Extrait du Rhuthmos http://rhuthmos.eu/spip.php?article1766

Rhythm as Periods, Meters and Cycles - Life Science, **Metrics and Idealist**



Philosophy (1750_1920)

Table of contents

- Rhythm in the Living (Wolff and his followers 1759-1800)
- <u>A Rhythm Episteme? (1800-1830)</u>
- Rhythm as Meter (Hermann 1796-1818)
- Rhythm Between Artistic Dynamics and Cosmic Cycles (Schelling 1802-1805)
- Rhythm as Dialectic (Hegel 1807-1829)

This text follows the previous one.

In her book *Die Form des Werdens: Eine Kulturgeschichte der Embryologie, 1760-1830*, Janina Wellmann claims that around 1800 the concept of rhythm has emerged and penetrated the entire Western culture. In literature, in the theoretical reflection on art, in philosophy, but especially in the newest life sciences, rhythm would have become a common scientific "Paradigm", or better a new "Episteme" (Wellmann, 2010, p. 12, 33, 116).

It would be great if it is true. But I think this idea is largely exaggerated and moreover that it blurs the real evolution of rhythm theories in the 19th century. Inspired by a part of Foucault's work that, at least in my opinion, has proved obsolete - its structuralist part -, it erases the significant conflict that started specifically in the early years of the century, between rhythmologies directly inspired by poetic and artistic experience, and those of biological, metric, or philosophical origin, which quickly spread and happened to dominate the epoch owing to the growing symbolic power of science, technique and idealism. Indeed, due to the progress of embryology and physiology, the new metrics initiated by Hermann, and the philosophies of Schelling and Hegel, the contributions brought by the philologists and poets of the last decades were rapidly forgotten - at least in Germany.

Rhythm in the Living (Wolff and his followers - 1759-1800)

Janina Wellmann admirably shows the rise from 1760 to 1800, of a new interest in the development and reproduction of living beings. Faced with phenomena impossible to understand with the mechanistic paradigms of the previous era, the new life sciences overwhelmingly use rhythm as operational concept able to hold together both movement and form (Wellmann, 2010, p. 16).

The initial moment of the emergence of the concept of rhythm in life science is the controversy between Albrecht von Haller (1708-1777), a supporter of "preformationism", and Caspar Friedrich Wolff (1734-1794), defender of "epigenesis" (Wellmann, 2010, chap. IV). For the first, all organisms are generated by preformed germs, which are kinds of organisms in miniature, and which have only to grow by getting out of their shell. For the second, the development consists of a serial genesis process of a final form, involving interactions between repetition, stability and variation factors. In his thesis *Theoria Generationis* published in 1759 and in his later book *De formatione Intestinorum* (1768-1769), Wolff brings up to date the theory of epigenesis, already advanced by Aristotle and Harvey, and supported at the time by Maupertuis and Buffon. But, without explicitly using the term rhythm, he introduces, besides the germ layers theory, the concepts of pulsed movement, successive stages and interactions.

From his work, Janina Wellmann argues, if not the term at least the concept of rhythm spreads to physiology, where experiments by Johann Christian Reil (1759-1813) on vital forces (*De structura nervorum*, 1796), and Ignaz Döllinger

(1770-1841) on secretion (*Was ist Absonderung und wie geschieht sie* ? 1819), make rhythm a vital part of the organism operation (Wellmann, 2010, chap. VI).

Janina Wellmann points out that this emergence is not unrelated to that recorded in the same period in poets, theorists of poetics, and even, she claims, in music theorists. In the first part of her book, she goes through the works of Klopstock, Hölderlin, Moritz, Novalis, A. W. Schlegel, Schelling (Wellmann, 2010, chap. I, II, III). The link between arts, poetics and life science is embodied in Goethe who, like his French predecessor whom he admires, is a kind of hub where all sciences meet and fertilize each other. Only a few years after his discussion with Moritz (1786) and a few years before that with Schiller on poetic rhythm (1795-1798), Goethe publishes an essay entitled *Versuch die Metamorphose der Pflanze zu erklären* (1790), where rhythm features as an essential part of the metamorphosis of plants (Wellmann, 2010, chap. V).

Janina Wellmann then studies the increasing use of engravings, since the middle of the 18th centuries, to show the successive phases of the embryo development (Wellmann, 2010, chap. VIII), and compares it with other uses of engraved pictures, starting from the middle of the 16th century, representing the successive moments of wrestling, weapon handling, army maneuvering, riding, court dancing, choreography and, in the 18th century, of artifacts crafting (Wellmann, 2010, chap. VII).

In the 19th century, the rhythmic model unfolds, while becoming more complex, in the embryology of Christian Heinrich von Pander (1794-1865) (Wellmann, 2010, chap. IX) and Karl Ernst von Baer (1792-1876) (Wellmann, 2010, chap. X). Both claim that embryonic development can be read as a rhythmic transformation of membranes by successive twists and folds in different directions.

