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Between Art and Science: On Ernst Cassirer's Concept of Style

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Abstract

This essay centralizes and explores Ernst Cassirer's concept of style. Although it does not emerge as much as the concept of form or symbol in Cassirer's corpus, style plays a major—if intrinsic—role throughout the *Philosophy of Symbolic Forms*. I shall examine how Cassirer's conception of style is derived from Goethe's theory of art and why it is fundamental to Cassirer's theory of knowledge. Style is considered the defining feature of the cultural sciences, as well as the sign of the anthropological character of the natural sciences, and, more generally, as the creative principle underlying all objectivity. I argue that it is therefore justified to read style as the fundamental yet variable expression of our symbolic relation to reality. Indeed, style refers neither to an abstract principle nor to a predetermined truth: it is a formative force actualizing itself in the incessant diversification of its forms. In so doing, Cassirer's underexamined concept of style proves highly relevant in our times of epistemic and cultural pluralism.

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Between Art and Science: On Ernst Cassirer's Concept of Style

1. Introduction: Cassirer, Goethe, and Style

There has recently been burgeoning interest in the concept of style in the history and philosophy of science.¹ This new interest is controversial in light of our “post-truth” and “alternative facts” era, however, because holding that there are different “styles of scientific thinking or reasoning”²—in the same way that there are different styles of artistic creation—appears to pivot upon and encourage epistemic relativism, if not the outright denial of science.³ Is science not precisely the practice that transcends any form of peculiarity or idiosyncrasy? In this essay, I appeal to Ernst Cassirer's philosophy to challenge this pessimistic approach to style in science. As Claus Zittel suggests, alongside Karl Mannheim and Ludwik Fleck, Cassirer was one of the first to introduce the concept of style into science studies.⁴ This not only holds historical significance but also carries theoretical implications that deepen our understanding of scientific truth and the broader context of rationality. As I shall argue, from a Cassirerian perspective, style is never a sign of unrestrained subjectivity, but is instead the symbolic expression of the “manifold unity” of objectivity itself. This theoretical perspective forms the focus of the present discussion.

It should be noted that the word “style” used in this context does not refer primarily to Cassirer's manner of writing, reading, or thinking.⁵ While Cassirer admits that there is always a “reciprocal relationship” between the “form of life” (*Lebensform*) and the “form of thought” (*Lehrform*)⁶ and that his own *Philosophy of Symbolic Forms* draws on the “stylistic law”

¹ E.g., Matteo Vagelli's Marie Skłodowska-Curie project EPISTYLE: Style Matters. Scientific Pluralism and its Early-Modern Sources (2021–2024). <https://pric.unive.it/projects/epistyle/home>. Accessed 12 July 2024.

² Hacking (1994).

³ See Sciortino (2016). One of the most famous relativistic applications of the concept of style to the philosophy of science can be found in Feyerabend (1983a). English translation in Feyerabend (1983b).

⁴ Zittel (2012, p. 56).

⁵ E.g., see Stephenson (2012) and Müller (2012).

⁶ Cassirer (1918, p. 1). English translation in Cassirer (1981, p. 6). See also Cassirer (1945, p. 495).

(*Stilgesetz*) at the root of Kant's Critical philosophy,⁷ I shall home in on Cassirer's philosophical definition of the concept of style rather than his own style of philosophizing. Admittedly, this concept is more implicit in Cassirer's work than, for example, form or symbol, and yet in the tenth volume of his *Nachgelassene Manuskripte und Texte*, he explicitly relates the concept of form to Goethe's concept of style and more generally to his theory of morphology.⁸ For this reason, it seems reasonable to view Goethe's concept of style as a precursor to Cassirer's concept of symbolic form and the matrix through which to situate it.

While the consensus has always been that Cassirer's philosophy is indebted to Kant, it has been shown over the past thirty years that it is equally indebted to Goethe.⁹ In 1945—the year he died—Cassirer published a short essay summarizing his lifelong engagement with both thinkers, pointing to their similarities, as well as to the modifications that Goethe made to Kant's transcendental method.¹⁰ Specifically, Cassirer insists on Goethe's refusal to instigate any principled separation between intuition and understanding, realism and idealism, art and science. Both in his artistic work and in his scientific investigations, Goethe sought to capture the immanent dynamism and productivity of nature—*natura naturans* rather than *natura naturata*—which discloses itself at the surface of its ever-changing, incessant forms.¹¹ In Goethe's view of reality, forms are conceived as always-already symbolic, for their meaning is inherent in their manifestation and can be fully understood only through the activity of an “exact sensorial imagination.”¹² As Goethe puts it, “this is true symbolism, where the particular

⁷ Cassirer (1923a, p. 8). English translation in Cassirer (2021a, p. 8). See also Maigné (2013, pp. 31–58).

