Cassirer's Revision of Cohen

Ira Irit Katsur

Hebrew University of Jerusalem

Jerusalem, Israel

ira.kachur@gmail.com

Abstract—**Ernst Cassirer has been proclaimed a follower of Hermann Cohen. However, Cassirer modified the basic concepts of Cohen's theory of knowledge, so that Cassirer's philosophical positions in many aspects actually stand in opposition to Cohen's. Although Cassirer did follow Cohen's methodology coherently, in that path he refuted the main positions of his teacher. Cohen's philosophical task was forwarding Kant's critical method to construct a theory of knowledge. He aimed not only to renew Kant's method in the way he interpreted it, but also to revise, in accordance with Kant's method, the uncritical positions of Kant's own theory of knowledge. Cohen's methodology was intended to achieve this goal. In following his teacher's task, however, Cassirer developed a set of functional concepts which coherently reveal and overturn the uncritical positions in the theory of knowledge, including the one essential for Cohen himself. Consequently, it may be said, Cassirer "revises" Cohen's system in a same way that Cohen revised Kant.**

Keywords—Hermann Cohen; Ernst Cassirer; function and substance; Marc-Wogau; symbol

I. INTRODUCTION

Ernst Cassirer was the most prominent philosopher of Hermann Cohen's disciples. In the Davos dispute between Cassirer and Heidegger, famous in the philosophy of 20th century, Cassirer said: "I do not conceive of my own development as a defection from Cohen" [1]. The dispute took place in 1929, two years after Cassirer published the third volume of his magnum opus "The Philosophy of Symbolic Forms" (PSF) — his philosophical inquiry of culture, aimed to enlarge the theory of knowledge (epistemology) to a theory of culture — and as became evident from his words, Cassirer considered this enlargement to be worked out in accordance with Cohen's philosophy. However, my argument is that Cassirer actually modified the basic concepts of Cohen's epistemology. As a result, Cassirer's philosophy leads to a worldview which in many respects stands in opposition to Cohen's. In this paper I will trace the development of Cassirer's thought from the premises of Cohen's and stress the points where Cassirer distanced himself from his teacher.

Cohen, the founder of Marburg's school of Neo-Kantian philosophy, declared his philosophical task to be a movement "back to Kant". However, as Cassirer noticed, many German philosophers after Kant claimed the similar thing [2]. There were metaphysical and psychological interpretations of Kant. But Cohen differed from all others.

He proposed to interpret Kant in light of Kant's new theory of experience, known as the "Copernican revolution", that is, Kant's revolutionary move in which the theory of knowledge becomes the theory of experience. This means that the conceptual tools for acquiring the knowledge of nature determine this knowledge. Kant's critical method aimed to examine and advance this revolution. Experiences are not perceived by sense data; rather they are shaped by the powers of the mind, that is, dynamic functional judgments — the concepts of understanding. However, whereas Kant's epistemology included two sources of knowledge — concepts and intuition, that is, the forms of time and space for organization of sense data, Cohen's philosophical task was to revise Kant's concepts [13], [20]; he wanted to give a rational explanation for intuition and sense data, that is, to define them as dynamic judgments (Urteil) [12]. Cohen united time and space with concepts of understanding and defined sense data in terms of infinitesimal mathematical elements. In addition to intuition and sense data, the other problematic moment in Kant's theory is the thing-in-itself – the unattainable end of knowledge. Cohen transformed the thing-in-itself into the idea of complete knowledge, equally unreachable, but, unlike Kant's thing-in-itself, within the borders of knowledge; it is the infinite task of knowledge. The task — a complete idea of knowledge — is the ideal, and it defines a primary direction of scientific investigation. Cohen's infinitesimals as well as the infinite task are both process-concepts, directed to a definite point. For Cohen these concepts were completely different from the "stony" presence of sense data elements (starre Gegebenkeiten) [20]. He was convinced, therefore, that his methodology completed Kant's critical method. Nevertheless, the prejudged process directing investigation to a given point reifies this process, and in so doing erases the difference between it and static existing elements, such as substance. My goal in what follows is to show how Cassirer, following Cohen's methodology, eliminated Cohen's concepts, and in so doing went beyond Cohen in his interpretation of knowledge. I will argue that the first divergence Cassirer made from Cohen's philosophy was by the introduction of the functional concept, based purely on relation. He developed the functional concept into the concept of symbol, which, I argue, is an inconsistent concept that leads to double-thinking. Using the work of Cassirer's and discussions by scholars, I will argue that the inconsistency of the concept serves as the main means by which substantive elements in Cohen's and other epistemologies may be overcome.