A Rhythm Episteme? (1800-1830)

All these analyses are extremely valuable because they provide us with new historical evidence that can only improve our understanding of a very obscure past. But the general interpretations which are proposed by Janina Wellmann are quite questionable. Inspired in part by Foucault, whose rhythmic analysis of military exercises in *Discipline and Punish* she rightfully extends in chapter VII - while strangely downplaying and depoliticizing his contribution (for another approach see Michon, 2007) - she also wants to update *The Order of Things* and offers to see 1800 as the tipping point when the Modern "Episteme" would have emerged, while no longer being the "Episteme of History", as Foucault put it, but that of "Rhythm".

Such a statement has the advantage of drawing attention to the importance attached to the question of the organization of becoming in scientific, artistic and philosophical discussions of the epoch. It also subtly returns the reflection on rhythm developed by Foucault in the 1970s against his own structuralism of the 1960s by challenging the famous passage of the "era of classification and tabulation" to "the era of history" which, as we have seen with Diderot, starts at least in the 1760s. Finally, it places the concepts produced by the new life sciences in a broader historical context, a move that the history of science specialists rarely make and that explains some of the harsh criticisms that Wellmann's book received (Levit, 2012).

But Wellmann's claim also has two great flaws. The first pertains to her conception of rhythm. While reading her study, one sometimes feels she is not far from the complex idea of *rhuthmos* that was elaborated in the 18th century. Especially when she deals with literature, she rightly notes the intertwining of language and thought, sounds and concepts, for example in Hölderlin's theory of rhythm:

Language, sound and thought must be brought together, on their own each one of these aspects is incomplete. Hölderlin put thinking under the conditions of the sounds of language at the center of his reflections. (Wellmann, 2010, p. 44)

Simultaneously, she introduces concepts such as "system" and "interaction" (*Wechselwirkung*) that are essential features in the new conception of rhythm. For Moritz :

The peculiarity of rhythm pertains to its *dual* structure: on the one hand, each individual element of the rhythm makes a complete, self-contained entity. Where the mind evaluates, hierarchizes and prioritizes, the sensation constitutes in return equality. On the other hand, the individual member becomes meaningful only in relation to all other rhythmic series. (Wellmann, 2010, p. 58)

But because she holds the flatly historicist and empiricist view that the historian must not start from a definite concept of rhythm but from the concept(s) of the period he or she studies (Wellmann, 2010, p. 31) and because she unfortunately knows very little about the research on rhythm that has been going on in poetics, sociology, philosophy and history in France since the 1970s - Foucault is scarcely quoted, Barthes and Lefebvre don't show up at all, Deleuze and Meschonnic are disposed of in a few lines, Sauvanet's and my own research are ignored - most of the time she uses a quite confusing definition or rhythm where metric and "rhuthmic" elements are placed on the same level:

The core elements of rhythm - such as repetition, variation, regularity, period, modification, change, relation - are also the key elements that characterized the new Episteme of organic development around 1800. (Wellmann, 2010, p. 31)

Worse: as it often happens, the empiricist claim hides an unconscious bias. Far from being completely opened to the data, she looks, in her first three chapters and in the chapter dedicated to Goethe, at poetry, art and language mainly from the life science perspective and projects on them a rather poor biological concept of rhythm that finally comes down, in the last part of the book, to periods, cycles and series. For Reil and subsequently for Pander and Baer she notes:

The organism is changing continuously. Cycles, periods and time ratios, day and night, seasons and disposition of vitality are descriptions for the rhythmic structure of the temporal change, to which the organism is subjected. (Wellmann, 2010, p. 182)

In Pander's and Baer's works, with which modern embryology began after 1800, we find, as in Herold's, the series as the image form, paradigmatic until today for the reference structure of images and canonical for the representation of development. (Wellmann, 2010, p. 307)

One then understands why, on the one hand, her survey of literature, art theory and poetics of the end of the 18th century flattens, with a few exceptions, the difference between life science and arts, nature and culture, the rhythmic features of the latter being reduced to those of the former. Klopstock's, Moritz's and Schlegel's contributions are completely misunderstood by overplaying the equivalence of biological and poetic categories they indeed sometimes refer to:

Klopstock is interesting as a transitional figure because on the one hand he still recorded and continued to expand classic rhythm theories, but on the other hand he partly developed a physiological idea of rhythm. This new turn is even clearer by Friedrich Hölderlin, both in his theory of "exchange of sounds" and in his reflections on the good and wrong paths of "arts and education drives". Even Karl Philipp Moritz's concept of autonomy of artistic productions followed the rhythmic order of nature. Moritz exemplified its autonomy aesthetics with the language which, precisely because it is rhythmic, becomes poetry and therefore work of art. Just as the rhythmic movement is the law of development of poetic language, so the rhythmic movement in the organic world is the law of development of the new emerging life. A few years later August Wilhelm Schlegel formulated an anthropological theory of rhythm, in which the poetry was not understood as an expression of human artistic skill, but on the contrary of that of the basic physiological nature of man. The arts remained according to Schlegel, in their most elaborate form as well, attached to the physiology of the body, and rhythm was their fundamental ordering structure. (Wellmann, 2010, p. 34)

This misleading approach explains, on the other hand, why she sees Novalis and Schelling as perfect examples of the artistic rhythm theories of the time :

