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## Rhythm as Spatial Aesthetic Form (Part 1)

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During the 1900s, the rhythm became the subject of a fierce debate between the Swiss-German and Austrian schools of art history. Rhythm which had been considered by the former as a *form of process* was now redefined by the latter as a *spatial form*. To better assess this controversy, I will first expose the position of the main opponent to Wölfflin and Schmarsow: the Austrian art historian Alois Riegl (1858-1905) (for a useful introduction on Riegl, see Gubser, 2010). I will then address Schmarsow's answer to Riegl in the next chapter.

## Rhythm as Geometric Pattern (Riegl - 1893)

When a student at the university of Vienna, Riegl attended classes on philosophy and history taught by Franz Brentano (1838-1917), and Alexius Meinong (1853-1920). As many art historians, he began his career by studying architecture: his dissertation was a study of the *Jakobskirche* – the Benedictine Abbey of St James, in Regensburg. But he, subsequently, switched to applied arts. In 1886, he was appointed a curator in the textile department at the K. K. Österreichisches Museum für Kunst und Industrie in Vienna, and in 1889 he completed his habilitation on medieval calendar manuscripts. In 1894, he was finally awarded an *extraordinarius* position at the University of Vienna where he served until his death in 1905.

Riegl is nowadays regarded as one of the main contributors to the establishment of art history as a self-sufficient academic discipline, and also, along with Wölfflin, as one of the introducers of formalism. We may add that his innovative concern for form resulted in a significant transformation of the concept of rhythm.

Already in 1891, the architect Ferdinand von Fellner-Feldegg of the Österreichisches Museum für Kunst und Industrie—that is, the very institution where Riegl worked—had delivered a lecture open to the public on the theme "Rhythm, symmetry and proportion in nature and art" (Vasold, 2010, p. 45)

In 1893, Riegl published his *Stilfragen: Grundlegungen zu einer Geschichte der Ornamentik – Problems of Style: Foundations for a History of Ornament.* In the introduction, as it was customary in Germanic academy, he gave a few hints on his epistemological and philosophical position. He had tried, he said, to refute the materialist account—commonly, yet wrongly according to him, attributed to Gottfried Semper—of the origins of decorative motifs from wickerwork or weaving of textiles, a theory according to which "all art forms were always the direct products of materials and techniques" (p. VII). He argued that Semper's followers had twisted and exaggerated Semper's useful insights, exactly as Darwin's followers had done with Darwin (p. VI).

Instead, Riegl attempted to describe a continuous "History of ornament" based on a principle of autonomous "development" of forms. He concentrated on four ornamental motifs: the "geometric style," the "heraldic style," the "vegetal ornament," and the "arabesque," whose transformation and permanence he followed from Prehistorical, through ancient near Eastern, then Classical and up into early Medieval and Islamic art. All these motifs, he claimed borrowing from Schnaase's Kunsttrieb or Kunstrichtung, had been produced and continuously reelaborated by a "bestimmtes Kunstwollen – particular artistic will" or "immanenter künstlerischer Trieb – immanent artistic drive."

Technical factors surely played a role as well [in prehistorical art], even within the process described above, but it was by no means the leading role that the supporters of the technical-materialist theory of origin assumed. The impetus [Der Anstoss] did not arise from the technique but, on the contrary, from the particular artistic [will] [von dem bestimmten Kunstwollen aus]. First came the desire to create the likeness of a creature from nature in lifeless material, and then came the invention of whatever technique was appropriate. A carved reindeer on the hilt of a dagger certainly does not make it any easier to handle. Therefore, it must have been an immanent artistic drive [ein immanenter künstlerischer Trieb], alert and restless for action, that human beings possessed long before they invented woven protective coverings for their bodies, and that impelled them to carve bone handles in the shape of reindeer. (Problems of Style, 1893, p. 20, trans. Evelyn Kain, my mod.)

Since the most ancient time man had "struggled with the material" and expressed in art a desired reality. Consequently, the stylistic development had been driven by contingent tendencies particular to each age or social group, and devoid of any connection to technological concerns.