⁸ Cassirer (2006, p. 122). See also Cassirer (1916, pp. 181–284).

⁹ See Krois (1995), Naumann (1998), and Naumann and Recki (2002).

¹⁰ “Goethe and Kantian Philosophy,” Cassirer (1945, pp. 542–575).

¹¹ For instance, see Goethe (WA II/6, p. 10), where he insists on the inherent movement of both nature and our knowledge of it: “When something has acquired a form it metamorphoses immediately to a new one. If we wish to arrive at some living perception of nature we ourselves must remain as quick and flexible as nature and follow the example she gives.” English translation in Goethe (2016, p. 979).

¹² Goethe (WA II/11, p. 75). English translation in Goethe (1995, p. 46). Also see Wellbery (2021).

represents the general, not as dream and shadow, but as a live and immediate revelation of the unfathomable.”¹³

This “morpho-symbolic” stance is precisely what led Cassirer to draw a parallel between Goethe’s definition of style and his own definition of symbolic form in his seminal paper, “The Concept of Symbolic Form in the Construction of the Human Sciences” (1923).¹⁴ According to Goethe, style is the artistic expression of “true” symbolism, the aesthetic counterpart to his morphological approach to botany and zoology. He posits that style is neither mere imitation of nature nor purely subjective creation, but that it “rests on the most fundamental principle of cognition, on the essence of things—to the extent that it is granted us to perceive this essence in visible and tangible form.”¹⁵ As for Cassirer, he defines symbolic form as “every energy of spirit by which the content of spiritual signification is linked to a concrete and intrinsically appropriate sensuous sign.”¹⁶ Like Goethe’s specification of style, this definition departs from the traditional view of the symbol as a thing that stands for something else. More radically, it seeks to unveil the process through which every sensory impression from the “outside” world undergoes an immediate transformation into meaningful expression, whether artistic, scientific, mythical, and so on. The linkage of Goethe’s “visible” and “tangible” knowledge and Cassirer’s “concrete” and “sensuous” signification is thus of major philosophical importance because it is based on the conceptual homology of art and science, whose expressive and formative spontaneity also proves exemplary for *any* symbolic process at all.¹⁷ It is evident, then, that when acknowledged as connecting the artistic and scientific domains, style proves to be a touchstone for analyzing the relationship between Cassirer’s aesthetics and epistemology, as well as his broader understanding of human culture and reality.

2. Style in the Human Sciences

¹³ Goethe (HA XII, p. 471, No 752). English translation in Goethe (1998, p. 47, No 314).

¹⁴ Cassirer (1923b, pp. 86–87). English translation in Cassirer (2013, pp. 83–84). See also Stephenson (2004) and Matteucci (2010).

¹⁵ Goethe (WA I/47, p. 80). English translation in Goethe (2016, p. 876). Also see Ronzheimer (2022).

¹⁶ Cassirer (1923b, p. 79). English translation in Cassirer (2013, p. 76).

¹⁷ See Lassègue (2016, pp. 98–99). English translation in Lassègue (2020a, pp. 70–71).

From a quantitative perspective, Cassirer mainly relates the concept of style to the human sciences. Building on Wilhelm Dilthey's¹⁸ and Heinrich Rickert's¹⁹ attempts to distinguish between the *Naturwissenschaften* (natural sciences) and the *Kulturwissenschaften* (cultural sciences), Cassirer develops a theory of style to justify the scientific rigor of the humanities and their methodological independence from the natural sciences, suggesting that art is probably the most relevant object to explore for the sake of this method. Even if aesthetic experience seems limited to the realm of pure sensation and feeling, a zone traditionally out of science's reach, the careful contemplation of a work of art actually reveals a confrontation with its form—understood as its stylistic shape.²⁰ For if we are perceptually and emotionally affected by a work of art through its particular style, then it cannot be denied that the style itself has a degree of factuality. The problem is: what is the distinctive character of this factuality? Or put slightly differently, if style is a genuine object of science, what kind of object is it, and what kind of science does it involve?

Cassirer addresses these crucial questions in his 1942 text, *Logic of the Cultural Sciences*,²¹ within which art history plays a leading role. As a discipline specifically bound up with the study of style, art history is considered the paradigmatic example for scientific approaches to cultural phenomena that are resistant to naturalistic reductionism.²² This is for good reason because that which constitutes the work of art not simply as an object, but *as art*—which is called its style—cannot be reduced to any causal (mechanical, chronological, or psychological) explication of its sensible appearance, genesis, or existence. To ascertain the materials constituting a work of art, when or where it was created, or what it was created for (what sort of mindset it expresses) certainly provides valuable information about the work, but this remains contextual knowledge and overlooks its more fundamental meaning:

A cultural object always needs a physico-material substratum. The painting is attached to the canvas, the statue to the marble, the historical document to characters we find written on parchment paper. [...] But at the same time all this [...] must be situated historically in its place and time, [...] and it must be

¹⁸ Dilthey (1910). English translation in Dilthey (2002).

