding across wide water"), an allusion to a snake that is traveling very close to the earth. Life, including the belief of its transcendence, is depicted in the image of a bird, flying on "bright, green wings." Her recognition of life's transience leads the woman to remember what Sundays are all about, namely church. The "old catastrophe" with all its indoctrinated imagery ("blood and sepulchre") now encroaches upon her peaceful morning and fills it with guilt and fear, the two main powers in Christian faith.<sup>440</sup>

The second stanza picks up on the woman's doubt which has arisen from her musing over life and death.

Why should she give her bounty to the dead?

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<sup>440</sup> While there surely exists in this poem, as Dennis Donoghue suggest, an underlying sense of loss for the poet's own religious beliefs, Donoghue's view seems somewhat myopic: "At an early age he (Stevens) ceased to be a Christian, but he retained a deeply religious sensibility and spent a lifetime trying to console it for its loss [...] The loss, the heartbreak, come in phrases like "the holy hush of ancient sacrifice" and "The tomb in Palestine / Is not the porch of spirits lingering. / It is the grave of Jesus where he lay." Donoghue does see the consolation that is offered in "Sunday Morning" as "one's own imagination, liaisons, between the self and its environment," but insists that "the loss remains." Cf. Dennis Donoghue, *Connoisseurs of Chaos. Ideas of Order in Modern American Poetry* (New York: Macmillan, 1965), pp. 191-192.

What is divinity if it can come  
Only in silent shadows and in dreams?  
Shall she not find in comforts of the sun,  
In pungent fruit and bright, green wings, or else  
In any balm or beauty of the earth,  
Things to be cherished like the thought of heaven? (stanza II).

“Why should she give her bounty to the dead?”; in other words: why believe in an afterlife that is uncertain, that comes “only in silent shadows and in dreams?” Could she not attempt to find enjoyment, fulfillment and comfort in *this* life? (“comforts of the sun”)? Again, Stevens mentions the “pungent” fruit, the “bright, green wings” but this time they are connected to the earth (“in any balm or beauty of the earth”). Why not attempt to embrace her own divinity?:

Divinity must live within herself:  
Passions of rain, or moods in falling snow;  
Grievings in loneliness, or unsubdued  
Elations when the forest blooms; gusty  
Emotions on wet roads on autumn nights;  
All pleasures and all pains, remembering  
The bough of summer and the winter branch.  
These are the measures destined for her soul. (stanza II).

Still, however, the pleasures she envisions are accompanied by their counterparts: “passions” and “elations” are contrasted with “grievings in loneliness,” and are reflected in the seasons as well (“the bough of summer and the winter branch”). If indeed, “these are the measures destined for her soul,” and death is just as real as life is, then the thought of abandoning safe grounds render her doubtful. But, as both Emerson and Nietzsche affirmed, rebirth requires sacrifice.<sup>441</sup> Stevens thus asserts the necessity of always

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<sup>441</sup> Cf. Emerson’s claim that “The way of life is wonderful: it is by abandonment,” (*Circles*), and Nietzsche’s insistence that one must be willing to burn in one’s own flame in order to be reborn: “Verbrennen musst du dich wollen in deiner eignen Flamme: wie wolltest du neu werden, wenn du nicht erst Asche geworden bist!,” (*Zarathustra*); cf. my elaborations in chapter four. See also my discussion of Gottfried Benn’s poem “Karyatide” in chapter five.



beginning anew, of always reinventing those figures that allowed the ones of the past to live.

In this way, Stevens, like Emerson, Nietzsche, and Benn, is profoundly skeptical of history, and at the same time very much invested in the renewing powers of language. Hence, he proclaims in *Notes toward a Supreme Fiction* (1942), “if you take the varnish and dirt of generations off a picture, you see it in its first idea.”<sup>442</sup> The poem thus aims to removing all of the dead accumulations of history in order to give us the the essence.

As Gottfried Benn does in “Das späte Ich,” Stevens goes on, in stanza three, to trace the history of divinity:

Jove in the clouds had his inhuman birth.  
No mother suckled him, no sweet land gave  
Large-mannered motions to his mythy mind.  
He moved among us, as a muttering king,  
Magnificent, would move among his hinds,  
Until our blood, commingling, virginal,  
With heaven, brought such requital to desire  
The very hinds discerned it, in a star.  
Shall our blood fail? Or shall it come to be  
The blood of paradise? And shall the earth  
Seem all of paradise that we shall know?  
The sky will be much friendlier then than now,  
A part of labor and a part of pain,  
And next in glory to enduring love,  
Not this dividing and indifferent blue. (stanza III).

Stevens moves from the completely inhuman Jove (“inhuman birth, / no mother suckled him”) to the half-human and half-divine Jesus (“our blood, commingling, virginal, / with heaven”), and finally to a god that is fully human, represented by the elements of earth and blood, of nature and man. Such a god will make earth into paradise, and the sky “will

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<sup>442</sup> Stevens, *Letters*, pp. 426-427.

be much friendlier than now” because it will be ours, not the god’s.<sup>443</sup> Perhaps not surprisingly, Stevens mentions the essence of the human body, “blood” (rather than “soul”), three times throughout this stanza and thus reestablishes the connection to the elementary and to the earth. If “our blood” were indeed to become the “the blood of paradise,” and “the earth” became “all of paradise that we shall know,” then we ourselves would be both the created and the creator.<sup>444</sup>

Stevens’ extensive use of colors, especially of green and blue, has always been subject to speculation. In the nineteen seventies, early critics such as Veena R. Prasad proposed a rigid color scheme, which Helen Vendler, roughly ten years later, referred to as “commentary of extraordinary banality.”<sup>445</sup> What seems clear nevertheless is that Stevens does show a strong tendency to attribute the color blue to unattainable abstractions, such as the “dividing and indifferent blue” of the sky in “Sunday Morning,” and “blue-shadowed silk” of Peter Quince’s muse Susanna, who is entirely unattainable to him.<sup>446</sup> In contrast, the color green tends to be associated with a promise of a permanence that is vibrant, physical, and attainable even though it is anything but stagnant. It is embodied, for instance, “in pungent fruit and bright, green wings, or else / In any balm or beauty of the earth” as in “Sunday Morning,” (stanza II).

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<sup>443</sup> Cf. McCann, p. 9.

<sup>444</sup> Cf. Emerson’s, Nietzsche’s and Benn’s references to the earth and to blood in chapters four and five, respectively.

<sup>445</sup> Veena Rani Prasad, *Wallace Stevens: the Symbolic Dimensions of his Poetry* (New Delhi: Arnold-Heinemann, 1987). Cf. Helen Vendler, *Words Chosen out of Desire* (Knoxville: University of Tennessee Press, 1984), p. 53.

<sup>446</sup> See Stevens, “Peter Quince at the Clavier,” CPP, pp. 72-74.

