

I

In conceiving of language as a coherent system of synchronic oppositions and in accentuating its asymmetric dualism, the Geneva School was necessarily forced to elucidate the importance of the notion "zero" for the analysis of language. According to the fundamental formula of F. de Saussure, language can tolerate the opposition between something and nothing,¹ and, it is precisely this "nothing" opposed to "something" or, in other words, the zero sign, which lead to certain of the personal and fertile concepts of Charles Bally. It is, above all, his succinct studies, "Copule zéro et faits connexes"² [Zero copula and allied matters] and "Signe zéro,"³ which have pointed out the role that this phenomenon plays not only in morphology, but also in syntax; not only in grammar, but also in stylistics. This instructive analysis requires further investigation.

The existence of **zero desinences** in the declensions of the modern Slavic languages is a generally known example. In Russian, for instance, the NSg *suprug* 'husband, spouse' is opposed to all the other forms of the same word (GA *suprúga*, D *suprúgu*, I *suprúgom*⁴ etc.).

One finds in Russian, in almost all the paradigms of the substantives, and particularly in the case forms, only one form in each paradigm with a zero desinence. In those paradigms where the genitive plural and the nominative singular used to have the same zero desinence, the former has assumed the positive desinences *-ov* (*suprúgov*) or *-ěj* (*konej*) by analogy, thereby eliminating the previously existing homonymy. The zero desinence of the GPI has survived only in those nouns which distinguish the GPI from the NSg in some other way, whether by the desinence (NSg *žená*, *seló* - GPI *žěn*, *sěl*), by the place of the stress (NSg *vólos* - GPI *volós*), by a derivational suffix (NSg *bojárin* - GPI *bojár*), or by the composition of syntagmas (in the Saussurian sense of the word) in which these case forms are used (NSg *aršín*, noun of measure - GPI *aršin*, which almost always accompanies nouns of number).

The zero desinence, and likewise the "zero degree" opposed to a phoneme in grammatical alternations (for example, in Russian GSg *rta* - NSg *rot* 'mouth') corresponds exactly to C. Bally's definition: a sign invested with a particular value, but without any material support in sound.⁵ But language "can tolerate the opposition between something and nothing" not only on the level of the signifier (*signifiant*), but also on the level of the signified (*signifié*).⁶

II

In the singular, the paradigm *bog* 'god', *suprúg* 'husband, spouse' is systematically opposed to the paradigm *nogá* 'foot', *suprúga* 'wife'. While the first of these two paradigms expresses unequivocally a particular grammatical category, namely that of non-feminine gender, the second can refer indiscriminately to feminine and masculine gender: the masc. *slugá* 'servant' and the ambiguous *nedotróga* 'sensitive person' are declined in the same way as the fem. *nogá*, *suprúga*. None of the desinences of the oblique cases of the paradigm of *bog*, *suprúg* can be used with feminine nouns, and, with respect to the nominative of this paradigm, its zero desinence signals masculine gender exclusively only in stems which end in a hard consonant. In stems which end in a soft or hushing consonant, the zero desinence could equally well belong to a masculine word (*den* 'day', *muž* 'husband') or to a feminine word (*dan* 'tribute', *mys* 'mouse').

The paradigm *bog*, *suprúg* signifies, as we have said above, the non-feminine, or, in other words, the masculine or the neuter. These two genders are different only in the nominative, and in the accusative whenever it coincides with the nominative. In the nominative, a zero desinence signals exclusively the non-neuter, whereas the desinence *-o* or its unstressed counterpart can belong either to the neuter gender or to the masculine (neuter *toporíšče* 'handle of an axe', masc. *toporíšče* the augmentative of *topór* 'axe').

Thus, the paradigm *nogá*, *suprúga* is devoid of differential function with regard to gender opposition. The desinence is, therefore, from the point of view of gender, a sign that has a form which is well defined but has no functional value, in brief, a form with a **zero morphological function**. By carefully inspecting the two nominative formations *suprúg* 'spouse' and *suprúga* 'wife', we can see that, in this case, the form with a zero desinence has a positive morphological function, while the positive desinence has a zero morphological function, with respect to the differentiation of gender.

