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OBJECT NAMING IN APHASICS—THE LACK OF EFFECT OF CONTEXT OR REALISM*

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Abstract—Three experiments are reported using confrontation naming with aphasic patients. In the first experiment we looked at the effects of the plausibility of the context in object naming; in the second experiment we compared a plausible context with pictures of objects in isolation; in the last experiment we compared the naming of line drawings with that of real objects. In none of these cases were we able to find any effects of the experimental treatments. Such results bear on reasons given for the use of realism in therapy and have relevance for the appropriate form of the model of the underlying processes.

THIS PAPER is concerned with some of the factors which influence the retrieval of names of objects by aphasic patients. We report three experiments in which we attempt to replicate and clarify some earlier findings.

The fundamental question is whether context, particularly non-verbal context, can favourably influence confrontation naming in aphasics. One reason for supposing it might have such an influence is the generalisation that factors which affect word or object recognition in normals also influence the retrieval of the names by aphasics. The implication of this generalization, first made explicit by HOWES and GESCHWIND [1, 2], is that aphasics basically function like normals but with processes which are considerably slowed down. A variable which merely delays the response of a normal will, for the aphasic, affect the likelihood of a correct response, although, according to this viewpoint, we are looking at a continuum. Such a position contrasts with one which holds that the processes themselves are unaffected quantiatively but that there are qualitative impairments [3, 4]. These impairments may be intermittent and it is intermittency which, by this account, gives the appearance of a normality which is reduced.

Either position would be able to cope with established influences such as that of word frequency which not only affects direct recognition in normals [5], but also affects the word-

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finding performance of groups of aphasic patients [6–8]. The former position, however, would have to predict that if context affects normal performance it should also effect aphasics.

The effects of context of word recognition are well known [9, 10, 14, 15]. Similar effects were found pictorially by PALMER [16] who examined the ability of normal people to name drawings of objects in three conditions. The drawings were presented tachistoscopically preceded either by an appropriate pictorial context, an inappropriate context or a blank field. He found that the number of correct namings of the pictures was increased by the appropriate preceding context, while the inappropriate context reduced the number of correct namings compared with the control condition. His detailed analysis indicates that context can act directly in the process of object recognition (prior to word retrieval) as well as in word recognition.

Some contextual cues, can also help aphasics to find the names of objects. Thus ROCHFORD and WILLIAMS [7] asked their patients to name a variety of objects such as a comb and the handle of an umbrella. If the patient failed to produce the name then a series of four different kinds of cue was given: a functional description of the object, a strongly constrained sentence completion, a rhyming word and finally the spelling of the word. All these cues helped in naming, the last three being equally effective while the first, the functional description, was only about half as useful. Such results demonstrate that difficulties in word finding are not all-or-none.

One slightly surprising feature of the Rochford and Williams result is that a functional description of the object had any effect whatsoever since one has the impression from their paper that the patients were in no doubt as to what the object was or what its use might be. That is, they had full access to the information concerning the object in what we would like to call their *knowledge structures*. By using this term we wish to make a distinction between types of information about the words stored in the brain. At the extremes we would distinguish between language-based and non-language based information, though without prejudging where the boundary, if any, might be set. Since there is comprehension without naming, however, such a distinction must be made. It is not clear, then, what it was about the functional descriptions (e.g. "the thing you hold it by" for *handle*) that helped the patients. The same problem arises with respect to some of the context sentences. Is it possible that a sentence such as 'You hold on to the . . .' with reference to the handle of an umbrella actually provided the patient with information which he did not already have? It seems unlikely. It would seem, then, that some word-finding can be facilitated at a linguistic level which is separate from our knowledge structures. Note though that we would want to make a distinction here between possible "automatisms" such as "brush and comb" and sentences such as "You hold onto the handle". The former may be considered to be stored as a unit: the same assumption can scarcely be made for the latter.

