

HEGEL'S
Philosophy of Nature

BEING PART TWO OF THE
ENCYCLOPAEDIA OF
THE PHILOSOPHICAL SCIENCES (1830)
TRANSLATED FROM NICOLIN AND
PÖGGELER'S EDITION (1959)
AND FROM THE ZUSÄTZE IN
MICHELET'S TEXT (1847)

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OXFORD
AT THE CLARENDON PRESS
1970

TRANSLATOR'S FOREWORD

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* Note. In the third edition of the *Encyclopaedia* (1830) these Paragraphs appear in the following order:

- c. The Process of the Genus § 367
 - (a) Genus and Species § 368
 - (β) The Sex-Relation § 369
 - (γ) The Disease of the Individual § 371
 - (δ) The Self-induced Destruction of the Individual § 375

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ERRATA

Page	
xxx, for 272 read 273	
28, sub-heading, for (a) SPACE read (1) SPACE	
66, l. 4, for <i>proves</i> read <i>proved</i>	
79, l. 23, after standpoint insert belongs	
84, l. 10, for too read too,	
140, l. 1, for the mechanical read of the mechanical	
164, l. 33, for movement read movements	
185, l. 15, for principel read principle	
192, l. 28, after spiritual insert of	
311, l. 32, for objectivation read objectification	
330, l. 2, for Amica ² read Amici ²	
356, l. 35, after they insert are	
377, l. 14, for is read in	
388, l. 11, for 536 read 343	
410, l. 24, insert a before non-organic	

itself at the expense of its inorganic nature by assimilating it. The third relationship, the union of both, is the genus-process in which the animal relates itself to itself, to one of its own kind; it relates itself to a living being as in the first process and, at the same time, as in the second process, to a being already confronting it.

C. THE PROCESS OF THE GENUS

§ 367

The genus is in an *implicit*, simple unity with the singularity of the subject whose concrete substance it is. But the universal is disjunction or judgement (*Urteil*), in order to issue from this its diremption as a *unity for itself*, give itself an existence as a *subjective* universality. This process of its closing with itself contains the negation of the merely inner universality of the genus, and also the negation of the merely immediate singularity in which the living being is still only a natural being; the negation of this singularity exhibited in the preceding process (§ 366) is only the first, immediate negation. In this process of the genus, the merely natural being only perishes, for, as such, it does not transcend the natural. But the moments of the process of the genus, since their basis is still not the subjective universal, still not a single subject, fall apart and exist as a plurality of particular processes which culminate, in one way or another, in the *death* of the creature.

Zusatz. The individual which has established itself through its self-feeling, has acquired solidity and, so to say, breadth; its immediate singularity is sublated and the individual no longer needs to be in relationship with non-organic nature. With the vanishing of its determination as an exclusive singularity, the Notion acquires the further determination that the subject determines itself as a universal. This determination is again disjunctive (*verteilend*), again excludes what is other; but it has the determination of being identical for this other and existing for it as identical. Thus we have the genus, whose determination is to attain to an existence distinct from singularity; and this is the genus-process as such. True, the genus still does not attain to a free existence in the individual, not to universality; but even though it is here, on the one hand, still only immediately identical with the individual, yet, on the other hand, it has already attained to a differentiation of individual subjectivity from the genus. This difference is a process, the outcome of which is that the genus as universal comes to itself, and immediate singularity is negated. This

extinction [of immediate singularity] is the death of the individual; with this, organic Nature ends, for with the death of the individual the genus comes to its own self and thus becomes its *own* object: this is the process of spirit. This extinction of the singularity in the genus we have still to consider. But because the genus is related to the individual in a variety of ways, we have also to distinguish the particular processes, which are the different ways, in which the living creature meets its death. Thus the genus-process, in its turn, has three forms. The first is the sex-relation; what the genus brings forth is the procreation of individuals through the death of other individuals of the same genus; the individual, after reproducing itself as another individual, perishes. Secondly, the genus particularizes itself, divides itself into its species; and these species, behaving as mutually opposed individuals, are, at the same time, non-organic nature as the genus against individuality—death by violence. The third form is the relation of the individual to itself as genus within a single subjectivity, either as a transitory disharmony in disease, or else ending with the preservation of the genus as such through the transition of the individual into existence as a universal; this is natural death.