¹⁹ Rickert (1899). English translation in Rickert (1962).

²⁰ Cassirer (1939, p. 112). See also Capeillères (2012–2013).

²¹ Cassirer (1942). English translation in Cassirer (2000).

²² See Makkreel (1992, p. 399); Hinsch (2001, pp. 239–253); Van Vliet (2012); Maigné (2020).

understood as the expression of certain fundamental psychic attitudes, with which we can, in some way, empathize. Thus physical, historical, and psychological concepts continually enter into the description of a cultural object. However, [...] the specific signification [*Bedeutung*] of this object remains [...] obscure as long as we isolate these elements from each other, instead of grasping them in their correlation, their mutual “penetration.”²³

Style lies precisely in this “correlation,” thus constituting the overall orientation and spiritual direction that gives the work of art, as well as any “cultural object,” its specific form and meaning.²⁴ This places style in a very peculiar territory wherein it is read neither as pure sensible form nor as pure meaning, but rather as the inherent meaning of the form itself upon which hinges “its immanent truth and its objectivity.”²⁵

By virtue of its symbolic character, this definition of style draws some important epistemological consequences. For, considered as a scientific concept (and no longer as an object of science), style cannot function like a physical concept. It cannot ascertain cultural facts in the way natural science ascertains natural phenomena, that is, via derivation through universal laws. On the contrary, the conceptual efficiency of style lies in its reflectiveness and capacity to grasp the intrinsic meaning contained in various cultural forms and objects for the purposes of “classification,” that is, to assign them to a particular symbolic order.²⁶ And yet, concepts of style are not only accumulated descriptions of artistic or cultural singularities: “every concept,” Cassirer claims, “seeks to be a ‘unity of the manifold,’ a relation between the individual and the universal.”²⁷ In this regard, style is not to be understood as a weak reflection of a pre-existing cultural world. Rather, it is the vector through which we develop knowledge of the objective reality of culture—the conceptual power that makes sense of culture’s individual shapes such that these shapes are rendered *as* cultural objects. As Cassirer writes in his “Remarks on the Question of the Originality of the Renaissance:”

²³ Cassirer (1942, p. 415). English translation in Cassirer (2000, p. 57).

²⁴ Cassirer (1942, p. 430). English translation in Cassirer (2000, p. 72).

²⁵ Cassirer (1927b, p. 270). English translation in Cassirer (2013, p. 271).

²⁶ Cassirer (1942, pp. 416 and 428). English translation in Cassirer (2000, pp. 58 and 70).

²⁷ Cassirer (1942, p. 427). English translation in Cassirer (2000, p. 69).

Ideas like “Gothic,” “Renaissance,” or “Baroque” are ideas of historical “style.” As to the meaning of these ideas of “style” there still prevails a great lack of clarity in many respects. They can be used to *characterize* and *interpret* intellectual movements, but they express no actual historical *facts* that ever existed at any given time. “Renaissance” and “Middle Ages” are, strictly speaking, not names for historical periods at all, but they are concepts of “ideal types,” in Max Weber’s sense.²⁸

The reference to Weber is illuminating because it clearly demonstrates that the conceptual grasp of style is situated, to use Kant’s words, in its “formative power” (*bildende Kraft*)²⁹ rather than in its empirical content. Weber writes, concerning the formative characteristic of the ideal type, that it,

is a mental image that is not historical reality, and certainly not “true” reality; still less is it meant to serve as a schema *into* which it would be possible to fit reality as a *specimen*. It has the status of a purely ideal *limiting* concept against which reality is *measured*—with which it is *compared*— in order to bring out certain significant component parts of the empirical substance of [that reality]. Such concepts are constructions in which we apply the category of “objective possibility” to construct connections that our *imagination*, oriented towards and schooled by the contact with reality, *judges* to be adequate.³⁰

In other words, even though the ideal type may be deeply rooted in cultural reality, it cannot be apprehended simply as an *average* of actual cultural phenomena. In a decidedly Goethean tone, Weber states that the ideal type is an imaginary “accentuation” of the most prominent features of these phenomena, through which the *Kulturwissenschaftler* develops ad hoc categories of interpretation.³¹

This imaginative aspect of the ideal type is what interests Cassirer. His main innovation in developing this view is that the concept of style should be understood neither as an abstract

²⁸ Cassirer (1943, pp. 181–182).

²⁹ Kant (AA V, p. 374). English translation in Kant (2007, p. 202).

³⁰ Weber (1904, p. 208). English translation in Weber (2012, p. 127).