Suppose, then, that in aphasic word-finding by object naming there is an initial undisturbed process of object recognition followed by a search for the appropriate word. In such a case, as already indicated, we would not expect additional knowledge to have any affect. Neither would we expect that the stimulus qualities of an object should have any effect on the ease of naming of that object once demented patients and aphasics with visual agnosias had been excluded [11, 12]. ROCHFORD and WILLIAMS [8] compared the naming by aphasics of 8 object pictures, and 8 parts of the experimenter's body, the words being matched for frequency of occurrence. The body parts were placed visually in context and their names were all from the same semantic field; Rochford and Williams considered that

both factors should facilitate word-finding. For their samples of 10 aphasics they found no differences in performances. The realism of the body parts did not seem to help. On the other hand, a study which does seem to show a positive effect of realism is by BISIACH [13]. His patients were asked to name both "realistic coloured figures" and outline drawings of objects and found that the patients had more difficulty finding the names of outline drawings once they had recognized them.

The prediction that realism should help object naming is in accord with the common observation among therapists that aphasics can find object names more easily when in the context of their use. Thus we find, in respect of a 'global approach' to therapy, ". . . the patient will be led into the mental attitude in which the words occur. This makes it much easier for him to retrieve the appropriate word" [17, p. 24]. This reflects a classic tradition. GOLDSTEIN, for example, wrote: "Some words, which occur easily in fluent speech, offer particular difficulty in voluntary word-finding. . . . The patient cannot find the words because he cannot assume the attitude in which they normally appear" [18, p. 60]. If, on the other hand, we believe that the contextual cues have to provide some additional information if they help the aphasic to find the name, then, given that the drawings are equally identifiable in all cases, they should be equally nameable irrespective of context. We assume, of course, that there are no differences in motivation between the conditions which could bias the results.

EXPERIMENT I

The effect of plausibility of context

Materials. A series of pictures were drawn of obects in different situations. There were six different nouns (fork, nail, table, umbrella, crab, brush) covering a range of Thorndike–Lorge word frequencies and each object occurred in three different contexts. These contexts were intended to be ordered in terms of plausibility. We will term the most plausible A, the next B, and least plausible C. Underneath the picture was written a sentence describing the situation in which the last word, that of the name of the desired object, was missing. The three stimuli relating to the object *brush* are shown in Fig. 1. The task, then, was for the patient to complete the sentence, which was also read to him, with the appropriate word, as defined by the picture. In order to respond correctly the patient has to understand the sentence, coordinate this with the picture and then find the required noun.

The items were checked with normal subjects (members of the A.P.U. subject panel) in three ways. Firstly the picture–sentence combinations were presented to 100 subjects for completion. A second group of 100 subjects completed the isolated sentences. A further group of 100 subjects was given sets of three picture–sentence combinations, all relating to the same object. Their task was to judge which of the three was most probable and which least probable. The results of these normative enquiries are given in Table 1. The results for a further set of pictures for the object "shirt" fell below the levels we deemed necessary and that item was excluded from the final test. Apart from that we see that the picture–sentence combinations gave rise to the required response on all except 56 of 1800 trials. The "errors" were responses such as "sun-shade" for "umbrella". With the sentences alone, a mean of 24% of the A series gave rise to the target word. The judgements of relative plausibility were not perfect although the A stimulus was judged more plausible than the C stimulus on all occasions. In general, then, the stimuli have the required properties. If there are biasses they are likely to favour the A stimuli.

Subjects. The 30 patients had been diagnosed by their referring neurologists as having aphasia in association with localized cerebral lesions and without symptoms of general dementia. About three quarters of them were chronic cases. All patients were used assessed by their speech therapists not to be suffering from visual agnosias, motor difficulties or receptive losses severe enough to prevent appreciation of the sentence or the picture. The patients were otherwise mixed by any of the current classifications other than they suffered, more or less frequently, from an inability to name pictures of objects. This approach should not suggest that we are unaware of fundamental linguistic differences between clearly recognisable forms of aphasia, as described by, for example, LURIA [19], HÉCAEN [20], GOODGLASS and KAPLAN [3] or WEPMAN [21]. However, it was not clear to us *a priori* which group in which classification scheme might be expected to show effects of context on object naming if they were to be found. Our original intention was to perform *post hoc* analyses to identify such groups. As will be seen, our data proved this unnecessary.

