PHONETIC DICHOTOMY OF LANGUAGE

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PHONETIC DICHOTOMY OF LANGUAGE

Yoshio Nagano

No matter what ethnological difference may be found, the anatomy of the human vocal organs, coupled with the so-called economy of effort, will set a due limit to every imaginable combination and permutation of phonemes. Thus being under the psycho-biological control, any human speech can do with a given minimum of sounds so far as it answers the purpose. Then, in terms of the raw material of which language consists, the contrast between vowel and consonant, though conventional, proves to be not only fundamental but universal as well. A mere comparative glance, in this light, at the various languages of the world has induced me to venture a hypothesis that the sound of language might admit of binary classification. It goes without saying that, other things being equal, such a phonetic, hence typological, dichotomy of language does not anticipate a clear line of demarcation between the two types but implies the more or less undisguised tendency toward either way. Since no idiom is virtually to be met with in which the vowel-consonant ratio comes out in quantitatively perfect equilibrium if not hanging in the balance, this division may, in a sense, hold good for every actual case. Its additional merit would be expected to consist in making up for whatever blind spot the structural classification has hitherto failed to see. Above all, it would turn out to the advantage of our viewpoint to deal with the instance, as will be referred to later, where a specified sound

phenomenon is raised to a principle governing the entire structure of language.

Now, it may be safely assumed that to which of the two types a language is rather inclined depends upon the frequency of either vowel or consonant in the spoken form. The accurate determination of it, in a strict sense, would indeed require an exhaustive enumeration of vowel and consonant throughout the whole vocabulary, but practically such a trouble can be saved since no human speech is without features to mark itself off from others any more than a man. For instance, the presence of what is called a consonant-cluster may be taken as a most unmistakable index to the consonantal type: English strike (phonemically analyzed as CCCVC), Russian vskrik 'shriek'(CCCCVC), Georgian(of South Caucasus) msxverp'ls 'to the victim'(CCCCVCCCC) and the like.* Furthermore, when the phonological system shows an inclination to make very fine distinctions between fortis and lenis not only in plosives, but in nasals, laterals, liquids, fricatives and other consonants as in a great majority of the North American Indian languages or the Caucasian languages, it would certainly give us an impression of, to all appearances, the consonantal type. On the contrary, where such a consonantal catch in the sound, so to speak, is felt at least cacophonous, one might well expect those languages with a special emphasis on the euphony of vowels such as the Ural-Altaic and the Bantu

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* Now that nothing is yet known to us of the invention for phonetic measurement which will enable us to separate the vocal phoneme from the consonantal, we shall have to make the best of the written form, the incomplete copy of the articulate sound, where the proper means of phonetic transcription is of no avail .

families. Needless to say, many other features to reveal identity could be readily brought into light on further survey.

In the next place, comparative observation leads us to the inference that the proportion of vowel to consonant goes, on the whole, in parallel with the relative frequency of their respective uses. But, at the same time, it should be recognized that the possible total of the vocalic phoneme is generally not larger than that of the consonantal in point of variation. This fact might be in all probability due to the mechanism of the organs of speech that admits of the consonantal (i.e. non-musical) sound more easily than the vocalic (i.e. musical). If so, it would be independent of the two-way inclination at issue. This question, however, must await more careful and extended observation. Hence again the methodological axiom that biology is one thing and psychology is another. As a natural result, it sometimes happens that the vowel seems to do duty as a mere auxiliary to the consonant so that articulation may be brought about. Such is, in reality, the case with the Hamito-Semitic languages where the consonant holds apparent priority to the vowel. For example, Hebrew, in principle, could do with only five vowels (a,i,u,ɛ, and ɔ) in comparison with the abundance of no less than twenty-nine consonants. The beginning of Chapter XLII of Genesis in the consonantal text reads:

wyrɔ yɛḳb ky yš šbr bmṣrym wyɔmr
[saw /Jacob/that/(there)was/corn/in Egypt/(and)said

yɛḳb lbnyw ɬɬrɔw ...
Jacob/ why /ye look]

The basic, or rather generic, meaning of words

being prescribed by the consonantal frame, the use of the vowel is only for the various modification of the basic idea. It follows that, by way of example, given the Arabic root, so called in the Semitic linguistics, QTL, it originally involved a great difficulty where to fix or insert the specified vowel or vowels so that its inherent idea 'to kill' might make every differentiated sense such as qatala 'to kill', qatl '(the act of) killing', qitl 'enemy', qātil 'killer', qatāl 'dead body', qitāl 'battle' and others. Thus the need to get rid of this inconvenience brought forth the Masoretic text in Hebrew on the one hand and the use of a series of small vocalic signs in Arabic on the other.

