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Elements of Rhythmology vol. 3 - Conclusion

- Recherches
- Vers un nouveau paradigme scientifique ?
- Sur le concept de rythme



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[Previous chapter](#)

When, on the eve of World War I, Christian Ruckmich published his first bibliographical survey on rhythm studies, his list comprised more than two hundred titles (Ruckmich, 1913). The time seemed to have come, as Michael Golston once put it, "for a science of rhythm to be formulated as a theoretical field in its own right." However, paradoxically, "no complete study of rhythm was ever made during the period in question; the subject as such was never officially articulated or codified. Rather, one finds issues of rhythm informing, to varying degrees, a significant number of discourses at different moments during the first half of the century." Rhythm appeared more of "a floating field, so to speak, mutually informing a variety of disciplines" than a clearly defined scientific concept (Golston, 1996).

Both this success and this paradox raised, Golston remarked, a series of questions: Why, first of all, such a sudden and powerful surge from the 1890s? Why a notion which was so pervasive in such a vast array of disciplines has yet never been, at the time, the subject of any proper theoretical investigation for its own sake? What were then the mechanisms by which rhythm "was 'carried over' from one discourse to the next"? Finally, how now to "collate, chart, and analyze" the widespread use of the notion of rhythm "between 1890 and 1940"? (Golston, 1996)

To the first question Golston's answer was actually quite limited. Since he was mainly interested in the ethical and political future outcomes of this rhythmic complex, he limited himself to describing the surge of studies devoted to rhythm in the twenty-five years preceding World War I. He made very few comments on the previous period.

Golston answered the second and third questions by giving the notion of rhythm the role of an "ideological incubator," that is, of a principle sufficiently vague and ductile to be adapted and become productive in a large array of disciplines.

Because, as Ruckmich puts it, the subject of rhythm is so easily "carried over" from one discipline to the next, rhythm moreover acted precisely as an ideological incubator, able to traverse easily and mutually inform diverse areas of discourse. Historically a unique production of the early twentieth-century machine-age, in which, Ruckmich intimates, it is destined to play a major theoretical role, rhythm was ready by 1913 to become deployed in generative theoretical relationships with/in a significant array of social, political, and scientific discourses. (Golston, 1996)

Finally, Golston answered the last question by considering the rhythmic complex of the pre-war period as an "incubational topography" and by tracing its numerous connection lines with the authoritarian regimes which developed subsequently in the 1920s and 1930s.

After becoming an object of inquiry in psychology, physiology, and musicology early in the century, rhythm is "carried over" into studies of genetics and eugenics, while at the same time playing an important role in theories of work and child-rearing. Ultimately enlisted in Fascist discourse, it is employed as a tool of propaganda for the construction of genetically encoded subject-bodies, as well as the body of the state, itself conceived as a complex array of interpenetrating personal, physiological, biological, racial, industrial, psychological, and historical rhythms. Thus by examining theories of rhythm as they were gradually articulated and as they informed one another in the first half of the 20th century, we are able to trace an incubational topography, as it were, in the making, and to come to an understanding of the mechanisms by which scientific and theoretical discourses are appropriated for ideological ends. (Golston, 1996)

Since Golston's essays (1996 and 2008), other scholars have confirmed and complemented his investigation. In Germany, Inge Baxmann (2009) and, in France, Olivier Hanse (2010) have thoroughly examined the sociological, ideological, and political context of the rhythmic complex developed between the last decade of the 19th century and the first half of the 20th century.

As far as I am concerned, I have concentrated on the rhythmological side of the issue. The evidence gathered in the current book clearly confirms and complements the previous contributions but it also allows to answer somehow differently some of the questions raised.

1. Regarding the building up of the interest in rhythm during the period spanning between 1890 and 1914, the current survey has shown that we actually need to go much further back into the 19th century. If the Belle Époque witnessed, in many fields, a noticeable multiplication of academic studies on rhythm, accompanied by a rhythm mania among artists, dancers, and pedagogues, this surge did not come out of nowhere. Some researches already extensively using the notion were conducted as soon as the 1840s and 1850s in medicine, and natural science, as well as in aesthetics, art theory, and art history, no to mention alternative views on rhythm, that had already been developed by some poets, musicians, musicologists, and philosophers. There was a large movement of diffusion of the rhythm concept throughout the 19th century and even before (see vol. 2).