I. The Sex-Relation

§ 368 (§ 369 in 3rd ed. of *Encyclopaedia*)

This first diremption of the genus into species and the further determination of these to the point of immediate, exclusive being-for-self of *singularity*, is only a negative and hostile attitude towards others. But the genus is also an essentially affirmative relation of the singularity to itself in it; so that while the latter, as an individual, excludes another individual, it continues itself in this *other* and in this *other* feels its own self. This relationship is a *process* which begins with a *need*; for the individual as a *singular* does not accord with the genus immanent in it, and yet at the same time is the identical self-relation of the genus in *one* unity; it thus has the *feeling* of this defect. The genus is therefore present in the individual as a straining against the inadequacy of its single actuality, as the urge to obtain its self-feeling in the other of its genus, to integrate itself through union with it and through this mediation to close the genus with itself and bring it into existence—*copulation*.

Zusatz. The process of the animal with its non-organic nature has made the ideality of the latter explicit, and the animal has thereby demonstrated in

its own self its self-feeling and its objectivity. It is not merely an implicit self-feeling, but a self-feeling which exists and is alive. The division of the sexes is such that the extremes are totalities of self-feeling; the animal's instinct is to produce itself as a self-feeling, as totality. Now in the constructive instinct, the organic became a dead product, freely released, it is true, from the organism, but only a superficial form imposed on an external material, and this did not therefore confront itself as a free, indifferent subject: here, on the contrary, both sides are independent individuals as in the process of assimilation, but with this difference, that they are not related to each other as organic and non-organic beings; on the contrary, both are organisms and belong to the genus, so that they exist only as one species. Their union is the disappearance of the sexes into which the simple genus has developed. The animal has an object with which it feels itself immediately identical; this identity is the moment of the first process (of formation) which is added to the determination of the second (of assimilation). This attitude (*Verhalten*) of an individual to another of its kind is the substantial relation of the genus. The nature of each permeates both; and both exist within the sphere of this universality. The process consists in this, that they become in reality what they are in themselves, namely, one genus, the same subjective vitality. Here, the Idea of Nature is actual in the male and female couple; their identity, and their being-for-self, which up till now were only for us in our reflection, are now, in the infinite reflection into self of the two sexes, felt by themselves. This feeling of universality is the highest to which the animal can attain; but its concrete universality never becomes for it a theoretical object of intuition: else it would be Thought, Consciousness, in which alone the genus attains a free existence. The contradiction is, therefore, that the universality of the genus, the identity of individuals, is distinct from their particular individuality; the individual is only one of two, and does not exist as unity but only as a singular. The activity of the animal is to sublimate this difference. The genus, as the foundation, is one extreme of the syllogism, for every process has the form of the syllogism. The genus is the impelling subjectivity into which is placed the vitality which wants to produce itself. The mediation, the middle term of the syllogism, is the tension between this essential nature of the individuals and the incongruity of their single actuality; and it is this which impels them to have their self-feeling only in the other. The genus, in giving itself actuality, which, because it has the form of immediate existence is, of course, only a single actuality, closes itself with the other extreme, that of singularity.

The formation of the differentiated sexes must be different, their determinateness against each other must exist as posited by the Notion, because, as differentiated moments (*Differente*), they are an urge (*Trieb*). But the two sides are not merely, as in the chemical sphere, implicitly neutral; on the contrary, on account of the original identity of formation, the same type underlies both the male and female genitals, only that in one

or the other, one or the other part predominates: in the female, it is necessarily the passive moment (*das Indifferente*), in the male, the moment of duality (*das Entzweite*), of opposition. This identity is most striking in the lower animals: 'In some grasshoppers (e.g. *Cryllus verrucosus*) the large testicles, composed of vessels rolled together in bundles, resemble the ovaries which are equally large and composed of bundles of similarly rolled-up oviducts. Also in the male horse-fly, not only does the outline of the testicles present the same shape as the thicker (*größere*) larger ovaries, but they, too, consist of almost oval, elliptical, delicate vesicles which, with their base, stand up on the substance of the testicles like ova on an ovary.'¹ The greatest difficulty has been experienced in discovering the female uterus in the male genitals. The scrotum has ineptly been mistaken for it,² simply because the testicles present a definite correspondence to the female ovary. But it is rather the prostate in the male which corresponds to the female uterus; in the male, the uterus is reduced to a gland, to an indifferent generality. This has been very well demonstrated by Ackermann in his hermaphrodite, which has a uterus as well as other, male, organs (*Formationen*); but this uterus not only occupies the place of the prostate, but the ejaculatory ducts also pass through its substance and open into the *crista galli* in the urethra. Also, the female *labia pudendi* are shrunken scrota: consequently, in Ackermann's hermaphrodite, the *labia pudendi* were filled with a kind of testicular secretion. Lastly, the medial line of the scrotum is split in the female and forms the vagina. In this way, a complete understanding is obtained of the conversion of one sex into the other. Just as in the male, the uterus is reduced to a mere gland, so, on the other hand, the male testicle remains enclosed in the ovary in the female, does not emerge into opposition, does not develop on its own account into active brain; and the clitoris is inactive feeling in general. In the male, on the other hand, we have instead active feeling, the swelling heart, the effusion of blood into the *corpora cavernosa* and the meshes of the spongy tissue of the urethra; to this male effusion of blood correspond the female menses. In this way, the reception (*Empfangen*) by the uterus, as a simple retention, is, in the male, split into the productive brain and the external heart. Through this difference, therefore, the male is the active principle, and the female is the receptive, because she remains in her undeveloped unity.