In stanza four it becomes clear that the woman is not quite ready to let go of her transcendental beliefs because she realizes that the paradise offered to her is not permanent:

She says, "I am content when wakened birds,  
Before they fly, test the reality  
Of misty fields, by their sweet questionings;  
But when the birds are gone, and their warm fields  
Return no more, where, then is paradise?" (Stanza IV)

Her inner voice, however – we might call it her "Dionysian side" – assures her that there is in fact a kind of permanence:

There is not any haunt of prophesy,  
Nor any old chimera of the grave,  
Neither the golden underground, [...]
                    nor cloudy palm  
Remote on heaven's hill, that has endured  
As April's green endures; or will endure  
Like her remembrance of awakened birds,  
Or her desire for June and evening, tipped  
By the consummation of the swallow's wings. (stanza IV)

The permanence promised here is not of the traditional kind ("there is not any haunt of prophecy, / Nor any old chimera of the grave" etc.). Instead, the kind of eternal life that is promised here is depicted entirely in images of interactivity between human and natural life ("her remembrance of awakened birds," "her desire for June," "consummation of the swallow's wings"). However, Stevens makes clear that the objects in the physical environment *only* have permanence if they are mediated by the woman, if they are "remembered, desired, consummated" by her. The promised permanence is thus created through the interaction of subject and object and it is clear that they are only moments of permanence, sporadic centers of balance and fulfillment.

In regards to the fact that nothing will outlast the memory's images of the earthly paradise, Bloom makes the incisive observation that "nothing lasts as does the imagination of heaven, and thus only the imagination of heaven is paradise."<sup>447</sup> According to Stevens, permanence, and with it a life of *becoming* – as opposed to *being* – can only be attained by reconciling ourselves with the earth.<sup>448</sup> Janet McCann affirms this interpretation and adds that "one with nature, she (the woman) should not try to separate herself from it and redefine herself as something unnatural or supernatural."<sup>449</sup>

Stevens thus suspects, as do Emerson, Nietzsche, and Benn that what has always been thought of as "the essential, unvarying components of human experience are not natural facts of life but social constructions."<sup>450</sup> What we have lost, then is what Benn referred to as "mythical participation" ("mythische Partizipation") with of collective unconscious that we can reconnect with only through our body – through blood and earth.<sup>451</sup>

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<sup>447</sup> Bloom, *Wallace Stevens*, p. 22.

<sup>448</sup> Reconciliation with the earth is, of course, also a vital component, a prerequisite in fact, for "becoming who you are," ("wie man wird was man ist," Nietzsche's subtitle to *Ecce Homo*) as I have argued in previous chapters. See also B.J. Leggett's examination of the influence of Nietzschean philosophy in Stevens work. He argues that "Sunday Morning" is the best example of a clear intertextual reading: B.J. Leggett, *Early Stevens: The Nietzschean Intertext* (Durham, NC: Duke University Press, 1992), especially pp. 88-89, and 119-122.

<sup>449</sup> McCann, pp. 8 and 9. See also A. Walton Litz's *Introspective Voyager: The Poetic Development of Wallace Stevens* (New York: Oxford University Press, 1972); Litz shows the parallel between the thesis of "Sunday Morning" and William James' comment that "the earth of things, long thrown into shadow by the glories of the upper ether, must resume its rights," (p. 44).

<sup>450</sup> N. Katherine Hayles, *Chaos Bound: Orderly Disorder in Contemporary Literature and Science* (New York: Cornell University Press, 1990), pp. 265-295. Here p. 265 (see also my comments on "denaturing" in chapter four). Guy Rotella provides an interpretation of "Sunday Morning" that points to the emergence of nature as the religion or spirituality, as a result of the philosophical upheavals of the age of science and the end of the nineteenth century (Guy Rotella, *Reading and Writing Nature* [Boston: Northeastern University Press, 1991], pp. 114-116).

<sup>451</sup> Benn, *Der Aufbau der Persönlichkeit* (1930), StA, III:271. My translation.

In stanza five, the woman's fear of death indicates that she needs individual continuity, not the kind of collective transience that is offered to her: "But in contentment I still feel / The need for some imperishable bliss" (stanza V). Her consolation is that she can be part of the organic cycle of nature. In this cycle, death is not to be feared but instead,

Death is the mother of beauty<sup>452</sup>; hence from her,  
Alone, shall come fulfillment to our dreams  
And our desires. Although she strews the leaves  
Of sure obliteration on our paths, [...]  
She makes the willow shiver in the sun  
For maidens who were wont to sit and gaze  
Upon the grass, relinquished to their feet.  
She causes boys to pile new plums and pears  
On disregarded plate. The maidens taste  
And stray impassioned in the littering leaves. (stanza V).

Although the woman is certainly going to die ("although she strews the leaves / Of sure obliteration on our paths"), death is merely a stage in the cycle of ripening, fruition, and decay ("maidens who were wont to sit and gaze / upon the grass, relinquished to their feet. / She causes boys to pile new plums and pears").

Stanza six explains in greater detail the stunning revelation that death is considered the mother of beauty. The stanza conjures up a "what-if-scenario":

Is there no change of death in paradise?  
Does ripe fruit never fall? Or do the boughs  
Hang always heavy in that perfect sky,  
Unchanging, yet so like our perishing earth,  
With rivers like our own that seek for seas  
They never find, the same receding shores  
That never touch with inarticulate pang?  
Why set the pear upon those river-banks

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<sup>452</sup> The fact that Stevens' "death" is feminine ("she") strengthens his interpretation of life and death as an organic and recurring cycle since life is generally depicted as being a "mother," as is the earth, *gaia*.

Or spice the shores with odors of the plum?  
Alas, that they should wear our colors there,  
The silken weavings of our afternoons,  
And pick the strings of our insipid lutes!  
Death is the mother of beauty, mystical,  
Within whose burning bosom we devise  
Our earthly mothers waiting, sleeplessly. (stanza VI).

What if there were a heavenly paradise; “is there no change of death,” and “does ripe fruit never fall?” What Stevens depicts in this so-called paradise is a world of utter stagnation, frozen in life, perfection, and ripeness – “unchanging.” It becomes startlingly apparent that without death, life has no meaning; it is for this reason Stevens asks: “why set the pear upon those river-banks / Or spice the shores with odors of the plum?” There would be no wonder, no fear, no question, and no quest (no color or scent) – and therefore, Stevens claims, also no beauty.<sup>453</sup>

Thus, “death is the mother of beauty” in that death provides the impetus for life and change. It is both end and new beginning in one. Stasis ceases to be mystical, sublime, or beautiful; so ultimately, death is the bearer of beauty, namely of life and diversity. The static nature of the heavenly paradise is thus contrasted with the dynamic nature of life on earth. Stevens makes very clear that we are already a part of the world of beauty. He uses the possessive “our” no less than six times in the fifteen lines of stanza VI, indicating that we both possess the earth and are at the same time possessed by it. The poet makes the same point in the poem “Peter Quince at the Clavier,” where he asserts that “beauty is momentary in the mind - / The fitful tracing of a portal; / But in the flesh it is immortal.” He continues, in the same section of the poem, to compare the flow of

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<sup>453</sup> Bloom suggests that the “earthly mothers waiting, sleeplessly” are perhaps meant to oppose the complacency of the opening scene, (p. 23).

nature to that of a wave: “The body dies; the body’s beauty lives. / So evenings die, in their green going, / A wave, indeterminably flowing.”<sup>454</sup>

The aspect of life’s brute but vital force is evoked in the seventh stanza; in contrast to the complacent attitude of the poem’s opening, which portrays a Dionysian orgy:

Supple and turbulent, a ring of men  
Shall chant in orgy on a summer morn  
Their boisterous devotion to the sun,  
Not as god, but as a god might be,  
Naked among them, like a savage source. (stanza VII).