In Novalis' universal poetry too was rhythm that order, after which Nature was perpetually reshuffled, but also Man integrated the segmented knowledge of disciplines into an ever-changing image of the world. [...] Schelling is important for my argument because in his system rhythm has the key function to convey the spheres of art and nature mutually together: with rhythm art is provided with a concept that nature presents as it is in its very nature. Conversely with rhythm nature is provided with a means to alienate itself into the forms of art. (Wellmann, 2010, p. 34)

Handicapped by her gross empiricism and her lack of knowledge concerning modern research on rhythm, Janina Wellmann has no means to discern the real meaning of the emerging biological conception of rhythm that she wrongly considers as generalizable and when she comes to literature and art, she misses the most productive ideas of the epoch - those of Moritz, Goethe, Schiller, Schlegel, Hölderlin - while paradoxically overvaluing those of Novalis and Schelling which are wrongly aligned with their predecessors and will eventually support the cosmic or technical views of rhythm.

This leads us to the second problem raised by Janina Wellmann's analyses: her endorsement of the a-rhythmic or even anti-rhythmic notion of "episteme." First, the latter loses its meaning once it has been separate from its twin concept, the "epistemic break", which certainly was never explained by Foucault, but that gave to it its rigor and theoretical sharpness. Second, there is a tension between the concept and its use, which only gives a more modern look to what was called in the days of historicist conceptions of history, "the spirit of an era", but still induces, paradoxically, seeking a tipping point between two periods between which numerous continuities have been rightfully shown (e.g. Wellmann, 2010, p. 373). Finally and most importantly, the resumption of this notion favors the erasure of the theoretical conflicts specific to each of these periods, not of course the scientific controversies that Janina Wellmann very accurately reflects but these more secretive theoretical conflicts that divide the future.

For, if it is clear that embryology, as it develops in the 18th century, is not unrelated to a key point made in the *Rêve de d'Alembert*, where Diderot, precisely, takes the egg as a paradigmatic example of a forming process, that is to say, a process which makes shapes appear without having to assume any already existing or eternal form, the serial, cyclic and periodic definition of rhythm Janina Wellmann adopts is opposite to the holistic and interactional conception assumed by Diderot in his reflection on hieroglyph, manner and role (see previous chap. and Michon, 2015), and not least to the subsequent German Romanticism contributions (see previous chap. and Couturier-Heinrich, 2004).

Contrary to the analysis of poetic, pictorial or theatrical rhythms, which always presupposes a duration whose intensity certainly varies but remains continuous, the serializing of images studied in chap. VII representing the successive moments of weapons handling, army maneuvering, court dancing, artifacts crafting or embryo evolution, shows a duration structured by a series of "strong times" (observed phases) and "weak times" (unobserved interphases), whose frequency is determined at least in the case of the embryo in a strictly metric way (the number of days, hours, etc.).

This new imaging technology was by Herold the image series. In the serial representation for the first time appeared the change itself. Development constituted itself no longer in a single image, but in the relation of images. The change of the organic was no longer one impossible to watch but one that could only be brought to appear by investing a series of images: it was taking place in the images as well as between them. Now the sequence of images, the alternation of interspaces and representations, fullness and emptiness, represented and not represented, constituted development. (Wellmann, 2010, p. 306)

One will compare the complexity of Diderot's analysis of pictorial image in the *Salons*, his very ornate description of the circuits of pleasure and truth, with these forms of teaching or truth extraction subjected to absolute control by the power of the gaze and a drastic reduction of meaning complexity.

Moreover, while artistic rhythms convert the powers that come from bodies and groups in innovative and shareable forces, so that they produce something new, some history, some *trans-subject*, biological rhythms simply structure the expression of vital forces with no other consequences than the reproduction of the species (*vis essentialis corporis* in Wolff). These are only operating rhythms that have no explosive character.

Finally, while poetic, artistic and theatrical rhythms will remain in the 19th and 20th centuries liberating or at least transformative powers, the serializing methods increasingly used by life sciences are ways to standardize scientific description and to grasp in an analytical manner the becoming. They will quickly get into consonance with the industrial revolution, the development of technique and capitalism, and offer new ways to penetrate, control and master human bodies (Nick Hopwood, Simon Schaffer, Jim Secord, 2010). There is actually nothing in common between these opposite rhythmological conceptions, except the gross net thrown on one and the other by the analyst.

Rhythm as Meter (Hermann - 1796-1818)

The second force responsible for the vanishing of the 18th century contributions to rhythmology after 1800 is the new theory of meter developed by Hermann and his successors.

Gottfried Hermann (1772-1848) was a very successful professor and a researcher in Leipzig (Couturier-Heinrich, 2004 and 2011). Among many others, he published four books dedicated to metrics: a treatise *De metris poetarum graecorum et romanorum* published in 1796, a *Manual of Metrics* published in German in 1799, some *Elementa doctrinae metricae* (1816) and a shorter version of the latter, *Epitome doctrinae metricae* (1818). He had a very large influence during the first half of the 19th century (Couturier-Heinrich, 2004, p. 152-159).