³¹ Weber (1904, p. 203–204). English translation in Weber (2012, p. 125).

principle nor as a substantial being. It is the structuring force—indeed, the formative power—of scientific experience itself, an ideal but also entirely concrete rule laid out by the historian to help establish a point of orientation amid the mass of historical material, such that history is given a consistent direction, and thus a meaning. The “concrete ideality” of style (which mirrors that of the work of art) is not just an empty expression, however, because it involves the view that there is no such thing as historical reality in itself, which stands completely independent of our structures of knowledge. History is nothing but the historian’s interpretation of the past: its existence is purely symbolic (just as is the factuality of artistic style), which does not make it any less real.

3. Style in the Natural Sciences

Does the above reflect an alternative? That is, can we say that because the objectivity of the natural sciences is not concerned with the intrinsic style of cultural forms, that it is not symbolic at all? As we shall see in the following, the answer to this question is no. Indeed, Cassirer devotes a large part of the *Philosophy of Symbolic Forms* to analyzing the symbolic functioning of the mathematical sciences of nature.³² But at first glance this still does not necessarily entail that they have a style. As Cassirer puts it, while the human sciences cannot “renounce anthropomorphism and anthropocentrism”³³ by definition, the natural sciences aim to reach the “standpoint of no one,”³⁴ so to speak. Yet throughout his work, Cassirer often uses the concept of style in relation to the natural sciences—whether in reference to the style of an individual scientist, or that of an entire discipline or epoch.³⁵ For example, in the *Philosophy of Symbolic Forms*, he talks about “Heraclitus’ linguistic style and his style of thinking [*Denkstil*],”³⁶ and in the first volume of *The Problem of Knowledge in Modern Philosophy and Science*, he discusses “Galileo’s style” or the “stylistic history of modern science [*Stilgeschichte der neueren Wissenschaft*].”³⁷ In “The Concept of Symbolic Form in the Construction of the Human

³² Cassirer (1929a). English translation in Cassirer (2021b).

³³ Cassirer (1942, p. 434). English translation in Cassirer (2000, p. 75).

³⁴ Cassirer (1929a, p. 555). English translation in Cassirer (2021b, p. 552). Also see Cassirer (1929b, pp. 350–351).

³⁵ On the individual versus general use of style in the history of science, see Gayon (1996). English translation in Gayon (1999).

³⁶ Cassirer (1923a, p. 55). English translation in Cassirer (2021a, p. 57).

³⁷ Cassirer (1906, pp. 315–316, my translation).

Sciences,” Cassirer even views Einstein’s theory of relativity as that which best represents “the true ‘style’ of modern physical knowledge.”³⁸ These statements lead to a fundamental question: is Cassirer’s distinction between the determining causality of the natural sciences and the reflective morpho-symbolism of the cultural sciences as unequivocal as it first seems?

What is certain is that the explanatory power of the natural sciences depends on a particular “logical form,”³⁹ because “the thing-property-order” as well as “the order of ‘causes’ and ‘effects’ [...] always exhibit a certain ‘construction’ and a basic common formal character.”⁴⁰ Without causality—understood as a specific formative process inherent in the human spirit—nature itself could not exist as an object of knowledge. And for Cassirer, the “formal character” of causality is emphasized because it has been recognized as such since the beginning of the twentieth century:

So long as natural science stood firmly upon the basis of the “mechanical worldview,” the absolute rule of this worldview was hardly to be broken. But it was just here that that remarkable development occurred that led to an inner crisis and ultimately to a “revolution in our mode of thinking” within the field of the scientific knowledge of nature itself. Since the beginning of the twentieth century, it has made its appearance with growing clarity in all areas. Gradually it seized physics, biology, and psychology. This transformation [...] started out from the *concept of form*.⁴¹

We must note that the use of the word “form” here should not be rendered “in its old Aristotelian meaning,” that is, in terms of its anthropomorphic “*purposiveness*.” For, unlike a house built by an architect, making sense of natural phenomena—to scientifically objectify them—does not require relating them to a final cause⁴². In contemporary natural science, “form” indicates that there are no isolated parts without a whole within which they participate in a system. The whole is a meaningful structure—a *symbolic* structure—only because it is always more than

³⁸ Cassirer (1923b, p. 91). English translation in Cassirer (2013, p. 88). I have not provided the entire sentence here, as the translation reverses the meaning of the original text.

³⁹ Cassirer (1939, p. 24, my translation).

⁴⁰ Cassirer (1929a, p. 218). English translation in Cassirer (2021b, p. 226).

⁴¹ Cassirer (1942, pp. 449–450). English translation in Cassirer (2000, p. 91).

