

judgment, in behalf of its own use, always to ascend from empirical, particular laws to more general<sup>a</sup> but at the same time still empirical ones, for the sake of the unification of empirical laws, which grounds that principle. And one can by no means charge such a principle to the account of experience, because only under the presupposition of it is it possible to organize experiences in a systematic way.

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## V.

### On the reflecting power of judgment.

The power of judgment can be regarded either as a mere faculty for **reflecting** on a given representation, in accordance with a certain principle, for the sake of a concept that is thereby made possible, or as a faculty for **determining** an underlying concept through a given **empirical** representation. In the first case it is the **reflecting**, in the second case the **determining power of judgment**. To **reflect** (to consider),<sup>b</sup> however, is to compare and to hold together given representations either with others or with one's faculty of cognition, in relation to a concept thereby made possible. The reflecting power of judgment is that which is also called the faculty of judging<sup>c</sup> (*facultas diiudicandi*).<sup>7</sup>

**Reflecting** (which goes on even in animals, although only instinctively, namely not in relation to a concept which is thereby to be attained but rather in relation to some inclination which is thereby to be determined) in our case requires a principle just as much as does determining, in which the underlying concept of the object prescribes the rule to the power of judgment and thus plays the role of the principle.

The principle of reflection on given objects of nature is that for all things in nature empirically determinate **concepts** can be found,\*

\* On first glance, this principle does not look at all like a synthetic and transcendental proposition, but seems rather to be tautological and to belong to mere logic. For the latter teaches how one can compare a given representation with others, and, by extracting what it has in common with others, as a characteristic for general use, form a concept. But about whether for each object nature has many others to put forth as objects of comparison, which have much in common with the first in their form, it teaches us nothing; rather, this condition of the possibility of the application of logic to nature is a principle of the representation of nature as a system for our power of judgment, in which the manifold, divided into genera and species, makes it

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<sup>a</sup> The next two clauses were added to the fair copy.

<sup>b</sup> *Reflectiren* (*überlegen*)

<sup>c</sup> *Beurtheilungsvermögen*

20: 212 which is to say the same as that in all of its products one can always presuppose a form that is possible for general laws cognizable by us. For if we could not presuppose this and did not ground our treatment of empirical representations on this principle, then all reflection would become arbitrary and blind, and hence would be undertaken without any well-grounded expectation of its agreement with nature.

With regard to the general concepts of nature, under which a concept of experience (without specific empirical determination) is first possible at all, reflection already has its directions in the concept of a nature in general, i.e., in the understanding, and the power of judgment requires no special principle of reflection, but rather **schematizes** this *a priori* and applies these schemata to every empirical synthesis, without which no judgment of experience<sup>a</sup> would be possible at all. The power of judgment in its reflection is here also determining and its transcendental schematism serves it at the same time as a rule under which given empirical intuitions<sup>b</sup> are subsumed.

20: 213 But for those concepts which must first of all be found for given empirical intuitions, and which presuppose a particular law of nature, in accordance with which alone **particular** experience is possible, the power of judgment requires a special and<sup>c</sup> at the same time transcendental principle for its reflection, and one cannot refer it in turn to already known empirical concepts and transform reflection into a mere comparison with empirical forms for which one already has concepts.

possible to bring all the natural forms that are forthcoming<sup>d</sup> to concepts (of greater or lesser generality) through comparison. Now of course pure understanding already teaches (but also through synthetic principles) how to think of all things in nature as contained in a transcendental **system in accordance with *a priori* concepts** (the categories); only the (reflecting) power of judgment, which also seeks concepts for empirical representations, as such, must further assume for this purpose that nature in its boundless multiplicity has hit upon a division of itself into genera and species that makes it possible for our power of judgment to find consensus in the comparison of natural forms and to arrive at empirical concepts, and their interconnection with each other, through ascent to more general but still empirical concepts; i.e., the power of judgment presupposes a system of nature which is also in accordance with empirical laws and does so *a priori*, consequently by means of a transcendental principle.

<sup>a</sup> This phrase replaces “perception of an object” in the fair copy.

<sup>b</sup> Kant replaces “representations” in the fair copy with “intuitions.”

<sup>c</sup> *Und* in the fair copy crossed out by Kant.

<sup>d</sup> Kant replaces *empirische Vorstellungen* (“empirical representations”) in the fair copy with *alle vorkommende Naturformen*.