Stevens’ depiction of the men’s “boisterous devotion to the sun” is suggestive of not only Nietzsche’s cult of Dionysus but also of Benn’s Satyrs (silen) in his poem “Karyatide.”<sup>455</sup> In their actions, the men are “as a god might be,” which implies the god Stevens is envisioning would be as sensual, corporeal, and exulting as the men because they are aware that life is fleeting.<sup>456</sup>

The last stanza makes the argument that Jesus’ tomb in Jerusalem is not the sacred site of the resurrection, but merely the place where “he lay.” The statement seems to imply, as Bloom opines, that Jesus’ remains are in fact still lying there since he is mortal as we all are.<sup>457</sup>

She hears, upon that water without sound,

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<sup>454</sup> Stevens, “Peter Quince at the Clavier,” CPP, pp. 72-74. Here p. 74 (stanza IV).

<sup>455</sup> Cf. my discussion of Benn’s poem in the previous chapter.

<sup>456</sup> Cf. Bloom, who he points out the Biblical imagery in this stanza, stating that “the scene’s evocation of serafin echoes Isaiah’s version of the throne of God (...) The trees are likened to angels, the hills are a choir, and their journey, their fleeting attainment of paradise will only be in (...) their shared knowledge of their mortality and that the life they live here is the only life they will have,” (pp. 23-24).

<sup>457</sup> Cf. Bloom, p. 24.

A voice that cries, "The tomb in Palestine  
Is not the porch of spirits lingering.  
It is the grave of Jesus, where he lay." (stanza VIII)

Rather than living in a world ordered by a transcendental sphere, Stevens proposes, "we live in an old chaos of the sun." What may seem like nature's chaos, however, is actually a womb of possibilities. There *are* certainties that impose a sanctifying order and we know that change is the only constant.<sup>458</sup> This order of change is based not on a system imposed by man but by nature itself:

We live in an old chaos of the sun,  
Or old dependency of day and night,  
Or island solitude, unsponsored, free,  
Of that wide water, inescapable.  
Deer walk upon our mountains, and the quail  
Whistle about us their spontaneous cries;  
Sweet berries ripen in the wilderness;  
And, in the isolation of the sky,  
At evening, casual flocks of pigeons make  
Ambiguous undulations as they sink,  
Downward to darkness, on extended wings. (stanza VIII).

At last then, "at evening," and "in the isolation of the sky" from which the woman is now removed since she has accepted the alternative to Christianity, she is ready to take the leap of faith in herself. The pigeons, in their spiraling journey of "ambiguous undulations as they sink / downward to darkness" embody what Bloom pointedly refers to as "the noble tragedy of our journey."<sup>459</sup> However, even though we are no different from the "causal flocks of pigeons" our journey, as is their flight, is not patterned but random

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<sup>458</sup> See also Emerson's and Nietzsche's proclamations that only change offers permanence which I discuss in chapter four.

<sup>459</sup> Bloom, p. 24. Cf. my elaborations on the significance of the spiral shape/movement in previous chapters.



(“casual”), and their undecipherable movements are nevertheless a kind of self-definition that is not superimposed but natural.<sup>460</sup>

And though we might be missing some of the ecstatic, life affirming attitude that Emerson and Nietzsche had purveyed, we must take into consideration the fact that when it was published in *Poetry*, the poem had ended with what is now recognized as the seventh stanza. Instead it concluded with the ecstasy of human feeling as the only divinity that would be perpetually recreated and sustained by the course of nature.

Since the poem’s first publication in Monroe’s journal, the seventh stanza seems to have been something of a problem. Harriett Monroe apparently felt that its tone did not fit with the rest of the poem.<sup>461</sup> Interestingly, Sandra Gilbert and Susan Gubar have argued that it is precisely the stanza’s incongruity, namely the fact that “both logically and grammatically, this segment of ‘Sunday Morning’ does not quite ‘fit’ into the text’s elegant chain of reasoning” that marks the stanza’s “crucial importance.”<sup>462</sup> I am inclined to agree with Gilbert and Gubar’s reasoning. However, I believe that the last stanza of the poem as we now know it (stanza VIII) can be seen as a different rendering of the theme that is elaborated in the seventh stanza. “We live in an old chaos of the sun” seems to me to be indicating all of the characteristics of natural life that are depicted in the fictitious scene (“a ring of men *shall* chant in orgy” – my emphasis) in stanza VII.

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<sup>460</sup> Cf. McCann, p. 10.

<sup>461</sup> Cf. Stevens, LWS, p. 183.

<sup>462</sup> Sandra M. Gilbert and Susan Gubar, “The Man on the Dump versus the United Dames of America; or, What Does Frank Lentricchia Want?” *Critical Inquiry*, 14 (1988): pp. 386-406. Here p. 393.

Read in this way, the poem as a whole – that is the stanzas with their nuanced endings – are testament to the poet’s own struggle to come to terms with human life that does not provide definite answers. While we might conclude that at this point, a simple identification with the natural cycles does not offer transcendence, I propose that Stevens does not categorically choose “elegy over energy,” as McCann suggests.<sup>463</sup> In fact, as we shall see, testaments to his belief in energy and flux can be found throughout his work. “Sunday Morning” captures the oscillations between doubt and faith in a new kind of transcendence in precisely our “ambiguous undulations.” On extended wings, we cannot but sink downwards since that is simply the nature of life on earth: we are drawn downward by the earth’s force of gravity, and only by incessant beating of our wings can we literally stay aloft.

#### “The Snow Man”: De-creation and Nothingness

In this section, rather than offer a step-by-step interpretation of the poem “The Snowman,” which has been done many times, I will focus on what we might call the speaker’s meditation on “the nothing that is,” as well as the step leading up to it, namely Stevens’ process of decreation.<sup>464</sup>

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<sup>463</sup> McCann, p. 10.

<sup>464</sup> Stevens, “The Snow Man,” CPP, p. 8. Eda Lou Walton, in her review of *Ideas of order* (1936) refers to Stevens as “the poet of meditation,” herself citing the late prominent critic R.P. Blackmur who had coined this description of Wallace Stevens in his first volume of essays, *The Double Agent: essays in craft and elucidation* (Gloucester, Mass.: Peter Smith, 1962, ©1935).

In a single sentence “The Snow Man” turns the mind’s attention from the world created by the self to the larger universe, thus embodying Stevens’ central theme of the relation between imagination and reality. Or, in other words, in the course of fifteen lines of tercets, we witness the “evolution of ‘one’ to ‘no one,’” in a process of decreation.<sup>465</sup> The viewer’s gaze is redirected – through a change in perspective – from the particular, subjective point of view of an interpreting beholder to what we might, for now, call an objective and universal viewpoint:

One must have a mind of winter  
To regard the frost and the boughs  
Of the pine-trees crusted with snow;

And have been cold a long time  
To behold the junipers shagged with ice,  
The spruces rough in the distant glitter

Of the January sun; and not to think  
Of any misery in the sound of the wind,  
In the sound of a few leaves,

Which is the sound of the land  
Full of the same wind  
That is blowing in the same bare place

For the listenener, who listens in the snow,  
And, nothing himself, beholds  
Nothing that is not there and the nothing that is.<sup>466</sup>

What is perhaps especially striking is the fact that the poem does not in fact describe but merely invokes a snowman, namely by mentioning him in the title. Thereafter, the

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<sup>465</sup> George S. Lensing, *Wallace Stevens and the Seasons* (Baton Rouge: Louisiana State University Press, 2001), p. 144.