As in previous volumes, I did not want to burden the reader with too many historical considerations. However, pending a thorough investigation, this theoretical spread in its Platonic as well as in its anti-Platonic forms can certainly be accounted for by the dramatic changes that occurred in most Western societies during the period. Great-Britain had entered a new phase of modernization as soon as the last decades of the 18th century; France had followed in its specific way in the first decades of the 19th century. After 1850, this movement spread out to most Western and Central European countries and the United-States, accelerating after 1870 with the Second Industrial Revolution. Rapid industrial growth, strong urbanization, as well as development of new transportation and communication technologies triggered a kind of fluidization of societies and daily life. Corporate concentration, financialization, and growing imperialism radically changed the capitalist system itself.

These mutations, which accelerated between 1890 and 1914, may certainly account for the increased emphasis on the dynamic or processual character of the phenomena observed in each particular science and for the need to assess their temporal organization.

2. Concerning the paradox of a notion spreading in a vast array of disciplines without never being the subject of a theoretical investigation for its own sake, the ideological analyses are certainly valuable but they tell only half of the story: they deal with the discourses on rhythm only from their ethical and political consequences, that is from their subsequent developments. Yet, while the latter have certainly to be taken into serious consideration, we must also look at them according to their specific scientific and theoretical nature, which means to take into account their past history.

If the structuring role unconsciously played in this matter by the Platonic metric paradigm and its constant ignorance, indifference, or even hostility to challenges coming from poetics, art, or philosophy are correctly recognized, it becomes possible to answer Golston's own interrogation concerning the lack of proper theoretical thematization. The unconscious acceptance of the metric model explains that it has never been really problematized. Most 19th-century scientists considered meter as a natural phenomenon and not as a concept that had its own complex and debatable history.

3. Moreover, the ductility of the term rhythm and its frequent transfer from one discipline to the next, in other words its ideological nature, become clearer. Although some subtle changes and differences were sometimes implemented, the various scientific uses remained within the larger limits of a single paradigm which constituted an homogeneous

field allowing easy and harmless translations.

Finally, the emphasis on the Platonic roots throws new light on the massive use of the notion of rhythm in the 1920s and 1930s by the authoritarian regimes which, more or less consciously, resumed with the authoritarian ethics and politics associated, from its very origin, with the Platonic reduction of rhythm to meter (see vol. 1, chap. 2).

4. Concerning now the way to "collate, chart, and analyze" the widespread use of the notion of rhythm, this is where the difference between the rhythmological perspective advocated in this book and that of previous studies is maybe the greatest.

4.1 Mere observation proves that we need, first, to better differentiate between various disciplinary uses and, in each discipline, between successive acceptations. We have found, for instance, that in poetry a powerful opposition to the *classical metric norm* developed and a larger concept encompassing the *whole system of signifiers* tended to replace it. As in classical architecture, this new concept of rhythm involved the notion of relations between elements of a totality, but it also implied, by contrast with architecture or painting, to observe these relations in their internal temporality (for examples, see vol. 2, chap. 8). Similarly, in music the definition of rhythm significantly changed in the second part of the 19th century. Whereas it was ordinarily based on *regular beat* and *arithmetic arrangement of time intervals, written on a score*, it began to be increasingly viewed as *the movement*, that is, *the delay introduced by the musician, during his performance, between the written arrangement and the notes he actually plays*.

But this was the same in science although scientific definitions of rhythm remained within the Platonic frame. There was, for instance, a noticeable difference between the age-old medical definition and the one promoted, from the 1850s, by physiologists who replaced the *successive proportionate time intervals* by a *regular succession of separate beats*, and subsequently, during the last decades of the 19th century, by a *continuous wave-like form*. Due to the enormous prestige of physiology in the 19th century and the historical connection between the two disciplines, one is not surprised to find the same transformations in psychology, when it emerged after 1870 as an independent academic discipline, although some influences from poetic or musical metric may have sometimes complicated its propositions. Finally, one observes a similar shift in the concepts used by the emerging social sciences which, after 1890, passed from *succession of beats*, at the hands of Bücher, to *regular oscillations* in Aftalion's or Mauss' studies.

Naturally, all new acceptations did not purely and simply suppress their predecessors which were still used simultaneously for quite a time, so that the whole conceptual history of the Platonic paradigm in 19th century science looks like a tree growing younger branches alongside older ones.

4.2. Secondly, we need to better identify the various alternatives to the common notion of rhythm that have surfaced, here and there.