What are, in Russian, the general meanings of the grammatical genders, masculine and feminine? The feminine indicates that, if the referent is a person or lends itself to personification, it is absolutely certain that that person belongs to the female sex (*suprúga* always refers to the wife, the female spouse). On the other hand, the general meaning of the masculine does not necessarily specify the sex of the referent: *suprúg* designates either, in a more restrictive way, the husband (*suprúg i suprúga* 'husband and wife'), or, in a more general way, one of the spouses (*óba suprúga* 'the two spouses', *odín iz suprúgov* 'one of the two spouses'). Cf. *továrišč* (masculine gender, here female sex) *Nina* (feminine gender, female sex), *zubnój vrač* (masculine gender, here female sex) = 'Comrade Nina, dentist'. Thus, in the opposition of the general meanings of the two genders, the masculine is the gender with **zero meaning**. Here again, we are face to face with a clear chiasmus: the forms with zero morphological function (of the type *suprúga*) denote the gender with a positive meaning (feminine) and, on the other hand, the forms with a positive morphological function (of the type *suprúg*) specify the gender with zero meaning (masculine).

In fact, the patterning of the grammatical system, as I have tried to point out elsewhere,⁷ is based on the "opposition between something and nothing", that is, on the **opposition of contradictories**, according to the terminology of formal logic. Thus, the nominal system and the verbal system can be decomposed into binary oppositions, where one of the terms of the opposition signifies the presence of a certain quality and the other (the unmarked or undifferentiated term of the opposition, in brief, the zero term) indicates neither its presence nor its absence. Thus, in Russian, the perfective aspect signals the absolute end of a verbal process, in opposition to the imperfective (zero aspect) which leaves the question of the end of the action unresolved. Impf. *plávat'*, *plyt'* 'to swim', Pf. *priplýt'*, *doplýt'* 'to swim up to or as far as', *poplýt'* 'to have begun to swim' (the beginning is presented as a finished process), *poplávat'* 'to take a swim', *naplávat'sja* 'to have a good swim', *ponaplávat'* 'to have a good swim several times, and in all, enough' (absolute end). The determinative aspect (according to the terminology of S. Karcevskij) signifies an action conceived of as a unity: *plyt'* 'to be (in the act of) swimming', whereas the indeterminative aspect (zero aspect) does not give such an indication: *plávat'* can, depending on the context, signify a unified action (*poka ja plavaju, on sidit na beregu* 'while I swim, he sits on the shore'), a repeated action (*ja často plavaju* 'I swim often'),⁸ a non-realized action (*ja ne plaval* 'I didn't swim'), a capacity for a non-realized action (*ja plavaju, no ne prixoditsja* 'I know how to swim, but I have no occasion to'),

and finally an action about which one has no information – one does not know if it took place once or several times or never (*ty plaval?* ‘did you swim?’). *Plavat*’ is an imperfective and indeterminate verb. Thus, it belongs to two zero aspects. But no Russian verb can contain two positive values for aspect. The opposition of determinate and indeterminate verbs is, therefore, only valid within the imperfective aspect. V. Brøndal has brought out the fact that languages tend to avoid an excessive complexity in the aggregate of one morphological formation, and that, frequently, forms which are complex with respect to one category are relatively simple with respect to others.⁹ Likewise, in Russian, the present tense (zero tense) distinguishes persons, in contradistinction to the past which has only one form for all the persons; the singular (zero grammatical number) distinguishes grammatical genders, in contrast with the plural, which has totally effaced them. But, even though the grammatical system limits the “accumulation of meanings” [*cumul des signifiés*] (term and notion introduced by Bally),¹⁰ it does not by any means exclude it. The dative, like the instrumental, is opposed to the accusative and the nominative in that it indicates the peripheral position of the referent in the content of the message and, from the point of view of this opposition, the latter two cases are zero cases. But, at the same time, the dative and the accusative signal that the object is affected by the action and they are thus opposed to the instrumental and the nominative, which, from the point of view of this opposition, are zero cases. In this way, the dative combines two grammatical values; the accusative possesses one of these values and the instrumental possesses the other. The nominative functions as the absolute zero case and distinguishes, in conformity with Brøndal’s “principle of compensation”, the masculine and the neuter, a distinction which is irrelevant in the oblique (“marked”) cases.

The distinction between the nominative and the accusative provides proof of the purely arbitrary character of the relation between the “opposition between something and nothing” on the level of the signified, and the opposition of the same kind on the level of the signifier. Each of the three possible varieties of this relation are present: 1) there is a zero desinence corresponding to a zero case: N *suprúg* - A *suprúga*; 2) the relation is inverse (cf. the “chiasmus” cited above): NPI *gospodá* - API *gospód*; 3) neither of the cases has a zero desinence: N *slugá* - A *slugá*.