<sup>466</sup> Stevens, “The Snow Man,” CPP, p. 8.

snowman is involved in the poem only as “a metaphor of a metaphor.”<sup>467</sup> The snowman is a metaphor not only for the state of a “mind of winter” which, as it becomes clear in the course of the poem, is a mind that entertains “nothingness.”

Bloom already offered Nietzsche as an inspiration for “The Snow Man” in 1977. He quotes a passage from Nietzsche’s *Genealogie der Moral* which he claims is echoed in Stevens’ poem.<sup>468</sup> Nietzsche had pronounced what he called the “horror vacui” as the basic trait of human will, which expressed itself in the fact that man is always willing and that “man will wish *Nothingness* rather than *not* wish at all” (“eher will er noch *das Nichts* wollen als *nicht* wollen”).<sup>469</sup> Whether we agree with Bloom or not, it will be both interesting and valuable to compare Nietzsche’s and Stevens’ notions of nothingness.

There have been many propositions as to its nature; J. Hillis Miller identified the poem’s “nothing” with “being” and argued that nothingness for Stevens is the underlying reality, “the source and end of everything.”<sup>470</sup> In Paul Bové’s Heideggerian reading the poem is said to record the process by which its speaker sees “the primordially of Being-in-the-World” and learns that he is “ontologically identical with the other insofar as they are both part of ‘what-is’ existing in and by virtue of ‘nothing.’”<sup>471</sup> Against Miller and

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<sup>467</sup> See David Perkins, *A History of Modern Poetry: From the 1890s to the High Modernist Mode* (Cambridge: Harvard University Press, 1976), especially pp. 542-544. Here 543.

<sup>468</sup> Harold Bloom, *Wallace Stevens: The Poems of Our Climate* (Ithaca N.Y.: Cornell University Press, 1977), pp. 54-61.

<sup>469</sup> Note that Nietzsche’s concept parallels the pigeons’ need to fight gravity in “Sunday Morning.” Cf. Friedrich Nietzsche, *Zur Genealogie der Moral*, KSA V:339 and 412. Translation by Horace B. Samuel, *The Philosophy of Nietzsche* (New York: The Modern Library, 1954).

<sup>470</sup> Joseph Hillis Miller, “Wallace Stevens’ Poetry of Being,” *English Literary History* (Baltimore: The Johns Hopkins University Press, March 1964, 31: 86-105. Here p. 155.

<sup>471</sup> Paul A. Bové, *Destructive Poetics: Heidegger and Modern American Poetry* (New York: Columbia University Press, 1980), p. 191.

Bové, I argue with Leggett that the “nothing” of the poem may be read as Nietzsche’s notion of becoming.

“After one has abandoned a belief in god, poetry is that essence which takes its place as life’s redemption” Stevens claimed.<sup>472</sup> If one no longer believes in God as truth, there are only two entities left: man and nature, that is subject and object. The final unity towards which Stevens’ as well as Benn’s poetry leans is a blending of subject and object, of self and other. Thus, although this dissolving of the self is in one way the end of everything, it is at the same time the beginning of a new unity and as such represents pure potential; a potential that can be realized – temporarily – in poetry: reality is the product of the imagination as it shapes the world. Because it is constantly changing as we attempt to find imaginatively satisfying ways to perceive the world, reality is in fact not static but an activity. We approach reality by putting together parts of the world in an attempt to make it seem coherent. The effort is analogous to seeking temporary redemption from uncertainty.

In order to do so, we must pronounce God dead. In *The Necessary Angel*, Stevens comments on French philosopher and mystic Simone Weil’s coinage of the term “decreation,” which is somewhat reminiscent of Hayles’ notion of “denaturing”:

She [Simone Weil] says that decreation is making pass from the created to the uncreated, but that destruction is making pass from the created to nothingness. Modern reality is a reality decreation, in which our revelations are not the revelations of belief, but the precious portents of our own powers. The greatest truth we could hope to discover, in whatever field we discovered it, is that man’s truth is the final resolution of everything.<sup>473</sup>

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<sup>472</sup> Stevens, CPP, p. 901.

<sup>473</sup> Stevens, *The Necessary Angel*, CPP, pp. 643-751. Here p. 750.

Thus, Stevens relates (through poetry) a destruction of traditional reality leading to a realization that the meaning of a poem is not truth, always recognizing that the poem is the poets' perception of reality. This perception of reality is based on experience, historical context, and poetic skill, that the "imagination is the power of the mind over the possibility of things," he declares in "Imagination as Value;" "it is the source not of a certain single value but of as many values as reside in the possibilities of things."<sup>474</sup> For the imagination to be the source of values, however, its primary function must be to invest what man perceives in the flux of particulars with an order, a truth:

We cannot very well speak of spheres of value and the transmission of a value, commonly considered appropriate to one sphere, to another, and allude to the peculiarity of roles, as the poet's role, without reminding ourselves that we are speaking of a thing in continual flux.<sup>475</sup>

Fluctuations to Stevens reflect the effects of poetic energy; "for where there are no fluctuations, poetic energy is absent."<sup>476</sup> The new truths may then be altered by the endless profusion of new particulars. But the particulars within the flux already consist of the order and truth that the past have imbued them with. These previous systems prevent us from accurately perceiving the flux. Therefore, the imagination must first eliminate the old ideas, in order to discover new ones; decreation must precede creation.<sup>477</sup>

Futhermore, since the imagination manifests itself in words that are merely metaphors of the real world, though as close as we can get to it, the inevitable conclusion

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<sup>474</sup> Stevens, *Necessary Angel*, CPP, p. 726.

<sup>475</sup> Stevens, *Necessary Angel*, CPP, p. 735.

<sup>476</sup> Stevens, *The Irrational Element in Poetry*, CPP, pp. 781-792. Here p. 792.

<sup>477</sup> Cf. David La Guardia, *Advance on Chaos. The Sanctifying Imagination of Wallace Stevens* (Hanover, New England: Brown University Press, 1983), p.15.

is that the order and truth in the pluralistic universe can never be anything other than transient. Although the habit of language deceives man into thinking that the sounds he uses for objects are the objects themselves, they are not. Thus, words are always distinctly separate from the reality they describe and it is precisely this in-between-space where the action happens. We encounter perpetual re-creation.

“The Snow Man” presents a meditation of the mind on its incessant self-reflexivity rather than a description of a snowman. In a single train of thought, the poem illustrates the mind’s inherent dynamism and therefore its autopoietic power to “proceed on its own impulse.”<sup>478</sup> By inverting the visionary process in a meditative manner, the poem comes to the realization of an essential unity.<sup>479</sup> Writing in a world in which the old social, religious, and political hierarchical systems have crumbled and in which consequently, dependence on them is no longer possible, Stevens offers a wholeness that is furnished by the activity of the imagination. The poet is no longer to be “a man on the dump,” sitting on a pile of rubble made up of previous descriptions and interpretations of the world and which no longer have any poetic authenticity.<sup>480</sup> The imagination must reject old structures and avoid becoming locked into any other rigid system of thought.

The consolation and freedom that surface in this view of a fluid universe relate Stevens to Emerson, Nietzsche and Benn, With God dethroned from the top link in the

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<sup>478</sup> Perkins, p. 544.

<sup>479</sup> Cf. my interpretation of Gottfried Benn’s “Nichts” (nothingness) in the previous chapter.