4.2.1 We must note the emergence, with Riegl and later Wölfflin, of a formalist perspective, which gained momentum with the post-war interpretations of Saussure's linguistics at the hands of Roman Jakobson (1896-1982) and Louis Hjelmslev (1899-1965), and set the basis for a complete "de-historicization" and "de-temporalization" of the scientific method that resulted in the rejection of the concept of rhythm altogether. This emerging perspective implied a radical break with most of 19th-century scientific life, but this was made at the expense of the concept of process itself and, moreover, on ultra-Platonic bases. The formalist alternative blended together the Hegelian concept of spirit of a period, the classical architectural notion of eurhythmia as set of harmonious proportions, and the traditional poetic and musical notion of rhythm as succession of meters.

4.2.2 However, we must differentiate between this apparent alternative which below the shiny surface of its radicalism conserved the core of the Platonic perspective, and less visible, "minor" in Deleuzian sense, diverging

paths. Whereas previous studies mainly aimed at reconstructing the making of an all-encompassing ideological discourse which spread in the first half of the 20th century, this essay has tried to retrace the main *rhuthmos* or way of flowing of 19th century scientific life without sacrificing the finer whirls that have unfolded on its sides. As a matter of fact, by contrast with recent investigations on ideology, in which naturally the requirement of consistency does not apply but also with older Structuralist concepts of scientific paradigm such as those promoted in the 1960s by Kuhn and Foucault in which any scientific production in a given era is necessarily consistent with its general frame it has been possible to document in the rhythmological paradigm that has dominated the 19th century, the existence of internal contradictions, or at least of nascent critical *rhuthmoi*.

Not only has the Platonic paradigm undergone a vast process of branching out but it has also, sometimes, witnessed the growth of diverging lines, or better yet, volutes, mostly inspired by poetics but occasionally by natural science. Among those, the most noticeable were probably Brücke's critique of metrics and rejection of unnatural pronunciation of German poetry (chap. 1); Meumann's rebuff of the metric theories of his time, in his interest in language not only as written but also as uttered speech, and finally in his attention towards the whole sum of rhythmic processes in the subject hearing the uttered verse (chap. 3); Schnaase's insistence that the rhythm in language should not be reduced to the succession of metric building blocks (be they quantitative or accentual) but should be enlarged to the vertical interweaving of these blocks in and by the flow of sound-meaning (chap. 6); Kugler's comparison of the artistic rhythm with a living organism, or a system, or Semper's theory of the incorporation of alternating series into artistic wholes (chap. 6); Schmarsow's acknowledgment that even if the rhythm is composed of parts that can range from mere regular elements to complex arrangements, these parts need to be carried on by "the continuous flow of the whole" (chap. 9); and Mauss' reconsideration of the whole "social physiology" in the light of the larger dynamic system of linguistic or extra-linguistic signifiers responsible for the pragmatic effects of magic or religious ritual (chap. 16).

5. Although the description of the spread of the *metron* between the 1840s and the 1910s, of its structuring, constraining, and limiting effects on research, have been my main concerns, these unexpected whirls unexpected both at the time and for the historian are maybe the most exciting findings of this long investigation. Indeed, their bifurcations echoed previous intuitions developed by a few poets, artists, and philosophers since the 18th century (see vol. 2), and clearly anticipated other significant practical as well as theoretical transformations that marked Western literature just before and after World War I suffice it to think of William Butler Yeats' (1865-1939), Filippo Marinetti's (1876-1944), Virginia Woolf's (1882-1941), or Ezra Pound's (1885-1972) various but common obsession with rhythm. In addition, they shed new light, even if obliquely, on anti-metric contemporary innovations in philosophy such as the Jamesian *stream of consciousness* or the Bergsonian *durée*, or in sociology, on Gabriel Tarde's (1843-1904) interest in the *flow of the public opinion* under the influence of mass media or Georg Simmel's (1858-1918) concern with the *liquifying social and psychological consequences of the use of money*.

Faced with the empirical requirements of fast changing societies, most scientists reacted by borrowing metric or parametric concepts from the natural sciences, which had met with remarkable success since the first half of the 19th century. Yet, other scholars, depending on their education, on their attention to empirical facts, on their interest in the latest developments in visual art, music, dance, and poetry, or maybe simply on their innovation spirit, introduced new antimetric concepts which were to revolutionize the 20th century rhythmology. I hope to be able to extend one day my investigation into these other ways to address the crucial problem of *process organization* be it that of language, consciousness, or society.