<sup>a</sup>For it is open to question how one could hope to arrive at empirical concepts of that which is common to the different natural forms through the comparison of perceptions, if, on account of the great diversity of its empirical laws, nature (as it is quite possible to think) has imposed on these natural forms such a great diversity that all or at least most comparison would be useless for producing consensus and a hierarchical order of species and genera under it. All comparison of empirical representations in order to cognize empirical laws in natural things and **specific** forms matching these, which however through their comparison with others are also **generically corresponding** forms, presuppose that even with regard to its empirical laws nature has observed a certain economy suitable to our power of judgment and a uniformity that we can grasp, and this presupposition, as an *a priori* principle of the power of judgment, must precede all comparison.

The reflecting power of judgment thus proceeds with given appearances, in order to bring them under empirical concepts of determinate natural things, not schematically, but **technically**, not as it were merely mechanically, like an instrument, but **artistically**, in accordance with the general but at the same time indeterminate principle of a purposive arrangement of nature in a system, as it were for the benefit of our power of judgment, in the suitability of its particular laws (about which understanding has nothing to say) for the possibility of experience as a system, without which presupposition we could not hope to find our way in a labyrinth of the multiplicity of possible empirical particular laws. Thus the power of judgment itself makes the **technique of nature** into the principle of its reflection *a priori*, without however being able to explain this or determine it more precisely or having for this end an objective determining ground for the general concepts of nature (from a cognition of things in themselves),<sup>b</sup> but only in order to be able to reflect in accordance with its own subjective law, in accordance with its need,<sup>c</sup> but at the same time in accord with laws of nature in general.

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The principle of the reflecting power of judgment, through which nature is thought of as a system in accordance with empirical laws, is however merely a principle **for the logical use of the power of**

<sup>a</sup> The remainder of this paragraph is Kant's replacement for the following in the fair copy: "For it is also rightly open to question about these [empirical forms] how and through what reflection we have arrived at them as lawful natural forms. Laws cannot be perceived, but rather presuppose principles in accordance with which perceptions must be able to be compared, which, if under them alone experience is possible, are transcendental principles."

<sup>b</sup> Kant added the phrase *an sich selbst* to the fair copy.

<sup>c</sup> Kant added the phrase *nach ihrem Bedürfnis* to the fair copy.

**judgment**, a transcendental principle, to be sure, in terms of its origin,<sup>a</sup> but only for the sake of regarding nature *a priori* as qualified for a **logical system** of its multiplicity under empirical laws.<sup>8</sup>

20: 215 The logical form of a system consists merely in the division of given general concepts (of the sort which that of a nature in general is here), by means of which one thinks the particular (here the empirical) with its variety as contained under the general, in accordance with a certain principle. To this there belongs, if one proceeds empirically and ascends from the particular to the general, a **classification** of the manifold, i.e., a comparison with each other of several classes, each of which stands under a determinate concept, and, if they are complete with regard to the common characteristic, their subsumption<sup>b</sup> under higher classes (genera), until one reaches the concept that contains the principle of the entire classification (and which constitutes the highest genus). If, on the contrary, one begins with the general concept, in order to descend to the particular through a complete division, then the action is called the **specification** of the manifold under a given concept, since the progression is from the highest genus to lower (subgenera or species) and from species to subspecies. This would be expressed more correctly if, instead of saying (as in common usage) that one must specify the particular which stands under a general concept, it were instead said that one **specifies the general concept** by adducing the manifold under it. For the genus is (considered logically) as it were the matter, or the raw substratum, which nature works up into particular species and subspecies through various determinations, and thus it can be said, in analogy with the use of this word by jurists, when they speak of the specification of certain raw materials, that **nature specifies itself** in accordance with a certain principle (or the idea of a system).<sup>\*9</sup>

Now it is clear that the reflecting power of judgment, given its

20: 215 \* <sup>c</sup>The Aristotelian school also called the **genus** matter, but the **specific difference** the form.

20: 216 <sup>d</sup>Could Linnaeus have hoped to outline a system of nature if he had had to worry that if he found a stone that he called granite, this might differ in its internal constitution from every other stone which nevertheless looked just like it, and all he could hope to find were always individual things, as it were isolated for the understanding, and never a class of them that could be brought under concepts of genus and species[?]

<sup>a</sup> Kant added the phrase *seinem Ursprung nach* to the fair copy.

<sup>b</sup> Kant added the words *ibrer Subsumtion* to the fair copy.