II. FUNCTIONAL CONCEPT

Cassirer started his philosophical career as a student of the founder of the Marburg school, Hermann Cohen, and developed his philosophy of knowledge in harmony with the Marburg school methodology. This methodology included the following principal premises: first, negation of any given element in the process of cognition; second, use of the transcendental method, that is, the direction of investigation is from facts to conditions of knowledge; third, the direction of investigation is defined by the given task — a complete idea of knowledge; fourth is a unity of system [21] However, Cassirer made a significant shift from Marburg methodology already in his book Substanzbegriff und Funktionsbegriff (SF), written in 1910. The subject of this book is a theory of concept in accordance with the development of mathematics and the natural sciences. Cassirer followed the development of the generic-concept (Gattungsbegriff) to the function-concept or functional concept [8]. Cassirer's discussion begins with Aristotle's metaphysics. Aristotle distinguished between the mode of existence of individual things and the mode of existence of relations and attributes. The mode of existence of the former is called substance. This existence is independent, not bound by the existence of other things. In contrast, relations and attributes depend on the existence of things, so their existence is incomplete. Since Aristotle, the independent existence of substance is considered to be the model of existence. This model Cassirer called substantial existence or the substantial approach to existence. The theory of generic concepts is an outcome of the substantial kind of existence. The generic-concept is created by a common property of existing things. For example, by seeing many strong people, the concept of "strong" is generated. All people with strong bodies are subsumed in one group, under the concept of "strong". Cassirer emphasizes that this kind of concept formation matches the model of substantial existence, because this concept is part of reality. He noticed that the generic-concept might appear to be an arbitrary selection of one attribute, if it were not considered to be a real existence. So the concept "strong" was not perceived as a quality abstracted or taken from different people and animals, but as ultimate existence, a real essence of "strength". The essence of "strength" is as real as the existence of any individual thing. The generic-concept of "strong" is thus rooted in substantial existence, according to which substance is the real essence of things whose existence does not depend on other things or conditions, but it is the source for the existence of all strong things. For this reason, the generic concept and individual things are both substances that have the same mode of existence. So Cassirer calls generic concept "thing-concept" (Dingbegriff).

Cassirer states that it was Kant who made a revolution in the theory of concept. The Kant's "Copernican Revolution" aimed to turn the thing-concept into the function of cognition [6]. This change in fact signified the change from a substantial to a functional mode of existence. According to this, the concept is not a quality abstracted from individual things as is the generic concept, but becomes the function which determines the order of moments in the series F(a, b, c) [8]. This new notion of concept Cassirer called the functional concept (Funktionbegriff) that is dynamic concept which works as function. Function defines the relations between moments in the series. It means that moments are the inner components of relation, but relation is prior to them, and there is nothing outside of relation, no anchor, upon which relation depends. Function F does not exist as a member of a series; its mode of existence is completely different from theirs. The difference between function and members denotes the gap between the generic-concept and the functional concept. For example, the concept of "strong" is in defining conditions by which people considered to be less or more strong in relation to others. In contrast to the generic concept of "strength" which is abstracted from strong people, the strong individual does not exist as substance, nor does "strength" exist as a substance. Every strong person relates in some way to the concept of "strength", which is why they are called "strong". While the generic-concept exists in the same mode as a thing derived from and perceived by the senses, the functional concept exists as pure relation. There is no absolute individual being who is the strong person, but the quality of being strong is for a moment defined in comparison to strong moments of others. The functional concept presupposes that the relation has priority over existing elements. Cassirer makes the radical statement that there is no meaning for existing elements: "the meaning of all objective judgment depends on various relations" [10]. Therefore, for Cassirer both the function of the series and the moments of the series escape the substantial mode of existence. The function is not a condition for the existence of things, but it defines and organizes the relations between moments. The function-concept correlates to the change of "substantial" existence into "functional", which defines the relations between qualities as constitutive components of reality.

