

9. The Organic System of Science

Krause has shown that based on the fundamental intuition of the ego, in which the ego reflects on the transcendental constitution both of the ego as such, and in itself, it is immediately certain that a highest and ultimate principle of fact and knowledge exists in virtue of which every finite entity, be it an item of knowledge or an object in nature, is what it is, and is intelligible to the mind. Considered as such, this highest principle is that in virtue of which science as an organic system of science is possible and actual, because, considered as such, this principle is what, through its essence, establishes the unity of unity and difference needed for reality to exist in such a way that an organic system of science is possible. Considered in itself, the principle of science, *Orwesen*, is that which holds the world within, because, considered in itself, what we call the world is nothing over and about the union of the essentialities that are constitutive of the very intrinsic nature of the principle itself, as a whole, which, as the principle of the unity of its own being, as *Urwesen*, is the ultimate ground of the existence of the world, that is, of the union of reason, nature, and humanity. As such, the principle of science is the unity of its essentialities is, in itself, these essentialities and their opposition and union.

9.1 The organic system of science as the science of *Orwesen*

Krause summarizes the essentialities of Essence as follows: ‘Essence is essentiality and, in essentiality, unity; in unity, however, original-unity-of-essentiality, selfhood, wholeness, and unitedness; and formness or positivity, in positivity unity of form, unity of positivity, or unity of number; and, in unity of positivity, original-unity-of-positivity, directedness and comprehension; and beingness’ (Krause 1828: 387). These divine properties, the essentialities of Essence, are the material and formal categories of all being and knowing. That is, they are the categories with which the ego necessarily knows not only itself but everything that it can intelligibly grasp and know. For instance, in relation to selfhood and directedness it follows that as soon as I think of myself at all, I necessarily think of a self-same something that is directed towards itself. And, in relation to wholeness and comprehension, it follows that I can think of a whole if and only if I think of something that grasps

itself. Furthermore, any object of the mind is such that I always think it as a self-same and whole essence that grasps itself and is directed towards itself.

Because the transcendental categories of knowledge are *eo ipso* the transcendental categories of *Orwesen*, it follows that not only God, but everything that is, is a self-same and whole essence that is directed towards itself and grasps itself. All knowledge, as well as all beings, is determined in and through God, through the unity of His essence and the unity of his being. All knowledge and all being are determined by these categories, and, indeed, in such a way that all categories are, and are known to be, in union with all other categories.

Based on this insight it follows, according to Krause, that the organic system of science, considered as a set of propositions, is nothing over and about a mapping and an explication of the highest principle of science itself, that is, of *Orwesen*. If *Orwesen* is the highest principle of science in virtue of which everything is what it is and is recognized in the way it is recognized, if *Orwesen* is, in this sense, the one and only object of science, then a full understanding of the nature of *Orwesen* considered as such and in itself, is a full understanding of the organic system of science.

The organic system of science is what it is in virtue of the relations and unities to be found amongst the essentialities of Essence. This, though, entails that any particular science in the organic system of science is a science of a divine property. The organic system of science is therefore the science of *Orwesen*. Krause also names this organic system of science ‘the absolutely organic, unconditioned structural science’: ‘Because the intuition of Essence is itself unconditioned, the Absolute is prior to and above every and each opposition, and therefore prior to and above the opposition of the infinite and the finite, the unconditioned and the conditioned, the knowing and the known, the subject and the object. [...] However, the structure of science, described here, can be called absolutely organic, because it is thought that all distinguishable, determinate items are finite, in some perspective or other, according to the essentiality of Essence, which is in, with, and through every essentiality’ (Krause 1828: 358).

9.2 The infinity of the system of science

As an organic system of science, the true and single metaphysical object of which is the highest principle of science itself, that is, *Orwesen*, the system of science is infinite in so far as there is no finite set of propositions describing the complete essence of *Orwesen*. The reason for this consists, on the one hand,

in the fact that the principle of science is the unity of unity and difference and, on the other, that based on the transcendently discovered formal and material categories an infinite hierarchy of unities and differences of these categories is entailed that denote infinitely different aspect of Being.