All of art history presents itself as a continuous struggle with material; it is not the tool—which is determined by the technique—but the artistically creative idea that strives to expand its creative realm and increase its formal potential. Why should this situation, which obtains throughout the history of art, have been any different during its initial stages? (*Problems of Style*, 1893, p. 24, trans. Evelyn Kain)

In a way, this was resuming with Schnaase's Hegelian tradition in art history. However, since Riegl discarded the speculative claim that the whole development expressed—and was led by—the History of the Spirit, he finally ended up advocating a blunt historical relativism: in fact, there was no superiority of later over earlier artistic expressions; each one of them only resulted from a particular and incommensurable *Kunstwollen*. It also displaced the attention from content or meaning to form. Given that each kind of art was driven by a unique artistic will, particular to a period and a people, all works produced during this period and by this people possessed the same formal features. Therefore, art history should not limit itself—as it was customary in the 19<sup>th</sup> century—to finding the historical, cultural, or religious significations of the elements composing an ornament, a painting, a sculpture, or a piece of architecture. It had to concentrate on the formal similarities between the various expressions of an era or a people.

This new formalist orientation paradoxically contributed to the spread of rhythm: as Wölfflin who had extended it from architecture to painting, Riegl applied it to ornament. It also made rhythm a key concept for aesthetics—but, as we will see, in a way that was almost opposite to that of Wölfflin

and Schmarsow. Each one of the basic ornamental motifs: the "geometric style," the "heraldic style," the "vegetal ornament," and the "arabesque," was based somehow on rhythm. However, Riegl did not differentiate any longer, as Wölfflin and Schmarsow had done, between *Regelmässigkeit* – regularity and *Gesetzmässigkeit* – legality, i.e. between rhythm and meter.

In the first chapter devoted to the development of the most ancient form of ornament, "the Geometric style," Riegl claimed that, in prehistoric times, after the "encircling line" had emerged in animal representation, it had developed into "an art form in and of itself." The cave-dwellers began to arrange lines according "the fundamental artistic laws of symmetry and rhythm," by which he meant geometric forms like "triangles, squares, rhombuses, and circles," or repetitive figures like "zigzag patterns [...] undulating lines, and spirals." All these shapes were "familiar to us from plane geometry."

Ultimately, however, line became an art form in and of itself and was used without direct reference to any particular model in nature. Since, of course, not just any irregular scribble [ein regelloses Gekritzel] can claim to be an art form [Kunstform], linear shapes were made to obey the fundamental artistic laws of symmetry and rhythm. As a result, straight lines became triangles, squares, rhombuses, zigzag patterns, etc., while curved lines produced circles, undulating lines, and spirals. These are the shapes familiar to us from plane geometry; in art history, they are generally referred to as geometric. Consequently, the style based on the exclusive or predominant use of these patterns is called the Geometric Style. (Problems of Style, 1893, p. 3, trans. Evelyn Kain, my mod.)

As we see, whereas in architecture the concept of rhythm had been used traditionally mainly to describe whether proportional sets of parts or straight rows of ornaments, columns, or windows, Riegl resumed with Schnaase's extension to non-linear motifs as zigzag patterns, undulating lines, and spirals. But his definition of rhythm was now quite different from Schnaase's. Whereas the latter compared the rhythm of the arabesque—its dualistic nature and its endless repetition—with that of rhymed poetry, deriving them both from a radical change in the language, Riegl contended that the "laws of symmetry and rhythm" that governed the Geometric style were inspired partly by innate geometric capacities, and as Semper himself had observed, by the observation of corresponding "natural forms of humans, animals, plants, and crystals."

Even if the forms of the Geometric Style do not seem to be based on real things, they are nevertheless not completely divorced from nature. The same laws [Gesetze] of symmetry and rhythm that govern geometric shapes are apparent in the natural forms of humans, animals, plants, and crystals as well. In fact, it does not require any particular insight to perceive how the basic shapes and configurations of plane geometry are latent in natural things. (Problems of Style, 1893, p. 3, trans. Evelyn Kain)

This emphasis on geometry instead of poetry explains why Schnaase's poetic analysis was entirely forgotten and why Riegl's new extension of the rhythm concept was based—in tune with the now most common scientific acceptation—on sheer regularity, be it that of the motif itself or that of the changes in the motif. A rhythmic ornament could imply a regular alternation of direction, as in zigzag patterns and undulating lines, or a regular change in direction, as in spirals.

As a matter of fact, Riegl saw the historical origin of the Geometric style in Semper's first and second kinds of eurhythmy, the regular series of pearls, or beads, interrupted or not by unlike elements. Using evidence provided by anthropologists, he evoked also a possible derivation from the tattooing of the skin in prehistoric societies.