FIG. 1.

Table 1

Item	Number giving correct answer			Number of sentence completions with name of object			Number judging A more probable than B	Number judging B more plausible than C
	A	B	C	A	B	C		
Fork	96	98	92	53	0	0	100	84
Snail	98	97	99	8	0	0	100	86
Table	100	98	99	44	15	1	100	69
Umbrella	99	88	100	23	1	0	84	70
Crab	98	94	98	14	0	0	100	81
Brush	98	99	93	0	0	0	94	75

Method. The test sequence of 18 stimuli was given to thirty patients, in one of six different counterbalanced orders, so that for each word no particular context occurred in any position more often than any other. The test, administered by F.M.H. and D.H., was preceded by three practice items. Responses were counted correct if the response was unambiguous. We were interested in word finding not word production, thus some flexibility was used in deciding on correctness.

Results

Effects of context. The number of times an object was correctly named in each context is given in Table 2. Summing for the three levels of context we have the following mean

numbers of correct responses for the High, Medium and Low probability contexts: 19·7, 16·7, 17·2 out of a maximum 30. A Friedman 2-way AOV by ranks for subjects shows these differences are only significant at the 6% level ($\chi^2 = 5{\cdot}62$, $df = 2$). Differences as small as these could be accounted for solely in terms of sentence completion with the High Probability context, irrespective of the presence of the object. In addition the advantage for the High Context would be further eroded if one scored as correct those responses which had occurred as normal responses to the picture-sentence combinations. These included replacing "brush" by "hammer" in the illustrated B picture and "bristles" in the C picture.

Table 2

Item	Number of correct namings/30 A	B	C	Total	Thorndike–Lorge word frequency
Fork	22	19	12	53	31
Snail	18	15	20	53	8
Table	24	25	22	71	AA
Umbrella	18	9	19	46	13
Crab	16	15	16	47	16
Brush	20	17	14	51	A
Means	19·7	16·7	17·2	53·5	

We could find no evidence of inhomogeneity in the patients in respect of the effects of context. It is not the case that some patients use context and others are, for some perverse reason, adversely affected by a favourable context. Because of this we could not perform any *post hoc* analyses. Any planned comparisons which might be thought interesting would have to be the objective of further experiments.

Table 3

Item	Number of correct namings/30 1st presentation	2nd	3rd
Fork	14	18	21
Snail	17	18	18
Table	25	22	24
Umbrella	1	16	19
Crab	13	17	17
Brush	12	17	22
Means	15·3	18·0	20·2

Effects of repetition. Informal examination of the data indicated that a more potent factor in the experiment was the effect of repeated presentation. The number of successful namings on the first, second and third occurrences of a particular object irrespective of the context level are given in Table 3. A Friedman test gave $\chi^2 = 12{\cdot}62$, $P < 0{\cdot}01$. It appears that the probability of naming an object on a particular presentation is determined by whether that object had previously been correctly named. The detailed data are shown in Table 4. It is clear from this table that performance on the second and third presentations are very similar when expressed in terms of prior success with the object. Take first the cases where the patient has not previously succeeded in producing the correct response. The success rates were then $P\ (2/\bar{1}) = 0{\cdot}36$ on the second presentation and $P\ (3/\bar{2}) = 0{\cdot}34$ in the third