In the analytical-ascending part of science, Krause discovered the following categories that in the synthetical-descending part of science have been identified as the essentialities of the one principle of science:

Material Categories	Formal Categories:	Material-Formal Categories:
<i>Original Unity of Essentiality</i>	<i>Original Unity of Positivity</i>	<i>Original Unity of Beingness</i>
<i>Selfhood</i>	<i>Directedness</i>	<i>Unity of Difference</i>
<i>Wholeness</i>	<i>Comprehension</i>	<i>Unity of Determination</i>

Because of the unity of the essentialities of God, that is, because there is ultimate unity in God in so far as God is identical to His essentialities, it follows, in a first step, that each of these categories must be united with every other category by way of two place-relations. Suppose, then, that we treat only the material categories of original-unity-of-essentiality, selfhood, and wholeness as the starting point for a further analysis of the highest principle of science. Then, where *a*, *b*, and *c* stand respectively for each of the single categories further categories are yielded as essentialities of God according to the following pattern:

God			
a	aa	ab	ac
b	ba	bb	bc
c	ca	cb	c

Because Essence is the unity of that which Essence is, it follows that, in the table, we must unite each horizontal category with each vertical category to know further properties of God. The further essentialities of God, which are given with the categories *a*, *b*, and *c* and which should be read as *a-b-unity* (or: unitedness of *a* and *b*), are *aa*, *ab*, *ac* and so forth. As Krause (1828: 459) states: 'I will clarify [the formation of the categories] by three fundamental things given without end, and many times repeatable, which will be designated by *a*, *b*, *c*. We thereby first find three one-place consequences: *a*, *b*, *c*. Now the

two-place part-wholes can be constructed next: either out of two a's, that is; a and a, or a and b, or a and c, or b and a, b and b, b and c; or c and a, c and b, c and c. These are all the two-place consequences or all the consequences of the second class.'

However, the two-place relations that represent further essentialities of the principle of science do not exhaust the essence of Essence. In a second step, 'all three-place consequences, or the third class, are to be constructed, so: a and a and a, a and a and b, a and a and c' (Krause: 1828: 459). That is, we obtain a new tier of divine essentialities according to the following schema: for any natural number n of divine essentialities and any m -place-relation, we obtain n^m further essentialities of the divine being that represent further aspects of its being. To take one example: God is not only selfhood, wholeness, and directedness, but also, for instance, selfhood-wholeness-unity and selfhood-wholeness-directedness-unity. As Krause (1828: 460) explains: 'This operation is therefore incompletable. Now, these operations can still be made intuitive through ground elements [*Grunddinge*] of a certain kind, for example, through tones or colours. Suppose one takes the tones of the hard ground cords, for example, C, E, G, then one would obtain certain unsophisticated small melodies, and indeed, all those possible in the range. But the most important example, which I especially recommend you go through, is if we suppose the essentialities of Essence to be these ground elements [*Grunddinge*] or elements [*Elemente*]. [...] If one takes the highest essentialities at the same time as ground elements in a range, and unfolds the structure of the whole sequence (the whole sequence, the system of variations) for it, then one unfolds everything that follows and every fundamental essentialities of Essence at the same time' (Krause 1828: 460).

These combinations admit of being endlessly repeated. The system of categories is therefore an infinite system of divine properties which is developed, beginning with the basic categories, each in its own way. For, to fully describe the system of categories, all the categories must be thought with one another in unity to ensure that God is the unity of what God is. It is therefore not to be wondered at that 'the structure of the fundamental concepts or table of categories appears very comprehensive [*reichhaltig*]' (Krause 1829: 201).

To fully describe the organic system of science, each one of the categories must be united with every other, and all these unities, again, with all individual categories. In this way, a most systematic but inevitable structure of categories is obtained: 'For, if we associate each of the three simple members:

essentiality, positivity, beingness, each with each, then we obtain 9 two-membered fundamental concepts, and 27 three-membered, and so on. [...] In this innumerable number of cases, none is empty. But each combinatorial consequence or complexion gives a definite, multi-membered fundamental concept [*einen bestimmten mehrgliedrigen Grundbegriff*] (Krause 1829: 201).

In Krause's system, this deduction of the categories is logical: the highest categories are derived with immediate certainty from the intuition of Essence. And they are then interrogated for their unity, which bring with it further distinctions, as well as further unities, on the ground of the fact that God is the unity of what God is. Because all of these categories are properties of God, and because God as the one category is the one fact principle of science, it logically follows that each property of God is the principle of one relatively independent science: each category is, itself, an extensive and inexhaustible region of scientific investigation. As Krause (1828: 359) says: 'In so far as the inner members of the structure of Essence are fully known in this part, it itself embraces the whole of science. However, because each single part or member of the structure of Essence is, in itself, an infinite task for further research, on account of this consideration, the highest ideas of the highest subordinated sciences will be emphasised [*hervortun*]. These, when they are developed further, grant to the human mind the inner further shaping of the structure of science [*die innere Weitergestaltung des Wissenschaftsgliedbaus*]. Therefore, the possibility [*virtualiter, potential*] of the whole of science is contained in this. But that is why the actual [*actu*] knowledge is not yet realised. But, at this stage of absolute organic science, the human mind becomes fully conscious, and in a well-ordered way, of the supreme tasks subordinated to its further research.'