<sup>480</sup> See Stevens’ poem “Man on the Dump,” CPP, p. 184. Cf. Gottfried Benn’s terms for the accumulation of old values in his poem “Das späte Ich” (“The late Ego”): “Schutt. Bacchanalien. Propheturen. / Barkarolen. Schweinerein” (Rubble. And bacchanalia. Prophetcraft. / Barcarolles. And filthy stuff).

great chain of being, the chain itself dissolves into individual links.<sup>481</sup> Rather than placing the subject outside the world, Stevens proposes that essence resides in the interactive dynamic of self and world.

### 6.3. Melodic Interludes of Order

To this point I have argued that for Stevens poetry is “the statement of a relation between a man and the world” and “constantly requires a new relation.”<sup>482</sup> His poem “The Idea of Order at Key West,” published in 1935 and giving the collection *Ideas of Order* its title, is perhaps the best illustration of poetry creating temporary “order,” and thus periodic self-definition. The poem opens with the opposite of what McCann calls the “universal intercourse” between man and world, namely with the assertion of the division between mind and external reality.<sup>483</sup> But the gulf between self and external world is bridged twice; first by the singer who, through her art

was the single artificer of the world  
In which she sang. And when she sang, the sea,  
Whatever self it had, became the self  
That was her song, for she was the maker.<sup>484</sup>

Through her act of imagination, the artist unites self and other into a new, third reality.

What is truly astonishing and remarkable, however, is the fact that the other two figures

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<sup>481</sup> Cf. La Guardia, p. 13.

<sup>482</sup> Stevens, CPP, pp. 910 and 914.

<sup>483</sup> McCann, p. 43.

<sup>484</sup> Stevens, CPP, p. 106.



in the poem, who walk back towards the town, are suddenly seeing the harbor and its boats in new and intensified way. In a second bridging of self and other, the speaker addresses Ramon Fernandez, asking him how the artist has literally enchanted the night.<sup>485</sup>

Ramon Fernandez, tell me, if you know,  
Why, when the singing ended and we turned  
Toward the town, tell why the glassy lights,  
The lights in the fishing boats at anchor there,  
As the night descended, tilting in the air,  
Mastered the night and portioned out the sea,  
Fixing emblazoned zones and fiery poles,  
Arranging, deepening, enchanting night.

Not surprisingly, the poem's final third is generally read as an avowal of the romantic doctrine of the mind's ultimate superiority over nature.<sup>486</sup> The mastery of the metamorphosis of landscape that the two onlookers are witnessing is attributed solely to "the single artificer." As this mastery persists after the singing itself stops, the presence of a spiritual force greater than the water and wind or the singer are implied.

Interestingly, it is not the critic Fernandez but the perceiver/speaker who provides the answer to his own question.<sup>487</sup> He attributes the reordering of nature to a desire that is so intense that he refers to it as rage:

Oh! Blessed rage for order, pale Ramon,

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<sup>485</sup> Even though Stevens insisted that "Ramon Fernandez" was no one in particular, James Longenbach points out that Fernandez was a critic familiar to Stevens. His criticism, which Stevens read in *Nouvelle Revue Française*, the *Partisan Review*, and the *Criterion* (where he was translated by T.S. Eliot) involves theories of perception as well as commentary on the relationship between poetry and social reality (James Longenbach, *Wallace Stevens: The Plain Sense of Things* [New York: Oxford University Press, 1991], pp. 161-162.)

<sup>486</sup> See especially Leonard and Wharton, who argue that Stevens' meditation on the singer's voice ordering the natural world is both an extension as well as a theoretical treatment of a similar theme in Wordsworth and Coleridge, (*Fluent Mundo*, pp. 43-44).

<sup>487</sup> McCann, p. 32.

The maker's rage to order words of the sea,  
Words of the fragrant portals, dimly-starred,  
And of ourselves and of our origins,  
In ghostlier demarcations, keener sounds.<sup>488</sup>

The above lines imply an intrinsic urge, an instinct in fact, to impose order on our surroundings, and thus to make sense of the world. The rage for order is the impulse behind the intense, pure poetry (“keener sounds”) of “ourselves and our origins.” We have merely a vague understanding of our origin and even an even less definite idea of where we are going. The portals to these realms are thus barely discernible (“dimly starred”) but yet full of promise (“fragrant”). The blessed rage, our intense need to create meaning drives towards their articulation and definition (“ghostlier demarcations”).<sup>489</sup>

To make sense of the world is to construct a worldview through an active exercise of the imagination. The “demarcations,” however, are there; they must only be re-discovered, to which the “blessed rage leads.” The searching motion is therefore no dry philosophical activity, but a passionate engagement in creating order and meaning.

Thus, Stevens suggests that we live in the tension between the shapes we assume when the world acts upon us and the ideas of order that our imagination imposes upon the world. The imagination can only conceive of a world for a moment – a particular time, place and culture – and so it must continually revise its conception to align itself with the changing context.”<sup>490</sup>

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<sup>488</sup> Stevens, CPP, p.106.

<sup>489</sup> Cf. Gottfried Benn's postulate: “Come, all scales are roaring chaos, unforing” (“Komm, alle Skalen tosen Spuk, Entformungsgefühl”), Benn, *Epilog und Lyrisches Ich*, StA 3:133. My translation.

<sup>490</sup> Cf. Joseph Hillis Miller, who also shows that universal fluctuation is a constant theme throughout Stevens poetry and “many of Stevens' poems show an object or group of objects in aimless oscillation or circling movement.” (“Wallace Stevens,” in *Poets of Reality: Six Twentieth-Century Writers* [Cambridge: Harvard UP, 1966], pp. 217-284. Here p. 226).

The supreme fiction is that conceptualization of reality that seems to move from rigidity to fluidity. In an ever changing universe, only the supreme fiction is able to create periodic centers of truth:

I am the necessary angel of earth,  
Since, in my sight, you see the earth again,

Cleared of its stiff and stubborn, man-locked set,  
And, in my hearing, you hear its tragic drone

Rise liquidly in liquid lingerings,  
Like watery words awash.<sup>491</sup>

Hence, nothingness is in fact “somethingness,” a faint idea of order, as Stevens proclaims in “Final Soliloquy of the Interior Paramour”: “Here, now, we forget each other and ourselves. / We feel the obscurity of an order, a whole, a knowledge.”<sup>492</sup> The poet as well as his creation are part of this whole. Poetry is not *about* life and the self, it *is* a part of life, and a part of the self, as he claims in “An ordinary evening in New Haven”: “The poem is the cry of its occasion, / Part of the res itself and not about it. / The poet speaks the poem as it is.”<sup>493</sup>

The words that are to be ordered are “of the sea” of ourselves and our origins, “all of which refer the poem back to our very beginnings, our coming into being and entry into the world.”<sup>494</sup> Stevens showed his uncanny suspicion about flow, how it repeated

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<sup>491</sup> Stevens, “Angel Surrounded by Paysans,” in CPP, p. 423.

<sup>492</sup> Stevens, CPP, p. 444 (fourth tercet). See also Charles Berger’s essay where he discusses the idea of nothingness in Stevens’ “The Snow Man,” “The Course of a Particular,” and other late poems (Charles Berger, *Forms of Farewell: The Late Poetry of Wallace Stevens* [Madison, Wisconsin: The University of Wisconsin Press, 1985], pp. 158-161).