Do we not still encounter Polynesian tribes today who do without any form of clothing, while they tattoo their bodies from head to toe, thereby making full use of linear decorative motifs. Unfortunately, we have no way of knowing whether the cave dwellers of Aquitaine tattooed their skin as well; there is, at any rate, no evidence for it on their representations of human figures. We know for certain, however, that they wore jewelry. Otherwise, what would have been the purpose of the large number of perforated cattle and bear teeth found in caves partially engraved with animals except to be strung on a sinew or strip of raffia and worn around the neck? Here people are already following the elementary artistic principle of arranging things in rows and, moreover, without any inspiration from crisscrossed fibers, since the cave dwellers apparently had not felt the need to invent and practice the technique of weaving. (*Problems of Style*, 1893, p. 22-23, trans. Evelyn Kain)

In the rest of the chapter, Riegl's use of the term rhythm was consistent with his primary metric definition as *regular series of like or unlike elements*. He repeatedly used expressions such as "rhythmische Wiederkehr – rhythmic repetition" (p. 5), "rhythmische Abwechslung – rhythmic alternation (p. 13), "abwechselnder Ordnung – alternating arrangement" (p. 13).

The second chapter treated of "the Heraldic style," i.e. compositions of "paired animals arranged symmetrically to either side of an intervening central element" (p. 33). This type of decoration had been associated by previous scholars, most notably Ernst Curtius, with the technical demands of silk-weaving. Again, Riegl argued instead that heraldic ornament arose before the invention of mechanical weaving-looms, and stemmed from a natural desire for symmetry.

At first, Riegl seemed to oppose heraldic style and rhythm. Animals, he noticed, were "repeated simply and rhythmically in rows one behind the other," or "placed in pairs opposite each other in absolute bilateral symmetry." But the pairs themselves could naturally be repeated and associated in more complex rhythmic patterns.

There were still two possible decorative arrangements for the profile views of animals. First, the animals could be repeated simply and rhythmically in rows one behind the other [reihte die Thiere bloss rhythmisch hinter einander] with no attention paid to symmetry at all; such is the case with Curtius's so-called Carpet Style. Secondly, the animals could be placed in pairs opposite each other in absolute bilateral symmetry, and moreover, whenever possible, to either side of an equally symmetrical median for which a plant motif was best suited. This is roughly the way we should explain the Assyrian beasts grouped in pairs to either side of the so-called "sacred tree" (fig. 4) rather than by relying on a technique whose role is in no way certain. (Problems of Style, 1893, p. 40, trans. Evelyn Kain)

The third chapter dealt with "the introduction of vegetal ornament and the development of the

ornamental tendril" and traced an unbroken evolution of vegetal ornament from ancient Egyptian through to late Roman art. Given the irregular and mobile nature of this new ornament, one could expect that Riegl would improve his conception of rhythm, which he himself had found of "little aesthetic value" a few pages before.

Nature, it seems, can claim as few examples of absolute perfection as humans can of their ethical behavior; after all, the kinds of things that make history, that immediately capture our attention and save us from the monotonous pace of everyday life tend to be the exceptions to abstract laws. The Geometric Style, strictly constructed in accordance with the highest laws of symmetry and rhythm, is from the standpoint of regularity the most perfect of styles; on our scale of values, however, it occupies the lowest rank. Our present understanding of how the arts developed associates the Geometric Style as a rule with cultures still at a relatively low stage of development. (*Problems of Style*, 1893, p. 3, trans. Evelyn Kain)

But this is not what happened. Riegl kept using rhythm as synonymous with repetition, whether of similar motifs, as in the "guilloche," or full rhythmic sequences composed of unlike motifs as "palmette, blossom, palmette, bud, and so forth."

It is surely clear by this time that I see the guilloche as a linear shape formed exclusively according to the principles of symmetry and rhythm. What is more important at present, however, is the examination of the vegetal motifs flanking the guilloche in figure 33. There are three different kinds of motifs: a bud, a palmette, and a three-pronged blossom; they are repeated in the following rhythmic sequence: palmette, bud, palmette, blossom, palmette, bud, and so forth. (*Problems of Style*, 1893, p. 90, trans. Evelyn Kain)

Similarly, Riegl regularly used the term rhythm as "rhythmic alternation," as in this example taken from the Late Roman period.