⁴² Cassirer (1942, p. 450). English translation in Cassirer (2000, p. 91).

the sum of its parts. For Cassirer, this is proven in a handful of disciplines: modern field theory in physics, holistic approaches to organic life in biology, and *Gestalt* theory in psychology.⁴³

Of course, such a global “recognition of the concept of wholeness and of the concept of structure has by no means effaced or eliminated the difference between the sciences of nature and the sciences of culture. But it has eliminated a separating barrier that until now has stood them between.”⁴⁴ Cassirer had patiently established the methodological lines demarcating the natural and cultural sciences in the *Logic of the Cultural Sciences*, and he clearly did not want to blur or transgress these lines. But, as Ernst Wolfgang Orth argues, it cannot be denied that as soon as one departs from a strictly epistemological perspective to develop a wider viewpoint on the philosophy of culture—as soon as one recognizes that science as a whole is symbolic—it becomes rapidly evident that the theoretical line between these sciences can only lose its sharpness.⁴⁵ This shift challenges the traditional dominance of the natural sciences over the human sciences. Far from stemming from an absolute, disembodied reason, the natural sciences are an integral element of the symbolic cosmos that the cultural sciences claim as their specific field of study, given that both are, after all, ways of giving form and meaning to the world. Scientific (and mathematical) truth is fundamentally anthropological, so long as we situate this term in its most general meaning as denoting the human capacity to symbolically grasp reality.⁴⁶

In this vein, Cassirer appears simultaneously Kantian and Goethean. We need only go to Kant’s *Anthropology from a Pragmatic Point of View*, in which he states that “to know the human being according to his species as an earthly being endowed with reason especially deserves to be called *knowledge of the world*,”⁴⁷ and to Goethe’s claim that “[a]ll philosophy

⁴³ Here Cassirer builds largely—although implicitly—on his interpretation of Kant’s third *Critique*, and more specifically on Kant’s teleological judgment, as developed in *Kant’s Life and Thought*. See Cassirer (1918, pp. 261–346). English translation in Cassirer (1981, pp. 271–360). Also see Schubbach (2016). English translation in Schubbach (2021).

⁴⁴ Cassirer (1942, p. 455). English translation in Cassirer (2000, p. 96). See also Möckel (2018, pp. 397 sq.).

⁴⁵ Orth (2007). English translation in Orth (2011).

⁴⁶ In this regard, see Orth (2007, p. 287, n. 84), where he discusses an anthropology “without a fixed, essentialized picture of humanity”. English translation in Orth 2011, p. 130, n. 87. Also see Becker (2012) and Endres (2021a, 2021b, 2024).

⁴⁷ Kant (AA VII, p. 119). English translation in Kant (2006, p. 3).

of nature is still only anthropomorphism [...] as man is the measure of all things.”⁴⁸ Put slightly differently, science is entirely dependent on style because it is a cultural product, an expression of the formative power of the human mind at both individual and collective levels. But how can we be sure that such an “anthropologization” of science is not self-defeating, leading to epistemic relativism? Is style a sufficiently stable ground for science to stand on? Historically speaking, the answer is yes—at least, this is Cassirer’s argument. As Jean Lassègue recalls, Cassirer views the emergence of the problem of style in European thought as the true starting point of modern scientific reasoning, which moves away from a substantialist ontology:

In order to understand how, during the Renaissance, a new functional solidarity between concepts and objects set itself into place, one must start by considering Cassirer’s remark according to which the physico-mathematical Renaissance was indeed *preceded* by a philological Renaissance having for object the critique of the Aristotelian conception of the role of language in the sciences. [...] According to Cassirer, the shift in perspective characteristic of the modern era was made possible by a shift in attention from grammatical categories to the notion of *style*, that is, from a logic based on an *ontology* to a thoroughly *aesthetic* reflection, as demonstrated by the extraordinary changes in artistic forms during the Renaissance.⁴⁹

By emphasizing the historical significance of stylistics in the evolution of the modern natural sciences—wherein objects are no longer perceived as “things in themselves,” but rather as outcomes of a constructive and “operative,”⁵⁰ that is, of a *poietic* process—Cassirer implicitly confirms that his epistemological approach is even more enmeshed with art and culture than first seemed the case. This reveals a highly original perspective on science, based on a creative interpretation of objectivity.

4. Style and Genius

⁴⁸ Goethe (WA V/2, p. 180), quoted in Cassirer (1921, p. 111). English translation in Cassirer (1953, p. 445).

⁴⁹ Lassègue (2016, pp. 54–55). English translation in Lassègue (2020a, pp. 33–34).

⁵⁰ See Orth (1988).