<sup>493</sup> Stevens, CPP, p. 404

<sup>494</sup> Robert Rehder, *The Poetry of Wallace Stevens* (London: The MacMillan Press Ltd., 1988), p. 144.

itself but was never the same in many poems but captures it most formidably (as Heraclitus and Pindar had done) in the image of the river, in “This Solitude for Cataracts”:

He never felt twice about the flecked river,  
Which kept flowing and never the same way twice, flowing  
Through many places, as if it stood still in one.<sup>495</sup>

At the same time, Stevens conveys a certain faith in the invisible forms that order takes in nature. In his poem “Final Soliloquy of the Interior Paramour,” Stevens refers to this “whole,” which he claims is sensed, in the following way: “We feel the obscurity of an order, a whole, / A knowledge, that which arranged the rendezvous.”<sup>496</sup> Our knowledge of this past totality, Rehder notes, is “like the shining of a far-away star, as elusive and ineffable as a fragrance, but ineluctably there, the memory of a voice, an underlying inner music, a residuum.”<sup>497</sup> The poet discovers the nature of the self in the interrelation between person and world, an interrelation that has always existed but has been neglected, in favor of religious or scientific interpretations of the world and our role in it. Our deep need for reestablishing the connection, and thus understanding life, is a passion that becomes a “blessed rage” because the desire for complete order – an absolute understanding of the self and the world, of why we are, and who we are – can never be

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<sup>495</sup> Stevens, CPP, p. 366. See also Gleick, p. 196. It is not surprising, then, that literary critic and complexity theorist N. Katherine Hayles should mention Stevens’ poem “Connoisseur of Chaos,” in which the poet asserts that order and disorder are interchangeable: “A. A violent order is disorder; and / B. A great disorder is an order. These / Two things are one,” (CPP, p. 194).

<sup>496</sup> Stevens, CPP, p. 444 (stanza four).

<sup>497</sup> Rehder, p. 144. Cf. my discussion of the impact and importance of music within the process of locating the self, in chapter four.

fully satisfied. If it was, all motion would end, and with it the creative impulse. Thus, there can be only temporary order – periodic centers, in which we get are able to conjure up patterns and shapes in a seemingly chaotic universe.<sup>498</sup>

In 1942, against a backdrop of a world at war, Stevens had dramatized the discovery of order in poetry. He proposed his *Notes toward a Supreme Fiction* as “an antidote to chaos in the public realm,” Daniel R. Schwarz claims.<sup>499</sup> I contend, however, that imposing order on chaos is not a task that will end just as the river will continue to flow. Stevens himself had acknowledged that poems and poetry are to be seen as process, not product.<sup>500</sup> Frank Lentricchia perhaps said it best when he emphasized the “work-in-process” nature of Stevens’ poetry:

The effect of later Stevens, [...] is of someone discoursing on some tremendous urgency, the thing most needed – poetry, the poem, a supreme fiction: but not a person – without ever being able to make it clear what the thing is, though getting close, without ever experiencing the fulfillment that the thing might bring, though getting tantalizingly close....What he is writing is a kind of pre-poetry, a tentative approach to the poem, an enactment of desire not as a state of mind, with all the inert implications of the phrase ‘state of mind,’ but as a movement, and not a movement in a straight line, as if he could see the end of the journey, but a meandering sort of motion: desire as improvisational action which gives us a sense of starting, stopping, changing direction, revising the phrase, refining the language, drafting the poem and keeping the process of drafting all there as the final thing because the finished thing can’t be had.<sup>501</sup>

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<sup>498</sup> In his popular book *Making of a New Science*, James Gleick refers to Stevens as a *vates* and precursor of chaos and complexity theory, (p. 196).

<sup>499</sup> Daniel R. Schwarz, *Narrative and Representation in the Poetry of Wallace Stevens* (New York: St. Martin’s Press, 1993), p. 149.

<sup>500</sup> See Stevens, *Letters*, pp. 435 and 443. Rajeev S. Patke argues convincingly that for this reason, the *Notes* are “neither ‘of’ nor ‘about’ but only ‘toward’, a preposition which is a proposition of arrival, not a statement, even less an assertion. It concedes not a necessary arrival but only the recession of a theoretical possibility, always toward, toward, but never finally there,” Rajeev S. Patke, *The Long Poems of Wallace Stevens: An Interpretative Study* (Cambridge University Press, 1985), p. 118.

<sup>501</sup> Frank Lentricchia, *Ariel and the Police: Michel Foucault, William James, Wallace Stevens* (Madison, Wisconsin: University of Wisconsin Press, 1988), p. 202.

According to Lentriccia, Stevens dramatizes the meandering of his mind, vacillating between imagination and reality, abstraction and specificity, indeterminacy and completion, in its process of seeking to define the nature of the relationship between self and world. Poetry can aid in the quest for order, meaning, and thus self-definition, in that it can point to sporadic centers in an ongoing oscillation between poles. William Burney commented in 1968 that for Stevens, the only order worth looking for was the order of chaos itself.<sup>502</sup> That the poet's appeal thus lies in the inexhaustibility of his theme should come as no surprise; each reader approaches Stevens with his own search and finds his or her own process and sporadic centers, or momentary answers in his poetry.

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<sup>502</sup> William A. Burney, *Wallace Stevens* (New York: Twayne Publishers, 1968), p. 177. See also McCann, pp. 143-144.

## CONCLUSION

### THE POEM AS PERIODIC CENTER

In the course of this dissertation I have attempted to elucidate the affinities between the humanities and the sciences, and thus between the micro- and macrocosmic workings of nature and those of language, literature, and more specifically, lyric poetry.

I have argued that the science of complexity theory can help us gain a deeper understanding of how the creative impuls functions in poetry. Let us recapitulate the main characteristics of complex systems and relate them to what has transpired throughout this investigation:

A complex system is essentially comprised of a network of interrelated parts that have a “history,” and that are incessantly interacting with each other. The system contains feedback loops: signals – both positive and negative to varying degrees – that provide internal information to adjust the. These so-called feedback loops cause an oscillating motion, which in turn makes the system “open” because it is generally far from energetic equilibrium. Because it is open and in continuous flux, the boundaries of the system are difficult to determine. Finally, the dynamic nature of a complex system enhances diversity in that it exhibits emergent behaviors. In simpler terms, the system – because it is characterized by its interactions and not merely its parts – is too complex to be reduced and at the same time it produces new components that are often unexpected. When a “phase transition” takes place as the result of some perturbation of a complex system, it causes new emergent properties and behaviors. Complexity theory can thus be applied to

explain emergent phenomena in nature, in society, to language, and to literary texts. I apply its findings to what I call the “poetic system.”

The continuous oscillation between imagination and reality, between abstraction and specificity, and between indeterminacy and completion constitutes the process of defining the relationship between self and world. Just as we cannot define the workings of a human brain by analyzing an isolated brain cell we cannot interpret a work of art unless we take into consideration the dynamics between the elements that comprise it, as is the current trend in neuroscience.

In literature, especially in poetry, the dynamics appear in such techniques as symbol, metaphor, motif, irony, and pun – essentially in any linguistic device that forces us to understand and experience one thing in terms of another. Thus, the poem itself can be considered an autopoietic system due to the self-moving nature of its subsystems (words), which generate various and ever-changing meanings depending on their context, together with the reader’s expectations.