The examples thus far are all from buildings of the Late Roman period. The complete acanthusization of the motifs and the connecting lines comprising the intermittent tendril, however, had actually taken place much earlier. I offer two examples from the Forum of Nerva. The motifs in figure 135 are standard lotus blossoms, alongside palmettes with leaves overflowing laterally, which alternate rhythmically in two-dimensional or acanthusized form. (*Problems of Style*, 1893, p. 256, trans. Evelyn Kain)

It is no wonder, then, if Riegl saw in "the further development of the all-over tendril pattern," at the end of Antiquity and after, a continuous respect for "the basic decorative laws of rhythm and symmetry." "Paradoxically, the rhythm of vegetal tendril patterns was still a matter of geometry.

So long as vegetal tendril patterns could only expand lengthwise within the format of the register or frieze, they did not enjoy complete freedom of movement. This only became possible when they were able to expand in width as well as in length. As indicated earlier, the only area where this

could take place was around and beneath the handles of the ceramic vessels that, alas, provide virtually our only source of evidence. Nevertheless, it is still easy to reconstruct the path that vegetal tendrils took as they spread out unrestrictedly over surfaces, while at the same time respecting the basic decorative laws of rhythm and symmetry. At this point, we are really approaching the conclusion and ultimate goal of the entire development. (*Problems of Style*, 1893, p. 188, trans. Evelyn Kain)

Under the probable influence of the new scientific concerns for waves and cycles, the notion of rhythmic repetition was extended by Riegl to the "undulations" of "tendril" or "band ornament" so remarkably illustrated by Mycenaean and Greek art.

It is important to emphasize that in this type of decoration [spiral ornament in Mycenaean art], the bands are always clearly juxtaposed, in contrast to the overlapping or "interlaced bands" of early medieval Scandinavian art. Should we not also attribute this regularity, along with the rhythmically undulating course of Mycenaean band ornament, to the classical artistic spirit latent in Mycenaean art? (*Problems of Style*, 1893, p. 140, trans. Evelyn Kain)

The rhythmically undulating vegetal tendril, a goal to which Near Eastern art had also aspired, is the most beautiful and significant achievement of Hellenic ornament. It represents the Greeks' most invaluable contribution to the development of vegetal ornament. (*Problems of Style*, 1893, p. 112-113, trans. Evelyn Kain)

Naturally, both uses could be associated together in order to describe "undulating movements, giving rise to slightly curved rushes and volute blossoms rhythmically branching off to the side."

Another example of this (fig. 49) is found on a potsherd from Shaft Grave I at Mycenae. In this instance, the plant stems run next to each other parallel to the axis of the vessel. What distinguishes this arrangement fundamentally from that of the Egyptians is, once again, the treatment of the stems. They are not stiff and straight but wind their way upward in gentle, undulating movements, giving rise to slightly curved rushes and volute blossoms rhythmically branching off to the side. (*Problems of Style*, 1893, p. 119, trans. Evelyn Kain)

We now understand why Riegl never mentioned Schnaase in his book nor in the fourth and last chapter, yet dedicated to the development of "the Arabesque" during the late Antique, early Byzantine and early Islamic eras. Whereas Schnaase had explained the spread of the arabesque by a change in linguistic and poetic rhythm—thereby introducing a concern for the systemic dimension of rhythm—it was now understood by Riegl, in tune with the accelerating spread of metrics in science, as resulting from a growing "geometricization" of earlier systems of tendril ornament. The original geometric "spiral" had been changed by the Greeks into a "living tendril," which had been in turn transformed by Islamic art into a highly "geometricized" motif fit into "polygonal compartments."

The point of departure for vegetal ornament in the Near East (Egypt) was the geometric spiral

(figure 25), in which blossom motifs served only as accessory axil fillers. The Greeks transformed the spiral into a living tendril whose sheaths emitted beautifully formed blossom motifs. During the Middle Ages, the geometricized tendrils of Islamic art once again display that Oriental spirit of abstraction, which had, as we shall see, already begun to re-emerge in the late antique period. To be sure, the fundamental achievements of the Greeks—the rhythmic, undulating tendril sprawling freely over larger surfaces—were not abandoned; in fact the latter characteristic developed even further along the established course. However, the geometric element had again pressed itself, into the foreground wherever it could: this is manifested most clearly in the polygonal compartments created by the curving tendril lines, which are unquestionably geometric in character. (*Problems of Style*, 1893, p. 267, trans. Evelyn Kain)

Next chapter