The aesthetic root of knowledge referred to above is epitomized by Leonardo da Vinci, whose scientific practice is intricately bound up with his creativity and attraction to the visual. In *The Individual and the Cosmos in Renaissance Philosophy*, Cassirer connects the parallel emergence of modern art and science to Leonardo's "new sensitivity to form," which was a trait of all Renaissance thought.⁵¹ Consistent with Goethe's heterodox reading of Kant's *Critique of Judgment*,⁵² Cassirer regards Leonardo both as an artistic *and* as a scientific genius.⁵³ For Kant, genius is the marker that distinguishes art from science; for unlike the scientist, the artist cannot explain the process of creation. The artist of genius "naturally" *invents* the rules of their art during production, whereas the scientist engages in a collaborative, explicable, and replicable effort to *discover* the general laws of nature.⁵⁴ Conversely, Leonardo, Goethe, and Cassirer share the view that discovery is also invention, such that science is intrinsically creative. As Cassirer puts it, a scientific concept is always "*prospective*; it not only fixes the already known, establishing its general outlines but also maintains a consistent outlook for new and unknown connections."⁵⁵

Cassirer's overarching contribution to the theory of knowledge is found in this recognition, according to Christiane Schmitz-Rigal. Cassirerian science might be defined as an "*open art*," for it is no longer premised upon a static table of categories, as it was in Kant's Critical philosophy, but rather on a generative process that welcomes "constant change and contingency in our knowledge-systems [...] as an integral and necessary part of all objectivation."⁵⁶ Here, Schmitz-Rigal is narrowly referring to contemporary physics, but this temporality, which hinges upon viewing truth as fundamentally open, applies uniformly to all fields of science, including the cultural sciences. In this connection, Cassirer notes in the *Nachgelassene Manuskripte und Texte* that all "concepts of style are *provisional*, [...] but *this*

⁵¹ Cassirer (1927a, p. 184). English translation in Cassirer (1963, p. 159). Also see Cassirer (1929b, pp. 345–346).

⁵² Cassirer (1945, p. 563).

⁵³ Cassirer (1906, p. 266).

⁵⁴ Kant (AA V, pp. 307–310). English translation in Kant (2007, pp. 136–140).

⁵⁵ Cassirer (1929a, p. 352). English translation in Cassirer (2021b, p. 358). This is what leads Jean Lassègue (2016, p. 118; English translation in Lassègue 2020a, p. 87) to argue that Cassirer's symbolic approach to science "discard[s] the Kantian opposition, as it is described [in the *Critique of Judgment*], between determinant judgment and reflective judgment."

⁵⁶ Schmitz-Rigal (2011, pp. 40 and 22). Also see Schmitz-Rigal (2002; 2010).

is no objection against their ‘scientificity,’ on the contrary: *this* provisional character can never be overcome in physics either.”⁵⁷ Reading the spirit of what Cassirer is saying, the concept of style is not only about developing a “science of art” (*Kunstwissenschaft*) that is capable of attaining objective knowledge of artistic and cultural creativity; it is also indicative of a general “art of science” intrinsic to Cassirer’s symbolic conception of truth.⁵⁸

In the *Metaphysics of Symbolic Forms*, Cassirer goes even further. He suggests that reality itself—not just the artistic representation and scientific knowledge of reality—must be considered an incessant creation of humanity, given that even the most minute sensory perception is always-already symbolically shaped (this is what he calls the “symbolic pregnancy” of the sensible).⁵⁹

The first step toward [an authentic consciousness of reality] is the work that man “produces.” This lasting “product” which is the “deposit” from his works, the “sphere of works,” of creations provides the passage, the actual access, to the

⁵⁷ Cassirer (1937–1938, p. 169, my translation). Also see Schwemmer (2012) and Hoel (2012–2013). In so doing, Cassirer extends Weber’s idea that the historical sciences are “fated to remain eternally youthful” to all scientific domains. See Weber (1904, p. 224). English translation in Weber (2012, p. 133).

⁵⁸ This should not be conflated with accusing Cassirer of confusing science and art, however. For him, they remain two complementary ways of connecting the individual to the universal: science aims to provide universal meaning to the individual; art discloses what is universal in the individual itself. What is at stake in Cassirer’s “art of science” is the idea that even the most general scientific process has a specific style, because the very claim to universality is a particular stance on the world, a particular mode of shaping reality.

⁵⁹ See Cassirer (1929a, pp. 218–233). English translation in Cassirer (2021b, pp. 226–242). Cassirer draws his concept of “symbolic pregnancy” from *Gestalt* psychology but is also aware of its Kantian and Goethean origins. For example, in Cassirer (1916, p. 249), he writes that for Goethe, “memory and imagination are already active in the sensory organs themselves,” which aligns perfectly with Kant’s idea that “the imagination is a necessary ingredient of perception” (my translation). For more on the symbolic structure of perception in Cassirer’s philosophy, see Endres (2020).

sphere of “objective” being. From the consciousness of works grows the consciousness of things.⁶⁰