The method he followed was the same in all four books. Hermann first outlined a speculative theory of rhythm that consisted of an *a priori* definition, i.e. apart from any experience, and the general laws derived from the latter. Then the next sections dealt with the various meters. His purpose was to replace the existing metric, which was only empirical, by a purely rational one. The metric must stop listing and describing the various types of meter and verse through a quite anarchic observation of texts, as it has been done since Ancient Times, and become "the science of the general laws of rhythm" based on rational analysis of the "concept of rhythm" (*Handbuch der Metrik*, p. vi-x, quoted by Couturier-Heinrich, 2004, p. 142).

According to Hermann, the laws deriving from the *a priori* determined essence of rhythm explained the metric patterns followed by the ancient poets, since the latter, at least the Greek poets,

remained, under the exclusive influence of their intuition, so faithful to the necessary laws of rhythm [...] that one never finds rhythmic mistakes in their versification. (*Handbuch der Metrik*, p. vi, quoted by Couturier-Heinrich, 2004, p. 142)

Hermann himself kept contacts with non academic intellectuals or artists of his time such as Wilhelm von Humboldt

and Goethe. But he always remained a fervent Kantian fond of analytical reason and technicism which made his theory a clear case of theoretical regression. In order to build his *a priori* theory of rhythm, Hermann borrowed from the Second and Third Analogies of Experience analyzed in the *Critique of Pure Reason* the concepts of causality and interaction (Second edition, 1787 - Point 3, section 3, chap. II, book II), while establishing between them a necessary link that did not exist in Kant.

According to him, the rhythm, leaving aside all perception, is "the causal link between the time intervals." Being independent of the material nature of the "things" whose succession he governs, rhythm "is" specifically "the form of a causal series, as presented by intervals of time." But Hermann believes that "all causality must be thought through the concept of interaction." The rhythm is therefore for him "the temporal form of causation, as determined by interaction". (*Handbuch der Metrik*, p. 2-22, quoted by Couturier-Heinrich, 2004, p. 142)

For Kant, indeed, any knowledge of successive phenomena requires that they be reported to the concept of cause through the synthetic power of imagination and understanding:

I am only conscious, then, that my imagination places one state before and the other after; not that the one state antecedes the other in the object. In other words, the objective relation of the successive phenomena remains quite undetermined by means of mere perception. Now in order that this relation may be cognized as determined, the relation between the two states must be so cogitated that it is thereby determined as necessary, which of them must be placed before and which after, and not conversely. But the conception which carries with it a necessity of synthetical unity, can be none other than a pure conception of the understanding which does not lie in mere perception; and in this case it is the conception of "the relation of cause and effect," the former of which determines the latter in time, as its necessary consequence, and not as something which might possibly antecede (or which might in some cases not be perceived to follow). (*Critique of Pure Reason*, 1787)

Clémence Couturier-Heinrich notes that, by combining in his theory of rhythm causality and reciprocity, Hermann brings together two aspects of the doctrine of the experience that are normally separate in Kant. In the third Analogy of Experience, Kant associates indeed interaction with simultaneity and not with succession:

All substances, in so far as they can be perceived in space at the same time, exist in a state of complete reciprocity of action. (*Critique of Pure Reason*, 1787)

I think we can see in this oddity a trace of the contemporary debate on rhythm and the importance given to the concepts of system and interaction *(Wechselwirkung)* that we have many times seen appear and will soon be generalized by Humboldt in his reflection on language based on his Leibnizian training, his interest in the third Kantian *Critique* and the poetics progresses of the late 18th century.

According to Hermann, for there to be change and thus succession and rhythm, it is first necessary that the action of the first thing on the second be stronger, or, conversely, less strong than that of the second on the first. Hermann represents the interplay of actions and reactions at work in a rhythmic series by an arithmetic scheme in which time

intervals or members are designated by letters, the action of each of them on the following by + and its action in return on the preceding one by -.

a b c ... x

(+2) (-1+1) (-1+1) ... (-1)

Hermann adds that the *series* is the relevant unit for rhythm in poetry. It corresponds neither to foot nor verse and ends with either a hyphen or verse end. It comprises first the *arsis*, that Hermann defines as an "autonomous cause" which carries a pitch accent, the *ictus*, showing precisely its autonomous character, then the *thesis*, consisting of one or more syllables that "follow the cause as its effects." The *arsis* may be preceded by an *anacrousis* formed with one or more syllables themselves preceded by no *arsis* and being part of an earlier infinite series. The laws derivative of rhythm thus determine the duration, called by Hermann "measure", of the *arsis*, the *thesis* and the *anacrousis*.

Hermann infers from this definition what he calls the "fundamental law of rhythm", namely the constant equality of time intervals except for the first (*Handbuch der Metrik*, p. 22, quoted p. 146). According to the testimony of Wilhlem von Humboldt, who met with Hermann during the summer of 1795, these "intervals" are apparently the syllables (Couturier-Heinrich, 2004, p. 144). But, by claiming that all time intervals of a rhythmic series are equal, except the first that launches the series, Hermann openly disregards what is actually observed in Greek and Latin verses, namely alternating long and short syllables. He also has no clue at all on what is going on in Modern poetry and poetics especially in Germany in his epoch.