And since these contexts themselves are forever changing, the whole universe is in fact in fluid, as Heraclitus already suggested, and the only constant in this system is continuous change. On precisely this state of affairs Nietzsche bases his notion of perspectivism. He claims that as self-reflective human beings we need to reevaluate the record of thought that has shaped the world around us and still shapes our minds everyday – and thus constitutes the context for our lives. How can we possibly determine anything if the ground we are standing on is constantly shifting?

The importance of context in regards to creation and definition of the self in its relationship to the world was my focus in chapter four. Pertinent writings by Ralph



Waldo Emerson and Friedrich Nietzsche elucidate the importance of the body in establishing self-reliance, self-organization, and self-definition.

By applying the findings of complexity theory to the works of Gottfried Benn and Wallace Stevens in chapters five and six, I propose to view mimesis as a complex process of not only re-presentation but re-creation. In the course of this process, new creations come into being through the continuous de- and reconstruction of the poem, or poetic system. As such, the poem constitutes a subsystem – as does the human being – in the system of nature itself.

All four authors I discussed in this dissertation provide variations on a theme. They call upon us to create our own truths in attempting to create temporary order. Order, then, is just another word for “meaning.” By refusing to be passive recipients of handed-down presuppositions and approaches, whether they promote a transcendental faith or a purely scientific explanation of the world, we can avoid becoming locked into a specific system of thought. Only if we actively engage in a process of re-discovery can we find answers, answers that are not based on external - namely society-imposed - reference points. Like the sundial I mention in chapter four, man himself must be the gnomon and – in interaction with nature (the sun) – is thereby enabled to “tell the time,” that is to locate the self within a particular space in time.

Much like such a sundial, poetry can aid both the poet as well as the reader (who in fact becomes poet himself) in this quest to “tell time,” to create order, meaning, and thus ultimately self-definition, in that it can point to periodic centers in an ongoing oscillation between poles. Consequently, art can serve as a guide towards reconnecting with our essence: our body and our instincts, none of which are determined or bound by

reason. For this reason Nietzsche warns that we lose the deepest and richest aspects of our nature if we reject what he considers the Dionysian forces within us. For Nietzsche as well as for Emerson, Benn, and Stevens, art is not just a form of human activity but the highest expression of the human spirit because art alone can impose order and thus provide meaning in life.

Gottfried Benn and Wallace Stevens subscribe to a world of process as well as to the notion that the mind must initially let go of old conceptions; only then can the self assert itself, and both self and world can be created anew. This process, which Emerson and Nietzsche described as an act of purging, is for Stevens the procedure of decreation that must precede creation. Benn does not decreate; he initially seeks solace in the act of regression in order to return to a pre-rational state. Eventually, however, he propagates a kind of Nietzschean active nihilism in which “nothingness” actually represents pure potential. “Transcendence,” then, is part of the system itself.

Essentially, our search for order is based on the chaos we perceive around us. Chaos is thus the prerequisite for order. There would be no impulse to create order, form, and thereby meaning if there was no need to do so. It is for this reason that Emerson, Nietzsche, Benn, and Stevens embrace chaos and actually find solace in it: chaos lies at the very bottom of the creative act and therefore of life, and holds within in it an exquisite promise of transcendence.

Hence, this dissertation proposes a new interpretation of the concept of mimesis: the act of poetic creation in the continuous and dynamic re-creation of form is grounded in natural forces themselves. In a world of ever changing and fleeting phenomena, the

poem functions as periodic center, as a salutary moment of confluence between subject and object.

## APPENDIX

### A. Gottfried Benn

„The late Ego“ (Das späte Ich)

I

Gillyflower billow, see it swell,  
moist-eyed already, and abate,  
drop out, and auto-immortelle,  
for it is late.

At rose recession, when the fable  
of summer long has left the mead –  
moi haïssable,  
though now maenadically surveyed.

II

At the beginning was the flood. A lemur raft  
by Elk, the beast, is pushed, made pregnant by a stone.  
Out of death's kingdom, memory, animals tortured, cleft  
God enters in.

All the great animals: eagles of the cohorts,  
doves from Golgatha Vale –  
all the great cities: palm and purple borders –  
flowers of the desert, dream of Baal.

Scree of the Orient, ferry of Marmara,  
Rome, set the horses of Lyssipus free –  
last blood of the white bull over silent altars  
and Amphitrite's final sea –

Rubble. And bacchanalia. Prophetcraft.  
Barcarolles. And filthy stuff.  
In the beginning was the Flood. A lemur raft  
into the last seas pushes off.

III

O soul, putrescent through and through,  
hardly alive but still too much,  
when not one grain of dust from glades,  
when not one leaf from any forest

but leaden hurtles through your shads.

The rocks are glowing, Tartarus is blue,  
Hades ascends in oleander hues  
into sleep's eyelid, burning into sheaves  
of mythic bliss the autopsy.

Bamboo tumescence, rubber tree,  
lake water licks the Inca scrawls,  
the moon château: shadows and scree  
clutter the blue archaic walls.

Fraternal bliss of Cain and Abel  
for whom god cleft the clouds, in spate –  
aetiologic, haïssable:  
the ego, late.

-Translation by Michael Hamburger, in *Gottfried Benn: Prose, Essays, Poems*, ed. by Volkmar Sander (New York: Continuum, 1987), pp.199-203.

“Forsaken I” (“Verlorenes Ich”)

Forsaken I, in rout from stratospheres,  
The ion's victim—: radiation's sacrificial lamb—  
Particle and field—: infinity's chimeras  
On those grey stones of your new Notre Dame.

Your days go by without a night or morning,  
The years conceal, no snow, no fruit in sight,  
The infinite's dark threatening warning—  
The world as flight.

Where will you end, where pitch your camp, where see  
Your spheres outspread—all's one, or loss or gain—  
A game where only wild beasts win: eternities  
Along whose bars you flee in vain.

The bestial glaze: the stars as internalia,  
The jungle death as being and creation's ground,  
Man, Leipzig's slaughter, Catalaunias,  
Down the beasts' mw, all down.

World thought to bits. Space and the ages,  
And what mankind groped for as guide,  
Infinities are now their gauges—  
The myth has lied.

Where from, where to—no night, no morning,  
No evoë, no requiem,  
A cue might satisfy your yearning,  
But who can cue you in?

Oh, when all wholly to one center tended  
And even thinkers only thought of God  
With Shepherd and with Lamb all lives were blended  
And from His cup He cleansed them with His blood,

And all mankind from that one wound seemed welling,  
Breaking the bread that each one might partake—

Oh distant hour, fulfilling and compelling,  
That even the forsaken I did not forsake.

-Translation by Robert M. Browning, *Prose, Essays, Poems*, pp. 225-227.

“A Word” (“Ein Wort”)

A word, a phrase—: from Cyphers rise  
Life recognized, a sudden sense,  
The sun stands still, mute are the skies,  
And all compacts it, stark and dense.

A word—, a gleam, a flight, a spark,  
A thrust of flames, a stellar trace—,  
And then again—immense—the dark  
Round world and I in empty space.

-Translation by Richard Exner, *Prose, Essays, Poems*, p. 221.

B. Wallace Stevens

“Sunday Morning”

I  
Complacencies of the peignoir, and late  
Coffee and oranges in a sunny chair,  
And the green freedom of a cockatoo  
Upon a rug mingle to dissipate  
The holy hush of ancient sacrifice.  
She dreams a little, and she feels the dark  
Encroachment of that old catastrophe,

As a calm darkens among water-lights.  
The pungent oranges and bright, green wings  
Seem things in some procession of the dead,  
Winding across wide water, without sound.  
The day is like wide water, without sound.  
Stilled for the passing of her dreaming feet  
Over the seas, to silent Palestine,  
Dominion of the blood and sepulchre.