Cassirer's functional approach to concept seems perfectly to match the Marburg school methodology to free the process of cognition from any given sensory elements. His difference from Cohen is evident in two points: the annulment of foundation, and the annulment of the task. For the first: according to the Marburg school, a function that determines the relations between members of the series requires a foundation, that is, a principle of reality. Although this foundation is not identified with sensory elements, it has to be based on non-sensory reality -thinkable reality. For Cohen, this foundation is defined by infinitesimal mathematical elements. There is a continuum of smaller and larger in degree, the smallest of which is diminution to zero. There is no person without some degree of strength, but this quality can be diminished almost to zero. These are thinkable elements, but for Cohen thinkable mean real [14]. Unlike him, Cassirer eliminates any solid foundation and defines relation as the only foundation for function. The functional concept is pure relation, he argues. Concept becomes relational concept. It does not define the relationship between infinitesimals, but of two moments, whose existence is dependent only on relation. After reading Cassirer's proofs of Substanzbegriff und Funktionsbegriff Cohen become aware of Cassirer's shift from his teaching. His critique of Cassirer's relational concept was expressed in a letter of 24 Aug. 1910 to his student. Cohen insisted that relation alone

cannot define function and that it needs real infinitesimal elements: "...I still cannot discard as wrong what I told you in Marburg: you put the center of gravity upon the concept of relation and you believe that you have accomplished with the help of this concept the idealization of all materiality. The expression even escapes you, that the concept of relation is a category only insofar as it is function, and function unavoidably demands the infinitesimal element in which alone the root of the ideal reality can be found"[15].

As for the second: Cassirer's definition of function eliminates the notion of task. For Cohen, the task for the theory of knowledge is approaching knowledge — this approach is without end, since to reach complete knowledge is impossible. This task gives a primary direction to the investigation. Cohen's infinitesimals as well as the infinite task of epistemology are process-concepts directed to a point that they can never reach. Therefore, for Cohen, they avoid substantive existence.[1] The task, together with infinitesimals, both exist in an absolute manner, and as such they are remainders of substance in Cohen's writing. In contrast to Cohen, Cassirer's priority of relation over any kind of reality destroys the task and allows multiple directions, because no preconceived path is given. Yet what remains consistent in Cassirer's relational concept is the mode of relation between moments. This mode directs the order of moments, but does not determine the outcome. It constitutes a direction, but does not have any goal-oriented task. The mode of relation is also identified by Cassirer with "the guiding point of view". "In truth, it will be seen that a series of contents in its conceptual ordering may be arranged according to the most divergent points of view; but only provided that the guiding point of view itself is maintained unaltered in its qualitative peculiarity" [9]. It is still unclear here what "mode of relation" or "the guiding point of view" is. These points became more explicit in the Cassirer's later development of the relational concept into the concept of symbol. This will be clarified below.

III. FROM RELATIONAL CONCEPT TO THE CONCEPT OF SYMBOL

Whereas in SF Cassirer investigated the concept within mathematical and physical sciences, in PSF he aimed to show how the previously investigated relational concept works within the domain of the cultural sciences.[2] To begin with his aim was to broaden the critique of epistemology to a critique of culture. For this he had to transform the concept — the main tool for epistemological research — to a concept suited to the inquiry of culture, which includes far more than an epistemology of the natural sciences and mathematics. To do this, the functional concept becomes the concept of symbol. The "symbol" signifies the link of the rule of the function to the multiplicity of the concrete. The relational structure of the concept becomes the structure of the concept

of symbol. But in contrast to the concept in Substance and Function, working within the domain of natural sciences, the concept of symbol is applied to all areas of culture including language, mythical thinking and the primary level of perception. If in the concept of natural sciences the rules for ordering moments are independent from the moments themselves, in other cultural domains these rules or functions stay in various kinds of relations with its moments. Cassirer speaks about three kinds of relations which he called symbolic functions. My aim is to prove that the priority of relation exists in every definition of the concept of "symbol". For this purpose, we must advance a more detailed investigation of symbol in its different symbolic functions.

While the symbol is the most general concept, which includes all kinds of connection of the organizational principle with the concrete moment, there are three specific symbolic functions. These three functions characterize the mode of relation between symbols and symbolized. Cassirer named them "expression" (Ausdruck), "representation" (Vorstellung) and "signification" (Bedeutung). Expression characterizes the mode of relation in the symbolic function where the symbol is identified with what is symbolized; the meaning of expression is expression, and not something different from it. Cassirer defines expression as a kind of symbol that becomes essential for the perception of other subjects and for the construction of a mythical worldview. The perception of other beings' state of mind is conveyed in facial and bodily expression [4]. The meaning of an expression such as "bad mood" is embodied in the material content of that face. A face is not a representation of sadness or happiness, but embodies the expression. The same undivided unity between a symbol and its meaning is present in the non-figurative work of art such as abstract art where the composition of form and color has no external meaningful representative dimension. We have an immediate perception of the composition in non-figurative art.[3]