In short, although Hermann's work has initiated in Germany the metric studies, enjoyed tremendous success in both classical and modern philology, as well as in linguistics, and was still appreciated in the 20th century - e.g. by Wilamowitz in the 1920s and lately by Schmidt and Parker - as the "founder of the systematic metric" (Couturier-Heinrich, 2004, p. 152), we must recognize that his theory of rhythm accomplished an extraordinary regression compared to the progress carried out during the second half of the 18th century. It developed, from the outset, as a purely academic technical "knowledge" directly indexed on one philosophical theory - or at least on a part of it, because Hermann seemed strangely to have more interest in the first than in the third *Critique* - and completely disconnected from the living theory proposed by the artists of his time and of the past. It is no coincidence that he always refused to engage into the German metric treatise that Goethe begged him to write (Couturier-Heinrich, 2004, p. 140). He reduced again to linearity and alternation what had been bit by bit separate from them.

Wilhelm von Humboldt didn't like much Hermann's theory because he found it too mechanical to truly account for the variety of Ancient but also Modern meters (Couturier-Heinrich, 2004, p. 150). And Jean Paul in the *Aesthetic Preparatory Lecture*, whose final edition appeared in 1813, humorously mocked Hermann and his ilk, he accused to lose themselves in erudition and technique:

Malo quam unam glossam centum textus [I prefer one gloss to hundred texts], you say, and for the Metric of Hermann you would happily give in the hundred twenty-three lost tragedies of Sophocles, if seven still remain to explain the metric. (Jean Paul, *Werke*, ed. Norbert Müller, vol. 5, Munich, Hanser, 1987, p. 391, quoted by Couturier-Heinrich, 2004, p. 152)

Rhythm Between Artistic Dynamics and Cosmic Cycles (Schelling - 1802-1805)

The last forces opposed to the theory of *rhuthmos* come from the Idealist philosophy. Janina Wellmann claims that "the rhythm was a central epistemological category for Friedrich Wilhelm Schelling's philosophy of nature and art." (Wellmann, 2010, p. 94). According to her, rhythm was not to Schelling an issue limited to particular arts like Music and Poetry (Wellmann, 2010, p. 95, n. 10) but a general category which gave him a means to think the permanently progressive and organized activity and productivity he saw in nature (Wellmann, 2010, p. 94) and in art (Wellmann, 2010, p. 102). If this would be true, it would certainly be a very interesting link on the one hand with Spinoza and Leibniz, and on the other with Diderot and the German Romantics. But evidence provided by Janina Wellmann are very few. As a matter of fact, when Schelling addresses as his predecessors questions of dynamic and organization of transformation in nature and art, he never uses the term rhythm. For that purpose he uses "succession" (p. 98), "legality" *(Gesetzmässigkeit)* (p. 99), "organization" (p. 99). He employs rhythm mainly to talk about music, a bit about poetry and architecture. And it would be very mistaken to think that the concept of rhythm he is using in these occasions is compatible with the one elaborated by Diderot and his German successors in the second half of 18th century.

Indeed, in his *Philosophy of Art* (1802-1805), Schelling actually takes a very ambiguous stand. On the one hand, he makes his some of the major breakthroughs by the writers and art thinkers of his time, but on the other hand he incorporates their ideas into a cosmological idealism that ultimately strips them of any historical strength and that will periodically reemerge and oppose them for the next two centuries.

Schelling borrows elements from Schlegel's *Lectures on Philosophical Art-Theory* (1798) and, through him, endorses Moritz's concepts of the autonomy of art and its internal finality.

The poetic work must be a "whole closed onto itself"; it must develop a "discourse" that must "cut itself off from everything else to be closed onto itself, following an internal legality", that is to say, "to move, when seen from the outside, freely and autonomously, but being, only from within, directed and subordinated to legality." (*Philosophy of Art*, quoted by Couturier-Heinrich, 2004, p. 222)

But this closure and this internal legality of the discourse imply a capture and appropriation of time itself:

As soon as the chapter on music, which is the first art he studies in the special part of his aesthetics lecture, Schelling says that owing to rhythm, "the whole [of the musical work] is no longer subjected to time but has time *within itself.*" (*Philosophy of Art*, quoted by Couturier-Heinrich, 2004, p. 223)

In other words, like music, poetry does not escape from time by an ecstasy that would make it communicate directly with eternity, but rather it "submits time," it "has it within itself", owing to the "rhythm" that ensures its "rule and submission" (*Philosophy of Art*, quoted p. 223). Each poem becomes a kind of fragment of absolute, a display of power and organization of time itself.

Janina Wellmann claims that Schelling is inspired by the model of the living organism elaborated by the rising biology (Wellmann, 2010, p. 100). It is true, especially when he speaks about nature dynamics, but I think Schelling

also retrieves, when reflecting on art, Diderot's, Goethe's and Hölderlin's intuition that its broad rhythmic organization gives to poetry a semantic power both independent of its time and able to spread into the future without ever exhausting itself. But while Goethe still talked of rhythms as linearly distributed meters, Schelling, instructed by Moritz's and Schlegel's poetics, now speaks of the rhythm as a unique form, a system bringing together all discourse marks and making its "signifiance" inexhaustible and trans-temporal. Poetic language "must have its own independent movement" and "have its time within itself" (*Philosophy of Art*, quoted p. 222). Thus a number of historicizing elements from poetic origin are acting within his philosophical discourse.