## II

Why should she give her bounty to the dead?  
What is divinity if it can come  
Only in silent shadows and in dreams?  
Shall she not find in comforts of the sun,  
In pungent fruit and bright green wings, or else  
In any balm or beauty of the earth,  
Things to be cherished like the thought of heaven?  
Divinity must live within herself:  
Passions of rain, or moods in falling snow;  
Grievings in loneliness, or unsubdued  
Elations when the forest blooms; gusty  
Emotions on wet roads on autumn nights;  
All pleasures and all pains, remembering  
The bough of summer and the winter branch.  
These are the measure destined for her soul.

## III

Jove in the clouds had his inhuman birth.  
No mother suckled him, no sweet land gave  
Large-mannered motions to his mythy mind.  
He moved among us, as a muttering king,  
Magnificent, would move among his hinds,  
Until our blood, commingling, virginal,  
With heaven, brought such requital to desire  
The very hinds discerned it, in a star.  
Shall our blood fail? Or shall it come to be  
The blood of paradise? And shall the earth  
Seem all of paradise that we shall know?  
The sky will be much friendlier than now,  
A part of labor and a part of pain,  
And next in glory to enduring love,  
Not this dividing and indifferent blue.

## IV

She says, "I am content when wakened birds,  
Before they fly, test the reality

Of misty fields, by their sweet questionings;  
But when the birds are gone, and their warm fields  
Return no more, where, then, is paradise?"  
There is not any haunt of prophecy,  
Nor any old chimera of the grave,  
Neither the golden underground, nor isle  
Melodious, where spirits gat them home,  
Nor visionary south, nor cloudy palm  
Remote on heaven's hill, that has endured  
As April's green endures; or will endure  
Like her remembrance of awakened birds,  
Or her desire for June and evening, tipped  
By the consummation of the swallow's wings.

V

She says, "But in contentment I still feel  
The need of some imperishable bliss."  
Death is the mother of beauty; hence from her,  
Alone, shall come fulfillment to our dreams  
And our desires. Although she strews the leaves  
Of sure obliteration on our paths,  
The path sick sorrow took, the many paths  
Where triumph rang its brassy phrase, or love  
Whispered a little out of tenderness,  
She makes the willow shiver in the sun  
For maidens who were wont to sit and gaze  
Upon the grass, relinquished to their feet.  
She causes boys to pile new plums and pears  
On disregarded plate. The maidens taste  
And stray impassioned in the littering leaves.

VI

Is there no change of death in paradise?  
Does ripe fruit never fall? Or do the boughs  
Hang always heavy in that perfect sky,  
Unchanging, yet so like our perishing earth,  
With rivers like our own that seek for seas  
They never find, the same receding shores  
That never touch with inarticulate pang?  
Why set pear upon those river-banks  
Or spice the shores with odors of the plum?  
Alas, that they should wear our colors there,  
The silken weavings of our afternoons,  
And pick the strings of our insipid lutes!  
Death is the mother of beauty, mystical,  
Within whose burning bosom we devise



Our earthly mothers waiting, sleeplessly.

## VII

Supple and turbulent, a ring of men  
Shall chant in orgy on a summer morn  
Their boisterous devotion to the sun,  
Not as a god, but as a god might be,  
Naked among them, like a savage source.  
Their chant shall be a chant of paradise,  
Out of their blood, returning to the sky;  
And in their chant shall enter, voice by voice,  
The windy lake wherein their lord delights,  
The trees, like serafin, and echoing hills,  
That choir among themselves long afterward.  
They shall know well the heavenly fellowship  
Of men that perish and of summer morn.  
And whence they came and whither they shall go  
The dew upon their feet shall manifest.

## VIII

She hears, upon that water without sound,  
A voice that cries, "The tomb in Palestine  
Is not the porch of spirits lingering.  
It is the grave of Jesus, where he lay."  
We live in an old chaos of the sun,  
Or old dependency of day and night,  
Or island solitude, unsponsored, free,  
Of that wide water, inescapable.  
Deer walk upon our mountains, and the quail  
Whistle about us their spontaneous cries;  
Sweet berries ripen in the wilderness;  
And, in the isolation of the sky,  
At evening, casual flocks of pigeons make  
Ambiguous undulations as they sink,  
Downward to darkness, on extended wings.  
-in *CPP*, pp. 53-58.

## “The Snowman”

One must have a mind of winter  
To regard the frost and the boughs  
Of the pine-trees crusted with snow;

And have been cold a long time  
To behold the junipers shagged with ice,

The spruces rough in the distant glitter

Of the January sun; and not to think  
Of any misery in the sound of the wind,  
In the sound of a few leaves,

Which is the sound of the land  
Full of the same wind  
That is blowing in the same bare place

For the listener, who listens in the snow,  
And, nothing himself, beholds  
Nothing that is not there and the nothing that is.  
-in *CPP*, p. 8.

“The Idea of Order at Key West”

She sang beyond the genius of the sea.  
The water never formed to mind or voice,  
Like a body wholly body, fluttering  
Its empty sleeves; and yet its mimic motion  
Made constant cry, caused constantly a cry,  
That was not ours although we understood,  
Inhuman, of the veritable ocean.

The sea was not a mask. No more was she.  
The song and water were not medleyed sound  
Even if what she sang was what she heard,  
Since what she sang was uttered word by word.  
It may be that in all her phrases stirred  
The grinding water and the gasping wind;  
But it was she and not the sea we heard.

For she was the maker of the song she sang.  
The ever-hooded, tragic-gestured sea  
Was merely a place by which she walked to sing.  
Whose spirit is this? we said, because we knew  
It was the spirit that we sought and knew  
That we should ask this often as she sang.

If it was only the dark voice of the sea  
That rose, or even colored by many waves;  
If it was only the outer voice of sky  
And cloud, of the sunken coral water-walled,  
However clear, it would have been deep air,

The heaving speech of air, a summer sound  
Repeated in a summer without end  
And sound alone. But it was more than that,  
More even than her voice, and ours, among  
The meaningless plungings of water and the wind,  
Theatrical distances, bronze shadows heaped  
On high horizons, mountainous atmospheres  
Of sky and sea.

It was her voice that made  
The sky acutest at its vanishing.  
She measured to the hour its solitude.  
She was the single artificer of the world  
In which she sang. And when she sang, the sea,  
Whatever self it had, became the self  
That was her song, for she was the maker. Then we,  
As we beheld her striding there alone,  
Knew that there never was a world for her  
Except the one she sang and, singing, made.

Ramon Fernandez, tell me, if you know,  
Why, when the singing ended and we turned  
Toward the town, tell why the glassy lights,  
The lights in the fishing boats at anchor there,  
As the night descended, tilting in the air,  
Mastered the night and portioned out the sea,  
Fixing emblazoned zones and fiery poles,  
Arranging, deepening, enchanting night.

Oh! Blessed rage for order, pale Ramon,  
The maker's rage to order words of the sea,  
Words of the fragrant portals, dimly-starred,  
And of ourselves and of our origins,  
In ghostlier demarcations, keener sounds.  
in *CPP*, pp. 105-106.

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