AN ARTICLE OF FAITH

H. V. George

(English Language Institute, Victoria University)

Linguisticians often describe their work as scientific. I am a Popper man in this respect, and feel that to qualify as scientific a statement about language (like a statement about the physical world) must lead directly to prediction that is <u>experimentally</u> verifiable or falsifiable.[1] From this point of view, many premises of contemporary linguistics are articles of faith. This paper describes one article of faith put in the form of a prediction, experiments to verify to falsify the prediction, and some implications of the findings.

The article of faith is the assertion that in language the relationship between sign and meaning is arbitrary.

It is true that Bloomfield, after Jespersen, recognizes such facts as that many words in English beginning with <u>sl</u> represent varieties either of chopping and striking movements or of physical or mental "muddiness". These facts are noted, like onomatopoeia, as exceptional to the postulate that the meaning attached to a group of sounds is not intrinsic but socially determined.

The evidence for the postulate, or more precisely, the way in which the evidence is considered, is of methodological interest, and will be considered separately. Let us now reduce to experimental terms the statement under reference.

With an initial consonant, a vowel and a final consonant we have a simple formation pattern for an English word. Using <u>l</u> initially, varying the vowel, and taking final <u>p</u>, for instance, we form a series of "words": <u>lip</u> <u>lep</u> <u>lap</u> <u>lop</u> <u>lup</u> <u>leap</u> <u>lape</u> <u>lipe</u> ... and so on. Half of the words so formed are institutionalized, or "actual" words, and the others, <u>lep</u> <u>lup</u> <u>lape</u> ... I will call "contingent". The latter constitute material one can experiment with.

Taking for granted that actual words have actual meanings, there are three questions: May contingent words have actual meanings? Do actual words have contingent meanings? Do contingent words have contingent meanings? The third question is esoteric, and I have no experimental approach to it; the other two questions can be approached experimentally, and the first is considered here.

The question, <u>May contingent words have actual meanings?</u> cannot be put to experimental proof naively, by asking people, "What does <u>lep</u> mean?", for <u>lep</u> is a priori distinguished as not institutionalized, as not

---

[1]Popper 1935.

(yet) actual. We are by definition dealing not with actual actual meaning but with potential actual meaning.

Now from time to time, a contingent word does become an actual word, and the occurrence of actualization offers a clue to an experimental approach. Here are three actualizations: <u>Klim smog spiv</u>.

The condition for such actualization is the coming into existence, or perception, of a new designatum. Most actualizations are of unknown provenance. However <u>smog</u> is the <u>sm</u> of <u>smoke</u> and the <u>og</u> of <u>fog</u>, while <u>Klim</u> is <u>milk</u> backwards; and if these formation procedures were the whole facts of even one type of actualization we would have formulas for conjuring the contingent into the actual. While it has to be admitted that the unlikely <u>Mho</u> has established itself - at least as a written word - on the klim formula, I for one hardly imagine that <u>niaw</u> or <u>eniw</u> will come to life when this substance too is retailed as a powder. My prejudice is with the poet:

> Twin are the gates of sleep, of horn and polished ivory.
> The true shades issue from the one, and from the other
> Wraiths.

Here indeed we have the basis of experiment. It is said that the relationship between sign and meaning is artibtrary and socially determined. We predict, therefore, that when, for a designatum which as yet has no socially accorded sign, systematically chosen <u>alternative</u> contingent signs are proposed, no feature of any one such sign can make it more acceptable for representation of the designatum than any feature of any other sign; therefore, that when several people are invited to select one of the signs proposed for representation of the designatum, sounds associating randomly with meaning and no particular sign being preferred, the votes for each artificial word will be, within statistical limits, equal.

Experiment 1

Eight designata were proposed. Here is a specimen:
<u>The month</u>: Having 12 months with different totals of days is very awkward. Having 13 months of four weeks each is a much better idea. A name is required for a thirteenth month to come between May and June in the present calendar.

Ten contingent words (Alternatives a - j in Table 1) were selected to compete for representation of each designatum. The raw materials of the contingent words were obtained by breaking down to their constituent sounds the actual signs for adjacent designata, those of other months for the specimen cited above.[2]

The form of the experiment was explained to a group of graduate students at the Central Institute of English in Hyderabad, India, then a tape-recording was played, consisting of designatum definition followed by the ten contingent words read from the first to the tenth then repeated from the tenth to the first. Each student followed the reading on his

---

[2] For the month, the ten contingent words were a) tɔsba, b) bevrou, c) mu:pem, d) sedʒbi, e) ækmou, f) dilti, g) nepdu:, h) vlæsi, i) ɔlsem, j) rɔnta.

voting paper showing the words in I.P.A. script, and ticked his preference if he had one.   This is how the voting went:

Alternative:	Designatum: 1	2	3	4	5	6	7	8
a	2	8	1	7	4	3	9	8
b	4	2	1	2	2	5	5	3
c	[25]	10	[25]	5	9	[16]	4	2
d	5	3	4	8	-	2	1	4
e	3	6	1	4	[15]	8	2	5
f	3	1	1	1	[17]	7	[21]	6
g	-	5	[15]	2	3	8	-	9
h	1	3	2	4	-	-	5	5
i	2	7	-	-	1	3	2	8
j	4	5	2	[17]	1	1	1	-

TABLE 1

The prediction that there would be substantially the same number of votes for each word was fulfilled with respect to Designata 2 and 8, and unfulfilled with respect to Designata 1, 3, 4, 5, 6 and 7.   The postulate leading to this prediction must be held not verified.

What I take to be a similar experiment, though performed with a different purpose, is cursorily described in "Studies on Thought and Speech Problems" by R. G. Natadze.[3] The outcome appears to have been similar too, and one of the conclusions is that the result "seems to us to constitute a powerful argument against the mechanistic explanation in terms of association, which describes the naming process as a simple association between the attribute and the name for it."

Now when we observe, for instance, that Alternative c was accorded 25 votes for representation of Designatum 1, no other Alternative gaining more than 5 votes, we may not conclude that Alternative c is particularly suited to representation of Designatum 1.   Indeed, the Soviet psychologist's interest is the processes by which the "objectively indifferent (my italics) sound complex" is "appreciated by the subject as naming a particular attribute".   We conclude only that Alternative c and the other popularly selected words are intrinsically more generally acceptable for admission into the language.   To discover whether Alternative c, rather than any

[3] Natadze 1957: 306-8

the peoples that use them, have evolved, each developing its own "cut"[6], to which - however difficult to define - old and new acoustical phenomena adopt. As a language's words have altered, so presumably its speakers' feeling of appropriateness of sound for meaning has altered too, keeping fairly well in step.   There is no chance of "sister" getting represented by no matter what other sequence of sounds, since, it seems, sounds are not indifferent counters in sets of permutations.   Insisting on the "mathematics called linguistics", our work may be the less, not the more, scientific; for one opposite of "mentalism" is "fundamentalism", with a register of articles of faith.

---

[6] Martinet 1961: preface.

POPPER, K., 1935, <u>Logik der Forschung</u> (<u>The Logic of Scientific Discovery</u>, London, Hutchinson, 1959)

NATADZE, R.G., 1957, "Studies on Thought and Speech Problems", in Ed. O'CONNOR, N.O., 1961, <u>Recent Soviet Psychology</u>, Pergamon Press, 306-308.

DE SAUSSURE, F. <u>Cours de Linguistique Générale</u>, Paris, Payot.

MARTINET, A. 1961, <u>A Functional View of Language</u>, Oxford. Clarendon Press.