Procreation must not be reduced to the ovary and the male semen, as if the new product were merely a composition of the forms or parts of both sides; the truth is that the female contains the material element, but the male contains the subjectivity. Conception is the contraction of the whole individual into the simple, self-surrendering unity, into its representation (*Vorstellung*); the seed is this simple representation itself—simply a

¹ Schubert, *Abhandlungen einer allgemeinen Geschichte des Lebens*, part i, p. 185.

² Ibid., p. 205-6.

single point, like the name and the entire self. Conception, therefore, is nothing else but this, that the opposite moments, these abstract representations, become one.

§ 369 (§ 370 in 3rd ed. of *Encyclopædia*)

The *product* is the *negative identity* of the differentiated individuals and is, as *realized (gewordene) genus*, an asexual life. But on its *natural* side, this product is only in *principle (an sich)* this genus, distinct from the individuals whose difference [from one another] has perished in it and is itself an immediate *singular*, destined to develop into the same natural individuality, into the same difference and perishable existence. This process of propagation spends itself in the spurious infinite progress. The genus preserves itself only through the destruction of the individuals who, in the process of generation, fulfil their destiny and, in so far as they have no higher destiny, in this process meet their death.

Zusatz. Thus the animal organism has run through its cycle and is now the asexual and fecund universal; it has become the absolute genus which, however, is the death of this individual. The lower animal organisms, e.g. butterflies, die, therefore, immediately after copulation; for they have sublated their singularity in the genus and their singularity is their life. Higher organisms survive the generative act since they possess a higher kind of independence; and their death is the culmination of the process in their structure, which we shall come across later as disease. The genus, which produces itself through negation of its differences, does not, however, exist in and for itself but only in a series of single living beings; and thus the sublation of the contradiction is always the beginning of a fresh one. In the genus-process the separate individual creatures perish; for they are distinct only outside of this unity of the process, which is the true actuality. Love, on the other hand, is the feeling in which the self-seeking of the individual and its separated existence is negated, and the individual form (*Geist*) therefore perishes and cannot preserve itself. For only that preserves itself which, as absolute, is self-identical; and that is the universal which is for the universal. But in the animal, the genus does not exist as such but only in principle (*an sich*); it is only in spirit that it exists in and for itself in its eternity. The transition to the existent genus takes place in principle (*an sich*), in the Idea, in the Notion, that is to say, in the eternal creation; but there the sphere of Nature is closed.

§ 370 (§ 368 in 3rd ed. of *Encyclopædia*)

2. *Genus and Species*

The genus, in its implicit universality, *particularizes* itself at first simply into *species*. At the base of the *different forms* and *classes* of animals is the universal *type of the Animal*, determined by the Notion. Nature exhibits this type, partly in the various *stages of its development* from the simplest organization to the most perfect, in which it is the instrument of spirit, and partly in the various *circumstances and conditions of elemental Nature*. An animal species, developed to the point of singularity, distinguishes itself from others in and through its own self, and through the negation of them is *for itself*. The natural fate of the individuals in this hostile relationship, in which others are reduced to an inorganic nature, is a *violent death*.

Remark

Zoology, like the natural sciences generally, has concerned itself mainly with the search for sure and simple *signs* of classes, orders, etc., of animals for the purpose of a subjective recognition of them. Only since giving up this attempt to construct so-called artificial systems for classifying animals has the way been opened for a more comprehensive view directed to the *objective nature* of the organisms themselves. Of the empirical sciences, hardly one has in recent times expanded as much as zoology through its auxiliary science of *comparative anatomy*: an expansion not mainly in the sense of accumulated observations—for none of the sciences has lacked these—but in the sense of an arranging of its material to conform to the Notion [of the animal]. Just as the ingenious approach to Nature—especially of the French naturalists—has adopted the division of plants into monocotyledons and dicotyledons, so, too, it has adopted the *fundamental distinction* in the animal world made by the absence or presence of a *backbone*; in this way, the *fundamental classification* of animals has been reduced in its essentials to that which had already been perceived by Aristotle.

In addition, the habit (*habitus*) of individual animals, as a