Meanings can be opposed to one another, as something to nothing, not only in grammar but also in the domain of vocabulary; one of two synonymous words can be distinguished from the other by a supplementary determinant not applicable to the other. Thus, the Russian words *devúška* and

devíca both designate a girl, but the former of these synonyms, as opposed to the latter, adds the meaning “virgin”: one could not permute the two words in the sentence *ona – devica, no uže ne devúška* ‘she is a girl but is no longer a virgin’. Likewise, in the pair of Czech synonyms *mám rád* ‘ich habe gern’, ‘I like’, and *miluji* ‘ich liebe’, ‘I love’ (passionately), it is *mám rád* which is the “zero synonym”, and both *mám rád šunku* ‘I like ham’ and *mám rád rodiče* ‘I like my parents’ are possible, but *miluji* adds a meaning of strong passion and, in the sentence *miluji šunku*, one would feel that the verb is being used figuratively.

Such a use would correspond, for example, to the case of the feminine used for a man: *on – nastojaščaja masterica* ‘he is a really skilled crafts-woman’. This is a real exchange of signs, a metaphor, whereas the opposite use *ona – nastojaščij master* ‘she is a really skilled craftsman’ is nothing more than the application of a more general, generic term in place of *masterica*, which is more precise. Nevertheless, here, too, there is hypostasis, although to a much less noticeable degree, in much the same way that the historical present or the generic singular are, in actual fact, examples of hypostasis. A marked sign signals A (*masteríca*); the zero sign which is opposed to it (*máster*) signifies neither the presence nor the absence of that A (neither A nor non-A). The zero sign is, therefore, used in those contexts where A and non-A are not distinguished (*tut bylo sem’ masterov, v tom čisle dve mastericy* ‘here there were seven skilled craftsmen, among them two [crafts] women’) and in those contexts where non-A is designated (*tut bylo pjat’ masterov* [non-A] *i dve mastericy* [A] ‘here there were five skilled craftsmen and two skilled craftswomen’), but hypostasis is present in those cases where the zero sign serves to designate A and only A: *ona – nastojascij master*.

The judicious insight of Bally emphasizes the diversified play of hypostasis as an essential fact of the patterning of language.¹¹ J. Kuryłowicz has shown decisively the important role that hypostasis plays in syntax, where hypostasis means “the motivated and marked use” of words, as opposed to their basic or primary function.¹² “The attributive function is the primary function of the adjective”. The attributive adjective denotes, therefore, **zero hypostasis** in opposition to diverse hypostatic transformations, such as adjective-subject (*dalěkoje plenjaet nas* ‘the faraway fascinates us’) or adjective-complement (*sejte razumnoe, dobroe, večnoe* ‘sow the wise, the good, the eternal’). The predicate adjective has an external sign of transformation, *est*, in examples like *deus bonus est*, whereas the phrase *deus bonus* represents hypostasis in its pure form.¹³

III

In those languages where constructions without a copula are the only ones possible, as is the case with Russian, the absence of the copula in constructions like *izba derevjannaja* 'the hut (is) wooden' is viewed, in opposition to *izba byla derevjannaja* 'the hut was wooden' and *izba budet derevjannaja* 'the hut will be wooden', as a zero copula because of its form, and as the present tense of the copula verb, because of its function. But in Latin and in all the languages which allow, in the form of stylistic variants, sentences with copulas and those without, the lack of a copula in constructions like *deus bonus* is felt, in opposition to *deus bonus est*, as a zero copula because of its form, and as a signal of expressive language because of its function; on the other hand, the presence of the copula, positive form, is endowed, because of its function, with a **zero of expressivity**. The zero sign in question has, therefore, stylistic value in Latin. In this last case, Bally speaks of an implication [*sous-entente*] which rests on the existence of two parallel types and which supposes a certain choice by the speaker.¹⁴ The Geneva master places ellipsis, which he defines as "the repetition or the anticipation of an element which necessarily figures in the context or is suggested by the situation", alongside the zero sign with a grammatical value and the implication. We are tempted to interpret ellipsis rather as an implication of anaphoric terms which "represent" the context or else of deictic terms which "present" the situation.¹⁵ Thus, the question *Čto delal djadja v klube?* 'What did Uncle do at the club?' can be answered by choosing between one of two parallel modes: one with "explicit representation" *On tam obedal* 'He dined there' or one with "implicit representation" — *obedal* 'dined'. Ellipsis is, therefore, an **anaphoric (or deictic) zero sign**.