Krause, though, would have agreed that the finite mind could not imagine something under every category or under every possible science, because this would imply that the finite mind could completely grasp God. Instead, Krause can argue that the whole system of science unfolds in the course of time, bit by bit, with its infinite individual sciences. The working out of science as a system, the permanent distinguishing of the disciplines, would be an infinite task for humanity, which is appropriate to the object. Because, for Krause, time is the form of the infinite inner life of God, that is, because God as such lives in time in himself, it follows that time is infinite, and thereby provides the space for the infinite unfolding of the whole of science.

9.3 The principal sciences and the system of science

The properties of God are the categories. Each category grounds a science. The system of science is therefore the system of divine properties. Science is, in other words, an organic system of knowledge. Just as the divine properties are an explication of the *one* unity of the essentiality of God, with one another and under one another, so, in this way, the system of science is also to be grasped. Because all sciences, in the last analysis, are sciences of discriminable aspects of the divine essence, the inner consistency between the higher and the individual sciences is ontologically grounded: 'Now since all essentialities are a structure in God, all the individual sciences are also the inner structures of the one science, as the structure of the intuition of Essence. Thus, as essentialities, according to their nature and degree, and interrelationship, behave in themselves, and in and to God, so also all the individual sciences behave in themselves and in and to the one science. The structure of science is thus an unfolding of the structure of the basic ideas as about and in the idea of God' (Krause 1829: 230). That is to say, 'science [contains] in the one fundamental idea [*Uridee*], which is, at the same time, the basis and content of the entirety of science, a structure of subordinate sub-systems and subsystems, the development and peculiar design of which are the individual sciences. The whole of the original discourse constitutes one, sound, living, and beautiful science, in so far as humanity and human-kind is able to grasp and comprehend this infinite whole' (Krause 1829: 13).

Because the full description of the system of science is, in any case, infinite, Krause is content to specify only the principal sciences and to spell out their relation to the sciences subordinated to them, and to the system of science as a whole. To this extent, Krause divides the entire system of science into four principal sciences, to which the special sciences are subordinate. The principle sciences correspond to those essentialities of God that have been recognized with immediate certainty in the fundamental intuition as the material categories of the divine being. That is, the principal sciences are the sciences of selfhood, wholeness, selfhood-wholeness-unity and *Urwesen* in so far as *Urwesen* is the higher principle of the unity of selfhood and wholeness.

Because, according to Krause, selfhood is reason, where wholeness is nature and the union of both of them is what constitutes humanity, this classification of the principal sciences is synonymous with the more familiar distinction between the following principal sciences: natural science (*Naturwissenschaft*),

science of reason (*Geisteswissenschaft*), science of human beings, and philosophical theology. As Krause says, science proclaims itself as ‘a four-fold whole, in which science is to be known: nature, reason, humanity, and, above these, God. Therefore, it can be said that the whole of science proclaims itself, to spirit, as knowledge of God, and as natural science, as reason science, as human science [...] and as a science of God, provided that God is recognized as being above the world’ (Krause 1869: 25).

Philosophical theology is the science of *Urwesen*, in so far as *Orwesen*, in itself, is the original-unity-of-essentiality, which is distinguished from the opposition of essentialities and their unity, all of which has been intuited as constitutive of *Orwesen* in itself. In other words, as the science of *Urwesen*, philosophical theology is the science of the ground of the world and its unification with nature, reason, and humanity. The science of reason is the science of selfhood and therefore the science of conceptual harmony, unconditionality and freedom, because being unconditioned, according to Krause, means being free. It analyses all aspects of freedom and how freedom is possible. Furthermore, natural science is the science of wholeness that investigates the structure of nature, today we would say: the universe, in so far as it is a whole. The science of human beings investigates the status of free human beings as part of the whole universe.

In Krause’s system of science, all other individual sciences, as sciences of divine properties, must be subordinated to one of the respective principal sciences, in such a way that it becomes understandable how the principle of the respective individual sciences derives from the principle of the corresponding principal science. This allows Krause to ascribe to each of the sciences a certain independence, which belongs to it through its ground, the fact principle. As Krause (1829: 2) states: ‘Every special science has a certain independence. For if the basic idea, the basic thought, is given to a special science, then it can be partly developed for itself. But the fundamental ideas of all the special sciences are united in a fundamental idea: all the special sciences are fundamentally contained in the one fundamental idea of the one science. And the highest perfection of every special science, to which humanity and mankind can attain, can only be gained if every special science is formed as an inner, well-connected link in the one science.’