However, simultaneously, we also see in Schelling a desire to escape from time and history in order to mystically join the immutable and perfect operation of the Cosmos. It is very important to underline this aspiration because it will drive again later many rhythm theorists. Whereas Diderot, Goethe, Schiller, Schlegel and Hölderlin developed an aesthetic that gave a place of choice to poetics and drew from their artistic practices a radically new conception of rhythm based on its historicization and potentially politicization, Schelling returns to its traditional metric Platonic conception and, even worse, to the cosmological, mystical and anti-political generalization of this conception initiated by Plotinus, Aristides Quintilian and Boethius in late Antiquity (3rd-6th centuries).

Rhythm is then explicitly presented as a "secret of nature":

Rhythm belongs among the secrets of nature and art that are most deserving of admiration, and no invention of mankind seems to have been more immediately inspired by nature. (*Philosophy of Art*, p. 110)

Developing a suggestion of Novalis, Schelling reinstates the rhythm in a speculative and religious tradition according to which it is a formal element common to biological life, arts - firstly music - and operation of the cosmos. It is reduced to numbers, periods and cycles.

Music manifests, in rhythm and harmony, the pure form of the movements of the heavenly bodies, freed from any object or material. In this respect, music is that art which casts off the corporeal, in that it presents movement in itself, divorced from any object, borne on invisible, almost spiritual wings. [...] The first author claiming this vision of celestial movements as rhythm and music was, as we know, Pythagoras. But we also know that his ideas were misunderstood. [...] In the world of planets, rhythm is the dominant principle, their movements are pure melody; in the world of comets, it is harmony that dominates. (*Philosophy of Art*, Fr. trans. by C. Sulzer & A. Pernet, p. 191-193)

Schelling then draws an analogy between the "poetic work", the "universe" and all "heavenly bodies", planets, comets, that compose it:

What makes the heavenly body [...] have time in itself, is in art, insofar as music as well as speech are concerned, rhythm. Since music and speech have a movement in time, their works would not be wholes closed onto themselves if they were subject to time and if, on the contrary, they would not submit it and had not it within themselves. This domination and subjugation of time = *rhythm*. (*Philosophy of Art*, quoted by Couturier-Heinrich, 2004, p. 224)

In a new way - new for the time but actually quite archaic - Schelling speaks of "the rhythm of the universe and nature" (*Philosophy of Art*, quoted by Couturier-Heinrich, 2004, p. 223). Thus the *trans-subjective* character of art works is no longer seen as a radically historical power whereby Man makes himself, i.e. as an infinite ethical and political power, but as a tiny share of a natural creativity that actually pertains to the entire cosmos. An extremely ancient metaphysical tradition is thus revived, a tradition that will find an outcome at the end of the 19th century - now well known thanks to Olivier Hanse's work - in the panrhythmism that will irrigate the *Lebensreform* movement, the philosophies of Steiner and Klages, and their further extensions in the Nazi worldview. From this point of view, Schelling is certainly one of the thinkers responsible for the reduction of the revolutionary forces triggered by Spinoza's and Leibniz's ontologies and epistemologies, Diderot's and German Romantics' theories of art and language, and one of the main contributor, if unwillingly, of what Meschonnic called in his1975 book *The Sign and the Poem* the Modern "cosmic paradigm of rhythm."

Rhythm as Dialectic (Hegel - 1807-1829)

Unlike Schelling, Hegel avoids the pitfalls of the cosmic model, since he situates his own reflection in a history of the Spirit, which has not completely cut ties with Christianity. In his work the rhythm is not dissolved in a sacred naturalistic model. But Hegel is also much less sensitive than Schelling to the contributions to poetics developed by the poets themselves. Therefore, if his repression of the rhythmological findings by Diderot and the Romantics is motivated by somewhat different reasons, it is no less powerful. The rhythm is no longer absorbed in Nature but is now assimilated by the History of the Spirit.

Pierre Sauvanet has recently presented a list of occurrences of the term "rhythm" in the Preface to the *Phenomenology of Spirit* (1807) (Sauvanet, 2014). This record suggests that Hegel's use of the term is only metaphorical. Rhythm is never conceptualized for itself and it only designates the dialectic movement :

The *logical necessity* alone is the rational and the rhythm of the organic whole. (*Phenomenology of Spirit*, § 56)

This nature of scientific method, which consists partly in not being separate from the content, and partly in spontaneously determining the rhythm of its movement, has [...] its proper exposition in speculative theory. (*Phenomenology of Spirit*, § 57)

Philosophy should relinquish "any personal intrusions into the immanent rhythm of the concept, and not intervene in it either arbitrarily or with wisdom obtained elsewhere." (*Phenomenology of Spirit*, § 58)