As for the linguistic propensity, be that as it may, it will be better illustrated by the guise in which a loan-word is presented, especially when it gets into perfect harmony with the language habit, i.e. sound system, of a given community. The following example shows how characteristically each month name of Latin origin has found its way, whether firsthand or second-hand, into many languages of the modern world:

Latin	Italian	Spanish
Ianuaris	gennaio	enero
Februaris	febbraio	febrero
Martius	marzo	marzo
Aprilis	aprile	abril
⋮	⋮	⋮
September	settembre	septiembre
October	ottobre	octubre
November	novembre	noviembre
December	dicembre	diciembre

(Note:- c and z =[θ])

Russian	Welsh	Hangarian*
janvar'	Ionawr	január
febral'	Chwefror	február
mart'	Mawrth	március
aprjel'	Ebrill	aprilis
⋮	//	⋮
septjabr'		szeptember
oktjabr'	(Note:-	október
nojabr'	w=[u:]	november
dekabr'	ch=[x]	december
(Note:-	f=[v]	(Note:-
'=pala-	th=[θ])	c=[ts]
talized)		s=[ʃ]
		sz=[s]

Buluba-Lulua*	Samoan*	Hawaiian*
Januale	Januari	Januari
Febluale	Fepuari	Feberuari
Malasa	Mati	Maraki
Apila	Aperila	Aperila
⋮	⋮	⋮
Sepetemba	Setema	Sepetemaba
Okotoba	Oketopa	Okatoba
Novemba	Novema	Novemaba
Disemba	Tesema	Dekemaba
(Adapted from English)		(Note:- f and v are not native)

(* stands for the non-Indo-European language)

Even such a small check list can tell much of the sound type in question: provided that genealogical consideration can be here left out, Russian and Welsh are marked representatives of the consonantal type whereas Italian, Spanish, Samoan, Hawaiian and Buluba-Lulua (of the Bantu family) are all of a sort belonging to the vocalic type; and Hungarian, for all its appearance, may

have a fair claim to the latter assortment for the reason to be stated later. What is more, these specimens clearly point to the above-stated correlation between proportion and frequency in the two sound categories: for instance, in Russian as many as 35 consonants are to be counted over against 10 vowels (about the same with the rest of the Slavic languages) while in Hawaiian the comparative poverty of sounds is divided between 5 vowels and 8 consonants (as in most of the Polynesian group). This enumeration may be extended to the preparation of the phonemic inventory of as many languages as could be described. But here suffice it to add a few illustrations for further corroboration of our view. In the below a specimen is given from the Avar language (of North Caucasus) which is characterized by an amazing development of the consonantal system with numerous nuances of phonetic value (thus amounting to as many as 43 kinds) in contrast to the comparatively simple and stable vocalic inventory (amounting to 5):

reqečč'eb bit,arasada boŋ,ulareb
(he who says/an improper thing/an unpleasant thing

raɔula; xxwalč,al rugunaldasa raɔul
hears /of a sword/more than the hurt/of a word

rugun unt'ula
the hurt/does harm)

(A. Meillet et M. Cohen, Les Langues du Monde (nouv. éd.), Tome I, p.238 f.: the sign , shows certain particular nuances of articulation)

The following list shows the complete sound network of Tlingit, one of the North American aboriginal languages, which may be well matched with Avar in its uniqueness of consonantal superabundance:

Consonant					Semi-vowel	Vowel		
d	t	t'	n		w	i	u	Consonant: 42
g	k	k'	x	x'		i	u	Vowel: 8
g^w	k^w	k'^w	x^w	x'^w	γ	e	a	Prosodeme (high and deep): 2
G	q	q'	x	x'		e	a	
G^w	q^w	q'^w	x^w	x'^w				total 52
dz	ts	ts'	s	s'				
dj	tc	tc'	c		y			
dl	tɬ	tɬ'	ɬ	ɬ'				
		(')						

(Heinz-Jürgen Pinnow, Die Nordamerikanischen Indianersprachen (Wiesbaden, 1964), S.50)

After what we have seen so far, it is no wonder that a good number of the opposite type should be found. In this case, special mention must be made of those languages which have conventionalized the system of vowel harmony or the assimilation of vowel. Vowel harmony is specifically what is termed 'progressive assimilation' in which either palatalization or velarization of vowels at the end of words is normally put under the influence of the vowel in the base syllable. Hence an ordinary distinction in the vowels according to their nature, i.e. whether the tongue position is held for the back (called Group A) or the front rounded (Group B) or unrounded (Group C) vowels; the last of which is, being of a neutral nature, capable of combining with either A or B. It is this substantial identity with minor differences in the system of vowel harmony that characterizes each number of the Ural-Altaic linguistic family which covers

the vast area of the Eurasian continent. Illustrations are afforded by

Finnish: A - a/o/u
B - ä/ö/y
C - i/e
[koulu 'school'/kumartamatta 'without bowing'//ystävä 'friend'/nähnyt 'having seen'//asema 'station'/hedelmä 'fruit' //ilo 'joy'/lapsi 'child' etc.]

Hungarian: A - a,á/o,ó/u,ú
B - ö,ő/ü,ű
C - e,é/i,í
[uszoda 'swimming pool'/háznál 'beside the house'/tanulok 'I learn'//vörös 'red'/külső 'outward'//gyöker 'root'// papír 'paper' etc.]

Turkish: A - a/o/u/ı
B - e/ö/ü/i
[çalışkan 'industrious'/dokuz 'nine'/ olmadılar 'they did not become'//gelincik 'poppy'/ölmediler 'they did not die' etc.]

Mongol: A - a/o/u
B - e/ö/ü
C - i
[altan 'golden'/gutal 'shoe'//gerel 'light'/öndür 'high'//irekü 'come'// sonin 'news' etc.]

Old Japanese:
A - a/o/u
B - ö/(ï/ë)
C - i/(e)

[those three vowels enclosed with brackets are supposed to have been the later developments in exclusive use for the suffix, not for the stem: kuro 'black'/momo 'hundred'/koma 'horse'//kökönö 'nine'/kökörö 'heart, mind'/kötö 'thing'//aki 'autumn'/fitö 'man'/töri 'bird' etc.]

It is chiefly as a substantial clue for furnishing the proof of affinity when the phenomenon of vowel harmony finds mention as in the above quoted and other members of the Ural-Altaic family. There is no doubt that the discovery in this country of its undeniable existence in Old Japanese has done a great deal in favour of the attempt to disclose the genealogical identity of Japanese. In such a case, this is because vowel harmony is, so far as a given stage of these languages is concerned, so characteristically developed as to form part and parcel of their grammatical system. Nevertheless, some scholars may well exercise due caution against the fallacy one would be otherwise liable to, stating that this feature alone cannot be a conclusive factor in bringing one language and another into near kindship: historical evidence may be afforded to show that vowel harmony was less strictly followed in the earlier stage of some of those languages or that certain ones (like Hungarian, Cheremiss and others) have been subject to another (like Turkish)(cf. Björn Collinder, An Introduction to the Uralic Languages [Univ. of Calif. 1965], p. 65). Vowel harmony as such is, therefore, taken up by them as an example to illustrate the possible case in which even features common to all the representatives

of a given linguistic family may be unknown to their parent language (Ferdinand de Saussure, Cours de Linguistique Générale[4] [Paris 1949], p.315, and Antoine Meillet, Linguistique Historique et Linguistique Générale [Paris 1948], p.91: 'le fait de procéder uniquement par suffixation, l'emploi de l'harmonie vocalique, etc. ne constituent pas des preuves de parenté').

(to be continued)

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