When one has to choose between two forms of expression which are equal in their conceptual content, these two forms are never really equipollent, and ordinarily they form the following opposition: on the one hand, the expressive type which forms a whole with the given situation or else evokes an imagined situation in esthetic language and, on the other hand, the type with an expressive value and a deictic zero. In Russian, for example, there is a primary word order which is opposed to its various inversions. Thus, the predicate preceded by the subject and followed by the direct object, or the substantival form preceded by an attributive form but followed by a nominal complement, are examples of a word order with a zero value. *Ljudi umirajut* 'men die' is a complete utterance. By contrast, the utterance *umirajut ljudi* occurs as an appendix to the context or to the situation, or as an emotional

reaction. Explicit, formulaic language only allows **zero order** — *zemlja vraščaetsja vokrug solnca* 'the earth revolves around the sun'; by contrast, everyday language, preeminently implicit, creates combinations like *vertjatsja deti vokrug ělki*, *vokrug ělki vertjatsja deti*, *vokrug ělki deti vertjatsja*, *deti vokrug ělki vertjatsja*. In opposition to the zero order *deti vertjatsja vokrug ělki* 'the children are going round and round the Christmas tree', these constructions signal the point of departure motivated by the context or the situation (extralinguistic context), while the zero order does not make reference to either. However, in those cases where the syntactic function of the words is not clearly indicated by morphological means, the zero order is the only possible one and adopts a purely grammatical value. This is the case, for example, when the accusative coincides with the nominative (*mat' ljubit doč'* 'the mother loves the daughter', *doč' ljubit mat'* 'the daughter loves the mother'), or when the nominative coincides with the genitive (*dočeri prijatel'nicy* 'the daughters of the friend', *prijatel'nicy dočeri* 'the friends of the daughter'), or when the adjective functions as a substantive (*slepoj sumasšedšij* 'the blind madman', *sumasšedšij slepoj* 'the mad blind man') etc.

Russian has two stylistic variants for 'I go (by conveyance)': *ja edu* (with the personal pronoun) and *edu* (without the pronoun). Likewise, in Czech: *já jedu* and *jedu*. However, there is, as far as this is concerned, a great difference between the two languages: Russian, having abolished the present tense of the auxiliary verb and of the copula, had to transmit the role of the personal desinences to the personal pronouns and finally generalized their use: consequently, in Russian, it is the construction with two parts which is the "normal" type, while the variant with zero-subject has an expressive function.¹⁶ In Czech, by contrast, the zero of expressivity is related to the zero-subject, and the expressive value is attached to the type *já jedu*. The first person is focused on by the presence of the pronoun, whose use, from the grammatical point of view, is a pleonasm. Over-use of this pronoun, in Czech, gives the impression of a boastful style. By contrast, in Russian, it is exactly the excessive omission of the first-person pronoun that Dostoevskij experiences as irritating arrogance ("Krokodíl").

IV

The phonological system, as Bally points out, runs parallel to the general system of the language. Correlations of phonemes oppose the presence of a phonic quality to its absence or **zero quality**.¹⁷ Thus *t*, *s*, *p*, etc., are dis-

tinguished from the corresponding soft consonants *t'*, *s'*, *p'*, etc., by the lack of softening (palatalization), and the same phonemes are distinguished from *d*, *z*, *b*, etc., by the lack of sonority. The unifying factor which connects such a lack of something to the diverse kinds of zero signs which we have observed in grammar is again the fact that it is not a question of a simple nothing but of a nothing opposed, within the phonological system, to something positive. F. de Saussure has already shed light upon the role of contradictory oppositions in phonology by pointing out as an example the opposition of nasal and oral vowels, where "the absence of nasal resonance, a negative factor, will serve, just as well as by its presence, to characterize certain phonemes."¹⁸

In analyzing a phoneme like *s* in its relationship with the other phonemes of Russian, we ascertain that the positive qualities of this phoneme do not participate in any contradictory opposition, that is, that the presence of these qualities is never opposed to their absence. Outside of these qualities, the phoneme *s* only has zero qualities. By contrast, the phoneme *z'* comprises several phonological values, clearly analyzable, in opposition to the lack of the same values in correlative phonemes (voicing and softening are added to the qualities of an *s*). This is, therefore, a case of phonological accumulation, corresponding to the accumulation of meanings, such as Bally has analyzed it. Likewise, the "principle of compensation", established by Brøndal for morphology and limiting accumulation, has remarkable analogies in the structure of phonological systems.