presentation. These figures can be compared with those following a success on the previous trial $P(2/1) = 0{\cdot}83$ and $P(3/2) = 0{\cdot}84$ for the 2nd and 3rd presentations respectively. Further analyses showed that these large differences were indeed due to facilitation of responses and were not an artifact of either words or subjects. Thus if, in the extreme, certain words had always been correct and the rest never correct the probability of success following success would be 1·0 and of success following failure 0·0. The same would be true if some patients were always correct and the rest always failed. The tests showed that for all 6 words $P(2/1) > P(2/\bar{1})$ and $P(3/2) > P(3/\bar{2})$ (conjoint probability $P < 0{\cdot}003$). For individual patients $P(2/1) > P(2/\bar{1})$ for 18 with 3 in the opposite direction ($P < 0{\cdot}01$, Sign Test). For the comparison between $P(3/2)$ and $P(3/\bar{2})$, 13 patients were in the expected direction and 7 in the opposite direction ($P > 0{\cdot}05$, Sign Test).

Table 4. Proportions of correct namings, summed over all subjects

On first presentation	On second presentation		On third presentation	
$\frac{92}{180} = 0{\cdot}51$	$\frac{108}{180} = 0{\cdot}60$		$\frac{121}{180} = 0{\cdot}67$	
	after correct first time	after incorrect first time	after correct second time	after incorrect second time
	$\frac{76}{92} = 0{\cdot}83$	$\frac{32}{88} = 0{\cdot}36$	$\frac{91}{108} = 0{\cdot}83$	$\frac{30}{72} = 0{\cdot}42$
			after correct first time	after incorrect first time
			$\frac{67}{76} = 0{\cdot}88$	$\frac{24}{32} = 0{\cdot}75$
			after correct first time	after incorrect first time
			$\frac{11}{16} = 0{\cdot}69$	$\frac{19}{56} = 0{\cdot}34$

Errors. In order to clarify the strategies used by patients we looked at the errors they had made. A strategy which could provide the correct answer with most items would be for the patient to name any objects in the picture which had not been mentioned in the sentence accompanying it. An alternative strategy would be to ignore the picture and complete the sentence with the first word that came to mind. In order to be able to assess this we had previously given the sentences alone to 100 normal people and asked them to complete them with the first word that came to mind. Errors made by the aphasics which appeared in these lists we called *sentence completions*. Some errors were repetitions of a patient's earlier response (*preservation*), and some were repetitions of words from the uncompleted sentence (*repetition*). A further conspicuous class of errors was *misnaming* (for example, calling a fork a spade or a crab a spider). Misnamings can be generally and loosely interpreted as words from the same "semantic set" as the object. The classification of errors was often ambiguous as between *sentence completion* on the one hand and either *misnamings* or *unnamed objects* on the other. The final classification is given in Table 5. The table shows that the errors attributable to unnamed objects, sentence completion and misnamings amount to 60·8% of the meaningful errors.

Table 5

No. of errors		% of meaningful responses		
No response	49	—		
Neologisms	12	—		
Perseverance	14	8·9		
Repetitions	8	5·1		
Unnamed objects	14	8·9		19·0%
Unnamed objects, Sentence completions	16	10·1	32·9%	
Sentence completions	19	12·0		
Sentence completions, Misnamings	17	10·8		29·8%
Misnamings	30	19·0		
Other meaningful errors	40	25·3		

EXPERIMENT II

Effects of context

The first experiment failed to show any differential effects of context. We decided then, to ask the prior question of whether visual context had any effect in the naming of line drawings. The comparison, then, would be between line drawings of objects in isolation and the same drawings in a normal situation.

A test was devised of twenty drawings. Each of ten different objects was pictured, either alone or in a visual context. An example of an object in context is shown in Fig. 2. These were arranged in two lists each of 10 drawings; 5 with context and 5 without. In each a *contextualized* drawing corresponded to an isolated drawing in the other. These lists were then given to ten subjects in each of both orders.