Just as natural and rational science are interconnected by their union to human science, the special sciences are connected, directly or indirectly, with

any other principal science and its subordinate special sciences. To take one example: if the science of reason, as the science of selfhood, is the scientific investigation of the essentialities of free and unconditioned finite essences, as such, then selfhood-selfhood-unity (*Selbvereinselbheit*) will be the science of the relations of rational beings among one another and will analyse how the freedom of one finite entity is possible relative to the freedom of another.

9.4 The non-vicious circularity of the system of science

An objection against Krause's pantheism consists in objecting to him that he argues in a circle. For, so could one argue, only through Krause's concept of science, according to which science is one whole, unified, organic, system of knowledge, is it implied that there must be a single and highest ultimate principle of science. This highest principle of science, that is, *Orwesen*, is then understood to embrace both the unity and the difference of knowledge in the system of science, and therefore is also what accounts for the transcendental constitution of the ego. Then, however, so the objection goes, it cannot be surprising if Krause uncovers this principle at the end of his philosophy and spells out the entailments of the concept of the principle of science as adequate. It seems that Krause is guilty of a *petitio principii*.

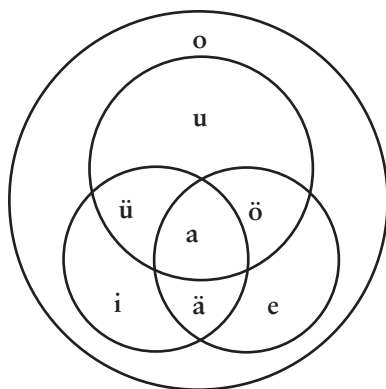
Instead of taking this as an objection to his account of pantheism as leading to an organic system of science, though, Krause fully endorses this consequence as a necessary condition for the development of any genuine philosophical system. According to Krause, some philosophers 'will object that my philosophy goes around in a circle. I know this. It should be so and cannot be otherwise. The circle itself is the following: in order to philosophise, one must have the belief, indeed the firm conviction, that the whole world is harmonious, and when one has philosophised, one comes back again to the same thing from which one set out. Before everything, it is to be noticed that that which is true is that without which the human being cannot subsist. If the latter is so, the truth [*das Wahre*] must be laid down in every individual, even the most uneducated human being, in a peculiar form. For he cannot live without it. So no wonder that, at the beginning of philosophy, nothing can be doubted about what one knows only more certainly at its end' (Krause 1889: 66).

So Krause does in fact argue in a circle, but because of the *necessity* that science can only be prosecuted in a circle. In other words: panentheism as a system of science can only be justified in a circular way, if it is assumed that God is the one infinite fact and knowledge principle whose essentialities are the transcendental and transcendent categories of all being and knowledge: ‘The thought of God [...] is by no means capable of proof in its content, for God himself is thought of as the ground of the possibility of every proof, and indeed of every doubt which ascends in the undeveloped knowledge of the finite spirit’ (Krause 1869: 265).

9.5 Summary

The organic system of principal and special sciences is possible because *Orwesen*, as the highest principle of science, determines both the principles of the principal sciences, in itself, and, through these, the principles of the other special sciences: ‘The one science is the structure of all the individual sciences, all of which are in it, as the structure of every individual essence is in Essence. Or rather, all is in itself and for itself in the one science, as the structure of finite and individual beings [*Endwesen und Einzelwesen*]’ (Krause 1890: 44). The principal sciences admit of division into philosophical theology, natural science, science of reason, and human science. Each special science is a science of a union of what these principal sciences deal with and has its own principle by which the knowledge contained within it is justified.

The diagram constructed by Krause illustrates the structure of the organic system of science:



First: when *o* represents the organic system of science as such, *i*, *e*, and *u* represent the principal sciences of selfhood, wholeness, and the principle of their unity, *Urwesen*, where Krause addresses the union of selfhood and wholeness, humanity, as the fourth principal science, *ä*. This immediately entails the existence of further special sciences that investigate particular features of the relation between selfhood, wholeness, humanity, and *Urwesen*: *ü*, *a*, and *ö*. That is, for instance, *ä* is the science of the relation between selfhood as part of the world and the principle in virtue of which selfhood exists in the world. second: If *i*, *e*, and *u* represent any three categories, we obtain, according to Krause, immediately further categories by looking at the unities and differences of these categories as represented in the diagram, where *i*, *e*, and *u* can also represent the same category or only two different categories.