Representation is a symbolic function where the relation between symbol and symbolized is that of meaning represented by content. This mode of relation began with the development of language and the apprehension of the world in space and time. As animalistic screams were transformed into declarative speech, the unity of expression was broken by the appearance of the "sign". In contrast to the "language" of screams and bodily expressions, in mature language the sequence of sounds or written signs (Cassirer does not distinguish between them here) represents or stands for something else, namely concepts. The symbolic function of representation is at work in more proximate religious perceptions. For example, the icon of a God is a representation, since it is perceived to be a representation of the God and not the God himself. In traditional art the picture represents objects, but it is not identified with these objects. Yet Cassirer states that in representation there is no total separation between the symbolizing function and

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[1] The critique of this kind of approach came from Horkheimer and Adorno in The Dialectic of Enlightenment. They argued that the functional concept becomes substance, because all its members are defined according to their given task.

[2] Already in the Foreword Cassirer declared that ideas of the PSF grew from SF [3].

[3] Cassirer's scholar J.M. Krois gives an example of this kind of symbolic function in the work of Ives Klein, International Klein Blue. This is an image of a blue square, which expresses the feeling of cold. The blue color of the square is a symbol that does not point to the idea of cold, but embodies the feeling of cold [17].

symbolized. Even in language, the first expressive level never disappears. The words are always uttered with some intonation which has expressive characteristics. Therefore, there always remain some subtle resemblances between the symbol and the symbolized, the presented and the represented.

The third symbolic function is signification, characterized by the complete separation of symbol and symbolized, sign and signified. This kind of symbol is pure sign, which started to develop with the appearance of mathematics. It was most fully realized only with the development of the modern scientific-theoretical approach. Signification distances itself from any immediate perception or anything in the world of concrete things. The scientific concept, discussed above as functional concept, is the implementation of the third symbolic function. There is no resemblance between sign and signified; their connection is arbitrary, completely unmotivated. The number two indicates any two things; it does not resemble what it signifies. The law of gravitation accounts for attraction between masses of things, and as a law it is very different from things. As in all symbolic functions, the role of sign-symbol is to relate between many and one, but the one is very different from "many".

Cassirer argues that the priority of the relational or symbolic over given elements is already involved in the organization of sensory perception, even in expression. The unity of material expression and meaning has a potential to be divided. Due to the priority of relation, there is no strict fixity of perception. Sensory perception may be organized by three symbolic functions which open "a guiding point of view". These perceptual possibilities or guiding points explain how the same sensory content may be understood in different ways. To define the mode of the relationship between meaning and senses he introduced the term symbolische Prägnanz [22] translated as "symbolic pregnance".[4] Symbolic pregnance is the moment of relation between meaning and sensory impression, which enables different modalities of meaning. It stands for the condition of something to be perceived, that is, in the neo-Kantian sense, the transcendental principle of cognition [16].

IV. THE CONCEPT OF SYMBOL AND NON-IDENTITY

Cassirer's concept of symbol is quite vague, especially, concerning the first symbolic function — expression. Expression is defined as the unity of meaning with sense data. It is characterized by its undivided wholeness of experience and is also called Erleiden, translated as "a mere passivity" [5]. Expression can be defined as meaning embodied in sensory perception. Cassirer states that expression is an essential moment of perception by which the world is initially "revealed" to us [4]. Meaning refers not to a particular component of perception but to the whole. It cannot be separated from the sensory component. Nevertheless, even in expression symbolic pregnance as a mode of relation must be prior to the unification of meaning with senses. Cassirer often stresses that the meaningful

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[4] The translation suggested by Krois [16].

component of perception is not immediately given in a sensory impression; rather it needs to be united with a sensory impression in some mode of relation. This raises the question whether expression can be consistent with symbolic pregnance. On the one hand, expression is defined as an immediate, undivided perception; it requires undivided unity of perception. On the other hand, symbolic pregnance requires the separation of meaning and senses. If expression is manifested in the basic moment of perception, as Cassirer asserts in the chapter "The Phenomenon of Expression as the Basic Factor in the Perceptive Consciousness" in PSF III — there will be no separation between meaning and the senses, and thus it will be impossible to talk of a mode of relation between meaning and sensory perception.