Put simply, reality—whether felt, perceived, or conceived—is a human “product” because symbolic consciousness constitutes our *sole* experience of it. However, this does not imply that this symbolic production is entirely arbitrary. Cassirer adds later in the text:

The poetic [i.e., the symbolic shaping of reality] “arises” and “endures” outside every “intention” (as “aiming at a goal” taken as a specific, momentary, individual action). It is “without interest” [*interesselos*]. It dwells within itself and is “blessed in itself.”⁶¹

In my view, this poetic “disinterestedness,” the “unintentional” objectivity through which Cassirer tries to reach the fundamental meaning of symbolism itself, loses some of its mystery when we return to Kant’s theory of genius, understood not so much as a description of an actual individual, but as a generic definition of the spiritual forces of creativity. Just as the work of genius is both “original” and “exemplary”⁶²—in Cassirer’s terms, a creation whose significance “endures” beyond the “specific, momentary, individual” context of its emergence—so too is any symbolic shaping of reality both “free” and “lawful,”⁶³ inventive and persuasive, be it artistic or not.⁶⁴ As Cassirer says regarding the natural sciences:

The scientist cannot attain his end without strict obedience to the facts of nature. But this obedience is not passive submission. The work of all great natural scientists—of Galileo and Newton, of Maxwell and Helmholtz, of Planck and Einstein—was not mere fact collecting; it was theoretical, and that means constructive, work. It is man’s highest power and it designates at the same time

⁶⁰ Cassirer (1940, p. 136). English translation in Cassirer (1996, p. 141).

⁶¹ Cassirer (1940, p. 187). English translation in Cassirer (1996, p. 183).

⁶² Kant (AA V, p. 308). English translation in Kant (2007, p. 137).

⁶³ Cassirer (1923b, p. 86). English translation in Cassirer (2013, p. 83). Also see the definition of art a few pages later: Cassirer (1923b, pp. 93 sq.). English translation in Cassirer (2013, pp. 90 sq.).

⁶⁴ On the non-arbitrariness of artistic invention, see Cassirer (1944a, p. 158).

the natural boundary of our human world. In language, in religion, in art, in science, man can do no more than to build up his own universe—a symbolic universe that enables him to understand and interpret, to articulate and organize, to synthesize and universalize his human experience.⁶⁵

Owing to this “poetic” rendering of human reality, Cassirer does not endorse a purely pragmatic or instrumental understanding of objectivity; objectivity is never measured simply in the frame of its practical effects in the *Metaphysics of Symbolic Forms*.⁶⁶ Like artistic beauty or style, as Goethe calls it,⁶⁷ objectivity is that which, despite being undetermined beforehand, convinces us of its inner necessity in the very presentation of its form—a form that anyone can potentially understand, criticize, make their own, and further transform. Consequently, when examined through the lens of the theory of genius, style emerges as the foundational principle of any shared experience and the driving force behind the progressive shaping of a common world.

5. Provisional Conclusion: Style as Symbol of Symbolism

The exemplarity of art for science⁶⁸—and for objectivity in general—prompts the question of the ultimate status of style in the philosophy of symbolic forms. As is apparent from the above, Cassirer’s definition of style is quite loose, such that interpreting it is not always easy. But I believe that there is enough material to aid in clarifying it. Having thoroughly studied the issue, Barbara Naumann claims that style should be considered the “alter ego of symbolic forms” insofar as it reveals the poetic and performative character at stake in the “movement of thought.”⁶⁹ Marion Lauschke rightly points out, however, that this conflation of style and symbolic form lacks conceptual rigor and as such is problematic. We are left asking, precisely

⁶⁵ Cassirer (1944a, p. 237).

⁶⁶ Cassirer (1940, p. 179 sq.). English translation in Cassirer (1996, pp. 177 sq.).

⁶⁷ If style achieves the “highest possible level” of art by revealing the “essence of things [...] in visible and tangible form” (Goethe WA I/47, p. 80; English translation in Goethe 2016, p. 876), then beauty constitutes its intrinsic quality, as beauty represents “a manifestation of secret natural laws which without this appearance would have remained eternally hidden from us.” (Goethe HA XII, p. 467, No 719; English translation in Goethe 1998, p. 33, No 183). On beauty, also see Cassirer (1942–1943).

⁶⁸ See Holquist (2004).