This conflict between the general form of a proposition and the unity of the Concept which destroys that form is similar to the conflict that occurs in rhythm between meter and accent. Rhythm results from the juggle and unification of both. So, too, in the philosophical proposition, the identification of Subject and Predicate is not meant to annihilate the difference between them expressed in the form of the proposition; their unity, rather, is meant to emerge as a harmony. (*Phenomenology of Spirit*, § 61)

Clémence Couturier-Heinrich notes also that in his Lectures on the Philosophy of Religion Hegel uses the term to

describe the dialectical organization in three successive phases:

The Spirit is firstly this: to be active in general. Specifically, it is the activity consisting in manifesting itself. Secondly it is this: the Spirit that manifests itself, determines itself, enters into the existence, gives itself some finitude. Thirdly, [...] it comes back into itself, becomes and is for itself as it is in itself. This is the rhythm or the pure and eternal life of the Spirit itself. If there were not this movement, then it would be something dead. (*Lectures on the Philosophy of Religion*, delivered in 1821, 1824, 1827 and 1831, quoted by Couturier-Heinrich, 2004, p. 19 in the 1827 version).

Despite the fact that the establishment of the text of these lectures has been complicated by the disappearance of Hegel's manuscripts, "it is certain, says Clémence Couturier-Heinrich, that Hegel used the word *rhythm* to speak of the dialectics of the concept or the Spirit." (Couturier-Heinrich, 2004, p. 19, n. 45)

Through its identification with the dialectical pattern, the rhythm disposes of both binary and arithmetic logic of the metric succession, but by so doing Hegel does not break actually completely with the Platonic model of a measured organization of time and becoming.

On the one hand, despite its flexibility and its differences with the methodical and critical dualisms (Descartes, Kant), the dialectic ternary schema remains tainted by a certain formalism which ensures its permanent identity, even through the plurality and complexity of History. The "rhythm of the Spirit" is for Hegel "its pure and eternal life."

On the other hand, if the affirmation of the content no longer appears as a simple emanation of an absolute which is completely identical to itself and always already contains in itself a negative part, the movement caused by the negation and the negation of this negation remains guided by a desire for removing this difference and reconciliating the opposites. The sequence of phases in which the spirit manifests itself, the absolute is particularized and the essence passes into existence, is punctuated by moments when it returns "into itself, for itself as it is in itself."

Dialectics therefore requires both the continuation of a certain formalism and a firm teleology that put Hegel's conception of rhythm clearly on Plato's side and drives it away from most pre-Socratic thinkers, but also from Spinoza, Leibniz and Diderot, and even from his Romantic contemporaries. In his texts on dialectic, the rhythm becomes succession of periods, cycles, just like, in his *Lectures on the Philosophy of History*, and *Reason in History*, the life of Nations and the general theory of History which always implies return and repetition of the same cycles even on a different level.

When, in his *Lectures on Aesthetics or Philosophy of Art* (Lecture delivered in 1818, 1820-1821, 1823, 1826, 1828 to 1829 and published posthumously in 1835), Hegel finally readdresses the issue of art, he starts by explicitly rejecting all progresses made in the second half of the 18th century.

Opposing Diderot and his Romantic predecessors, he claims, based on a very crude semiotic position, that poetry has nothing to do with the "collocation [of words] into sentences and elaborate paragraphs, nor in euphony, rhythm, rhyme, etc." It is only a matter of "imaginations and ideas":

Poetic expression does seem to lie throughout in words alone and therefore to be related purely to language, but the words are only *signs* of ideas and therefore the real origin of poetic speech lies neither in the choice of single words and the manner of their collocation into sentences and elaborate paragraphs, nor in euphony, rhythm, rhyme, etc., but in the sort and kind of ideas [or of the way of imagining things]. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

Contrary to what has been shown by numerous writers, poets and thinkers in the second half of the 18th century - but one certainly could go further back to Condillac and Leibniz - Hegel argues there are no bonds between ideas and sounds and rhythm produces anything but a "sensuous charm" or "magic" that blurs the pureness of our "feelings and ideas" :

Of course the trick of meter and the interlacings of rhyme seem an irksome bond between the sensuous element and the inner ideas, more irksome than that forged in painting by colors. This is because things in nature, and the human form, are colored naturally, and to portray them without color is a forced abstraction; whereas an idea has only a very remote connection, or no inner connection at all, with the syllables used as purely arbitrary signs of a communication, with the result that the obstinate demands of the laws of prosody may easily seem to fetter the imagination and make it no longer possible for the poet to communicate his ideas precisely as they float before his inner consciousness. Consequently, while the flow of rhythm and the melodic sound of rhyme exercises on us an indisputable magic, it would be regrettable to find the best poetic feelings and ideas often sacrificed for the sake of this sensuous charm. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

Yet Hegel recognizes that any great artist actually works within the "sensuous element" of language:

A genuine artistic talent moves always in its sensuous element as in its very own, where it is at home; it neither hinders nor oppresses, but on the contrary it uplifts and carries. So as a matter of fact we see all the great poets moving freely and assuredly in the field of their own self-created meter, rhythm, and rhyme, and only in translations is following the same meters, assonances, etc., a frequent constraint for the translator and a torture for his skill. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