A correlation is formed by a series of pairs, where each pair contains, on the one hand, the opposition between one and the same quality and its absence and, on the other, a common core (for example the pair *z'*-*z* consists of an opposition of softening and of a common core: voiced, constrictive, sibilant). But this common core could be absent from one of the pairs: in this case, the phoneme is reduced to the quality in question and is opposed quite simply to the absence of a phoneme (or **zero phoneme**). Thus, A. Martinet rightly insists, by virtue of structural analysis, on the fact that, in the correlation of aspiration which characterizes the consonants of Danish, one must recognize the opposition: initial aspirate /*h*/ - initial vowel.¹⁹

Likewise, in Russian, the correlation of softening opposes the phoneme *j* to zero (initial palatal glide - initial vowel). In Russian words, the vowel *e* can be preceded by a soft consonant, but not by the corresponding hard consonant; the vowel *e* can be preceded by *j*, but cannot begin a word. (The interjections, and especially the deictic interjection *e* in diverse compounds, are not affected by this rule.)

Thus, the opposition of soft and hard consonants is suppressed before the

vowel *e*: the presence of an opposition is, consequently, opposed to its absence. This absence (**zero opposition**), confronted with a realized opposition, gives greater relief to that which unifies and that which distinguishes the two terms of the suppressible opposition. As N. Durnovo had discerned, and as N. Trubetzkoy and A. Martinet have shown, a phonological opposition which is neutralized in particular positions constitutes, in contradistinction to constant oppositions, a profoundly distinct type.²⁰ Likewise, the syncretism of morphological forms which appear in certain paradigms or in certain grammatical categories²¹ or, on the other hand, the opposition of meanings whose suppression we witness in a given context — all these point to the large scope of the problem of "zero opposition" for linguistics and for general semiology, which is destined to examine closely the complex and bizarre relationship between the intertwined notions of "sign" and "zero".

"Signe zéro". Written in Brno in 1938 for the *Mélanges de linguistique offerts à Charles Bally* (Genève, 1939).

FOOTNOTES

1. *Cours de linguistique générale* (1922), p. 124. Cf. the notion of "negative form" in the linguistic doctrine of F. Fortunatov.
2. *Bulletin de la Société Linguistique de Paris*, XXIII, pp. 1 ff.
3. *Linguistique générale et linguistique française*, pp. 129 ff.
4. Since the facts analyzed here must be considered in relation to the total system of the given language, I have borrowed the examples for this study from my native language.
5. *Bulletin* . . . , 3; cf. R. Gauthiot, "Note sur le degré zéro", *Mélanges linguistiques offerts à M. Antoine Meillet* (Paris, 1902), pp. 51 ff.
6. The problem of zero meaning was posed in my monograph *Novejšaja russkaja poèzija* (Prague, 1921), p. 67.
7. "Structure of the Russian Verb" [see above, pp. 1-14] and "Contribution to the General Theory of Case" [see above, pp. 59-103].
8. *But ja často plyvu i dumaju* . . . 'often, when I am swimming, I think . . . '.
9. See *Slovo a slovesnost*, III, p. 256.
10. *Linguistique générale* . . . , pp. 115 ff.

11. *Linguistique générale* . . . , pp. 132 ff.
12. "Dérivation lexicale et dérivation syntactique", *Bulletin de la Société de Linguistique de Paris*, XXXVII, pp. 79 ff. Cf. my study cited above, "Contribution to the General Theory of Case", [see above, pp. 59-103].
13. Cf. *Linguistique générale* . . . , p. 135, and *Bulletin* . . . , p. 2.
14. *Bulletin* . . . , pp. 4 ff.
15. Cf. *Linguistique générale* . . . , pp. 65 ff.
16. See S. Karcevskij, *Système du verbe russe* (Prague, 1927), p. 133, and R. Jakobson, "Les enclitiques slaves", *Atti del III. Congresso Internazionale dei Linguisti*, 1935, pp. 388 ff.
17. *Linguistique générale* . . . , pp. 13 ff., 120; "Projet de terminologie phonologique standardisée", *Travaux du Cercle linguistique de Prague*, IV, pp. 314-321.
18. *Cours* . . . , IV, p. 69.
19. *La phonologie du mot en danois* (Paris, 1937), p. 32.
20. See N. S. Trubetzkoy, "Die Aufhebung der phonologischen Gegensätze", *Travaux du Cercle linguistique de Prague*, VI, pp. 29 ff.; and A. Martinet, "Neutralisation et archiphonème", *Travaux* . . . , VI, pp. 46 ff.
21. Cf. *Travaux*, VI, pp. 283 ff. [See "Contribution . . ." , pp. 59 ff. above].



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