In PSF Cassirer does not provide an explanation for this inconsistency. Instead, he intentionally kept shifting position, for which he was criticized by scholars. The Swedish philosopher Konrad Marc-Wogau in his 1936 article "Der Symbolbegriff in der Philosophie Ernst Cassirer's" claimed that the definition of the symbol-concept in PSF contains a contradiction. On the one hand, the concept of symbol consists of two different moments; on the other hand, the two moments of the symbol are united in relation and there is therefore only one moment [18]. Marc-Wogau argues that this inconsistency is present in all three definitions of symbolic function: expression, representation and signification. Marc-Wogau's critique of the symbol is concerned already with the relational theory of concept in Cassirer's SF. Like Cohen, he claims that it is impossible to consider a pure relation without contradiction. According to him this contradiction leads to double-thinking (Doppelgedanken). In one thought the two moments are perceived as one and as two at the same time. In other words, if meaning and senses are moments of perception, they are united and cannot stay in relation as independent variables. However, if they are connected by different mode of relation, they cannot be united.

In articles written in 1936 and 1938 Cassirer responds to Marc-Wogau's critique. He accepts Marc-Wogau's conclusion about double-thinking in the definition of the concept of symbol. Cassirer's purpose was not to hide the double-thinking but rather to emphasize it [11]. The double-thinking manifests the essential relational character of the concept of symbol. It is a functional concept, not a generic concept. Therefore, Marc-Wogau is correct in saying that the concept of symbol includes two divided moments that remain in a relationship with each other; they are neither completely divided nor completely united. The consequence of this relational position is that the two moments are divided only in thought; in fact, they are neither divided, nor are they united, because they remain in a relationship and are considered to be divided. Marc-Wogau, says Cassirer, did not accept the fact that the functional concept is not a substantive element, based on the logic of identity. In the framework of the substantive position, every concept must have a fixed meaning, and it has to be consistent with other concepts in this framework. The logic of identity presumes that concept has a fix meaning. As one cannot think about two different things or see two different images

simultaneously, one cannot have two inconsistent concepts in one thought. But in addition to the logic of identity there is logic of non-identity, and it does not require consistency as a necessary condition of thinking. The concept of symbol as a functional concept does not exist in a way that a thing exists. It includes aspects that contradict each other. The primacy of relation over existing elements is a result of the functional worldview, which dismisses the substantial existence of a thing. Critics of Cassirer's functional concept, as Cohen and Marc-Wogau misunderstood this point of inconsistency. They initially considered function to be a new substance whose existence depends on solid rules or principle of reality. However, the inconsistency or double-thinking of the concept of symbol definition destroys the substantial worldview and reveals a fluid picture with many aspects, some of which do not go together with one another. Cassirer asserted that the concept of symbol is simultaneously one and many, simple and complex [11]. The concept of symbol reveals how different symbolic functions generate perception. This concept explains how perception includes both: the actual unity of meaning and senses together with their functional distinction and modality of meaning. There is no one fixed and 'right' way to see or to hear. In other words, there is no objectively given one world, and every perception is an interpretation.

V. CONCLUSION

This paper has shown how Cassirer revised Cohen's epistemology. Knowledge, according to Cohen, is constructed by concepts of mind. Yet Cohen's system of knowledge required the principle of reality and was directed by a primary defined goal. It can be said, then, that he is a fundamentalist regarding knowledge. Cohen's entire system of knowledge can be identified with substance – unchangeable essence – that is the system in which truth is primary defined. Cassirer, who began his philosophical career as Cohen's student, developed a very different interpretation of what knowledge is. Advancing Cohen's task to free cognition from unconstructed substantive elements, Cassirer introduces the functional concept – the concept of symbol – as a main tool of cognition which coherently destroys any substantial remainders in Cohen's system of knowledge, including the predefined task of knowledge and the principle of reality. In his theory of concept, Cassirer frees concept from its dependence on existence and provides a much more flexible and relational framework than Cohen's approach for scientific and cultural theories. Analyzing functional concept, based on relation, Cassirer reveals the ambiguous relational nature of every concept, which breaks with logical determination. Cassirer's system of knowledge, I claim, avoids any predestination and has no anchors in the principle of reality. Consequently, I believe, Cohen's and Cassirer's epistemology exposes opposite views regarding knowledge and reality. While for Cohen knowledge can be knowledge only with a solid foundation, Cassirer destroys any foundation; he argues for the relative unfixed aspect of every system of so called objective knowledge. This position (never explicitly enunciated by Cassirer, however), can be said to anticipate Kuhn's The Structure of Scientific Revolutions, which argued that there is no such thing as truth

for scientific knowledge, since its veracity is assured by a paradigm, chosen as the best theory.

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