Anyway for him rhythm is limited to meter and strictly separate from prosody. Nothing from the discoveries made by his predecessors remains. Poetry and more generally language are torn into two rigorously separate parts:

For the more detailed division of the subject, there are principally two systems and we have to cast light on their distinction from one another. The first is rhythmic versification, which depends on the specific length and shortness of syllables, their manifold ways of figured conjunction and temporal progress. The second consists in emphasizing sound as such, in respect both of single letters, consonants or vowels, and of whole syllables and words, ordered and figured either according to the law of the uniform repetition of the same or a similar sound, or to the rule of symmetrical interchange. This is the sphere of alliteration, assonance, and rhyme. (*Aesthetics: Lectures on Fine Art,* Vol. 2, Part 3, Sect. 3, Chap. 3)

Following Hermann, Hegel defines rhythm in a strictly metrical way:

He identifies the "rhythmic movement" of the sounds to their "length and shortness" and defines it as "the movement of syllables regarding the duration." (*Aesthetics: Lectures on Fine Art*, 1823, quoted by Couturier-Heinrich, 2004, p. 130)

Poetry and music are put under the same metric cloak:

Just as in musical declamation the rhythm and melody must take on the character of the subject-matter and be made appropriate to it, so versification too is a music which, though in a remoter way, makes re-echo in itself that dim, yet specific, direction of the course and character of the ideas in question. To this end the meter must announce the general tone and spiritual touch of a whole poem. (*Aesthetics: Lectures on Fine Art,* Vol. 2, Part 3, Sect. 3, Chap. 3)

Poetic rhythm is assimilated to musical beat:

The element strictly speaking animating in rhythmic meter is introduced only by accent and caesura which run parallel with what we came to recognize in music as a the rhythmical beat. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Section 3, Chap. 3)

Furthermore, Hegel situates poetics in the historicist paradigm that divides the history of mankind into two parts. Rhythm appears, according to the model of the Biblical story of the Paradise and the Fall, as a kind of origin that Modern Times would have lost to the benefit of rhyme and harmony:

As Schelling, he distinguishes "two verse systems" explicitly situating one in Antiquity, the other in the Modern era. [...] According to him the ancient verse system is exclusively rhythmic, while the modern system is based on the rhyme but can arrange a secondary place to the rhythm. (Couturier-Heinrich, 2004, p. 130)

Eventually, yet, he wonders if this opposition is legitimate:

While in the way indicated we have distinguished and contrasted rhythmic versification and rhyme, the question arises whether a unification of the two is not conceivable and has not actually occurred. In this matter it is especially some modern languages that are important. We cannot absolutely deny that they have reintroduced the rhythmic system or combined it to some extent with rhyme. (*Aesthetics: Lectures on Fine Art,* Vol. 2, Part 3, Sect. 3, Chap. 3)

But, according to him, those experiments have failed because modern languages have no natural rhythmic qualities:

On this matter I will only reiterate what I have said already about the difference between classical and modern languages. Rhythmical versification rests on the *natural* length and shortness of syllables, and in this it has from the start a fixed measure which cannot be determined or altered or weakened by any *spiritual* emphasis. Modern languages, on the other hand, lack a natural measure like this because in them the verbal accent, given by the meaning, may itself make a syllable long in contrast to others which are without this significance. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

That is why, apparently, Modern poetry uses metrical accent and caesura:

Therefore, another element had to appear and be developed in compensation, one in itself of a more spiritual sort than the fixed natural quantity of the syllables. This element is the metrical accent and the caesura, which now instead of proceeding independently of the word-accent coincide with it. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

And why Modern poets are wrong when they blend rhythm and rhyme and should stick instead to classical meters:

As for the actual combination of rhythm and rhyme, it too is to be permitted, though to a still more restricted extent than the introduction of classical meters into modern versification. (*Aesthetics: Lectures on Fine Art,* Vol. 2, Part 3, Sect. 3, Chap. 3)

Finally, Hegel explicitly rejects the new experiments made during his youth to get rid of metric rules and nostalgically asserts his preference for the traditional metric forms:

It is true that, in his opposition to the false bombast of the French alexandrine meter, Lessing tried to introduce prosaic speech into tragedy especially, as something more suitable, and Schiller and Goethe followed him in their early stormy works by a $\hat{a}\in$ œnatural $\hat{a}\in$ • pressure for imaginative writing with a richer subject-matter. But Lessing himself finally used iambics again in his *Nathan*; Schiller similarly forsook, with his *Don Carlos*, the path he had trodden before; and Goethe too was so little satisfied with his earlier prosaic treatment of his *Iphigenia* and his *Tasso* that he transferred them to the field of art itself, alike in expression and prosody, and recast them entirely into the purer form, which is the reason why our admiration of these works is ever excited anew. (*Aesthetics: Lectures on Fine Art*, Vol. 2, Part 3, Sect. 3, Chap. 3)

Nothing of the intuitions, discoveries and inventions made in the 18th century remains. Hegel's theory of rhythm is one of the clearest case of rejection of modernity and reactionary thinking ever proposed.

To be <u>continued</u>.