⁶⁹ Naumann (1998, pp. 34–35). English translation in Naumann (2004, p. 84).

what does “alter ego” mean here? And what kind of connection does it invoke between the individual and the universal? While this point is obviously an incisive one, I disagree with Lauschke’s restrictive definition of style, which refers to a single “subgroup of cultural production,” namely art.⁷⁰ True, in *An Essay on Man*, Cassirer admits that one can “only metaphorically” speak of scientific genius, and that the “personal style” of any “great scientific discovery” has “only a psychological, not a systematic relevance.”⁷¹ But he also argues that art *and* science comprise the two highest peaks of spiritual creativity⁷²—a creativity that is found in all symbolic works of humanity, from the most “physical” sensation to the most “abstract” reasoning.⁷³

My view is that Cassirer’s statement has “systematic relevance” far exceeding a simple “psychological” rendition of style, as it aims to transcend the conventional opposition between realism and constructivism. I therefore suggest that, within the parameters of Cassirer’s philosophy—and especially in the *Metaphysics of Symbolic Forms*—style be generically defined as the concrete, continually renewed expression of the symbolic production of reality; or, to put it another way, as the symbol of symbolism itself, whose specific objectivity finds its most explicit instantiation in the work of art.⁷⁴ More precisely, style does not merely designate the “individual manifestation of the universal form of the symbolic function” or the “historical expression of the universal form of spirit,” as though it were possible to strictly differentiate between the general “being” of the symbolic form and the individual “direction” of its stylistic usage, as Steve Lofts claims.⁷⁵ In line with Goethe’s definition of symbolism, Cassirer conceives of “being” as always-already “oriented”⁷⁶ and the universal as always-already individualized.⁷⁷ To put this in terms of a mathematical analogy: Cassirer posits that the

⁷⁰ Lauschke (2007, pp. 215–217).

⁷¹ Cassirer (1944a, pp. 243–244).

⁷² Schubbach (2016, p. 284). English translation in Schubbach (2021, p. 254).

⁷³ See Cassirer (1944b).

⁷⁴ See Lofts (2000, pp. 196–197) and Capeillères (2009, p. 26).

⁷⁵ Lofts (2004, pp. 65 and 75, n. 22; 2000, pp. 181 and 221–222). See also Lofts in Cassirer (2021a, p. lxiv).

⁷⁶ See Capeillères (1997).

⁷⁷ This is why exemplarity is inherent in the nature of the symbol. See Lassègue (2016, p. 114). English translation in Lassègue (2020a, p. 84).

invariant of universality lives *in* the individual variations themselves.⁷⁸ Accordingly, Naumann is justified in referring style to Goethe's maxim, according to which the "general" and the "particular" always "coincide," because "the particular is the general [itself] made manifest under different conditions."⁷⁹ But it is more difficult to limit its theoretical validity only to Cassirer's manner of thinking, as Naumann does. For if all reality is unavoidably symbolic, style should be understood as having a more fundamental foothold as the universal yet shifting structure of human experience, as the ever-changing texture of the world itself.

Of course, this interpretation requires further analysis of Cassirer's corpus—in particular the *Nachgelassene Manuskripte und Texte*⁸⁰—such that it can be fully developed and elaborated. One might ask, for example: what about the tension between the descriptive and normative dimensions of style—what Carlo Ginzburg calls "style as inclusion" and "style as exclusion?"⁸¹ What is the relationship between creativity as a generic, collective process inherent in the objectifying capacity of the human mind and individual "genius?" What about the connection between invention and error, or deception?⁸² These are just a few of the many questions left unanswered by this short, exploratory study. But it is already evident that far from resulting in pure relativism, Cassirer's radical "stylistics" frees us from the illusion of an absolute, predetermined truth that opposes the vibrant plurality of lived experience. By examining the close relationship between art and science, Cassirer demonstrates that objectivity is not a given but a process that actualizes itself in the incessant diversification of its forms. As Lassègue suggests, "[f]or Cassirer, the *movement of objectification in its intrinsic diversity is the only reality*"⁸³ and the source of all unity, as this "differentiation of forms" is precisely what

⁷⁸ On the importance of Felix Klein's group theory to Cassirer's philosophy, see Endres (2020, pp. 257–267) and Lassègue (2016, pp. 21–48). English translation in Lassègue (2020a, pp. 5–28).

⁷⁹ Goethe (HA XII, p. 433, No 491). English translation in Goethe (1998, p. 82, No 569). Also see Naumann (1998, p. 68; 2004, p. 92).

⁸⁰ This analysis will be greatly facilitated by the recent publication of the "Register" of Cassirer's *Nachgelassene Manuskripte und Texte*, established by Christian Möckel. See Cassirer (2022).

⁸¹ Ginzburg (1998).

⁸² On the dialectics of error and truth in relation to perception, see Cassirer (1936, p. 188) and Endres (2020, pp. 270–280).

⁸³ Lassègue (2020b, p. 43, my translation).

“makes possible the search for ever-increasingly universal or limitless invariants.”⁸⁴ This paradox of style, however puzzling it may appear, undoubtedly constitutes a helpful key for understanding our pluralistic times while fighting against the erosion of our confidence in the power of reason.

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⁸⁴ Lassègue (2016, p. 121). English translation in Lassègue (2020a, p. 89).

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