<sup>c</sup> Kant added this footnote to the fair copy.

<sup>d</sup> He then added this in the margin next to the note.

nature, could not undertake to **classify** the whole of nature according to its empirical differences if it did not presuppose that nature itself **specifies** its transcendental laws in accordance with some sort of principle. Now this principle can be none other than that of the suitability for the capacity<sup>a</sup> of the power of judgment itself for finding in the immeasurable multiplicity of things in accordance with possible empirical laws sufficient kinship among them to enable them to be brought under empirical concepts (classes) and these in turn under more general laws (higher genera) and thus for an empirical system of nature to be reached. – Now since such a classification is not a common experiential cognition, but an artistic one, nature, to the extent that it is thought of as specifying itself in accordance with such a principle, is also regarded as **art**, and the power of judgment thus necessarily carries with it *a priori* a principle of the **technique** of nature, which is distinct from the **nomothetic** of nature in accordance with transcendental laws of understanding in that the latter can make its principle valid as a law but the former only as a necessary presupposition.

The special principle of the power of judgment is thus: **Nature specifies its general laws into<sup>b</sup> empirical ones, in accordance with the form of a logical system, in behalf of the power of judgment.**

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Now here arises the concept of a **purposiveness** of nature, indeed as a special concept of the reflecting power of judgment, not of reason; for the end is not posited in the object at all, but strictly in the subject and indeed in its mere capacity<sup>c</sup> for reflecting. – For we call purposive that the existence of which seems to presuppose a representation of that same thing; natural laws, however, which are so constituted and related to each other as if they had been designed by the power of judgment for its own need, have a similarity with the possibility of things that presuppose a representation of themselves as their ground. Thus through its principle the power of judgment thinks of a purposiveness of nature in the specification of its forms through empirical laws.

However, these forms themselves are not thereby thought of as purposive, but only their relation to one another and their fitness, even in their great multiplicity, for a logical system of empirical concepts. – Now if nature showed us nothing more than this logical purposiveness, we would indeed already have cause to admire it for this, since we cannot suggest any ground for this in accordance with the general laws of the understanding; only hardly anyone other than a transcendental

<sup>a</sup> *Vermögen*

<sup>b</sup> Kant crossed out *durch die* (through the) and replaced it with *zu* (into).

<sup>c</sup> *Vermögen*

philosopher would be capable of this admiration, and even he<sup>a</sup> would not be able to name any determinate case where this purposiveness proved itself *in concreto*, but would have to think of it only in general.

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VI.  
On the purposiveness  
of the forms of nature  
as so many particular systems.

That nature in its empirical laws should specify itself as is requisite for a possible experience, as **a system** of empirical cognition – this form of nature contains a logical purposiveness, namely of its conformity to the subjective conditions of the power of judgment with regard to the possible interconnection of empirical concepts in the whole of an experience. Now this, however, yields no inference to its usefulness for a real purposiveness in its products, i.e., for producing individual things in the form of systems: for the latter could always, as far as intuition is concerned, be mere aggregates and nevertheless be possible in accordance with empirical laws interconnected with others in a system **of logical division**, without a concept specially instituted as the condition for their particular possibility having to be assumed, hence without a purposiveness of nature as its ground. In this way we see soils, stones, minerals, etc., without any purposive form, as mere aggregates, but nevertheless as so related in the inner character and grounds for the cognition of their possibility that they are suitable for the classification of things in a system of nature under empirical laws yet do not display the form of a system<sup>b</sup> **in themselves**.

Hence I understand by an **absolute purposiveness** of natural forms such an external shape as well as inner structure that are so constituted that their possibility must be grounded in an idea of them in our power of judgment. For purposiveness is a lawfulness of the contingent as such.<sup>c</sup> With regard to its products as aggregates, nature proceeds **mechanically, as mere nature**; but with regard to its products as systems, e.g., crystal formations, various shapes of flowers, or the inner structure of plants and animals, it proceeds **technically**, i.e., as at the same time an **art**. The distinction between these two ways of judging<sup>d</sup>

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<sup>a</sup> The words from the last semicolon to here replace the single word “we” (*wir*) in the original fair copy.

<sup>b</sup> *eine Form des Systems*

<sup>c</sup> In the fair copy, this sentence originally read: “For purposiveness is a lawfulness which is at the same time contingent with respect to general laws of nature that are necessary for experience.”

<sup>d</sup> *beurtheilen*