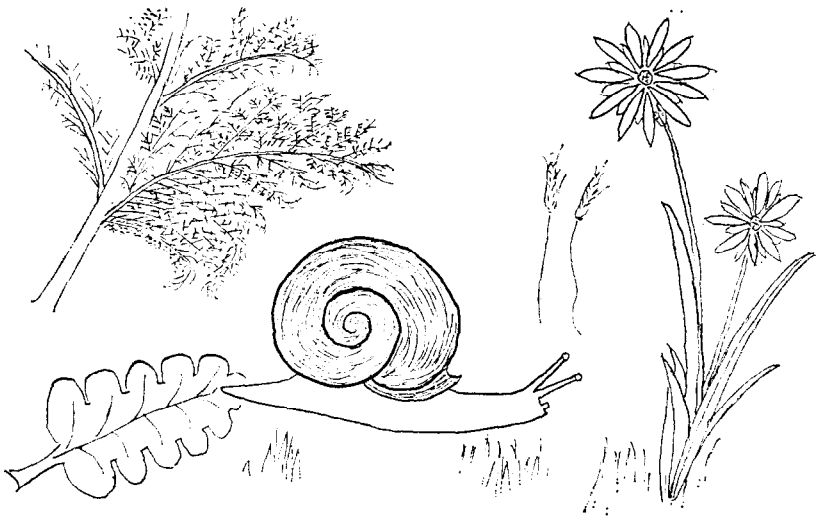

FIG. 2.

The subjects were twenty aphasic patients selected as in Experiment I. The test was administered by two of the authors (F.M.H. and D.H.); half the patients taking the test in each order.

Results

It can clearly be seen from the results in Table 6 that we could find no evidence of facilitation of word-finding for an object when it is presented in a context.

Table 6. Number of correct namings/20

Item	No context	Context
Brush	18	14
Shirt	4	3
Chair	16	14
Tractor	7	9
Fork	10	10
Table	15	12
Crab	10	8
Umbrella	11	11
Snail	10	9
Boat	17	17
Mean	11·8	10·7

The effects of repetition

The mean probability of naming the objects correctly on the first viewing, $P(1)$ was 0·60. The conditional probability of naming correctly on the second presentation, given that it was correct before, $P(2/1)$ was 0·79. If the object was not named in the first occasion, the probability of its being correct the second time $P(2/\bar{1})$, was 0·15.

The effects of priming are clear, $P(2/1)$ being greater than $P(1)$ for 16 of the 20 subjects ($P = 0{\cdot}006$, Sign Test). As before, then, we have evidence that finding a name successfully once is of considerable assistance a second time. That the effect is smaller than in Experiment I can possibly be accounted for by the fact that 9 items intervened between successive attempts at the same item in Experiment II compared with 5 items in Experiment I. Comparisons such as these reinforce our belief that we are dealing with a genuine facilitive effect.

This collection of negative results led us to wonder how reliable were the earlier studies. The negative data presented so far, although negative, are consistent with the quasi-logical notion that to be effective a cue has to provide the patient with information which is not yet available to him. We are increasingly inclined to believe that some of the positive results reported by other investigators can be attributed to some extraneous factor such as increased time available for the search.

EXPERIMENT III

Effects of realism

Thus we are forced to doubt that realism of any kind helps naming. The final experiment then goes back to the beginning and tests the effects of, as it were, hyper-realism comparing the ability of subjects to name real objects, photographs of the objects and line drawings.

Materials. The choice in this experiment was restricted by the need for the objects to be portable and for them to have a single name. Photographs and drawings were checked against a group of 11 Cambridge undergraduates who were asked to name them. Only items named with the target name by all subjects were chosen for use. The final list of items was chosen so that it could be subdivided into 3 sub-groups, roughly matched for frequency. Because the effects of facilitation were so strong in the first two experiments the subjects were only asked to produce the name once, to the object itself, to the photograph or to the drawing. The subjects were thus divided into three groups. Each group responded to one of the sub-lists in each of the three methods of presentation. Lists and methods were varied for groups in order of presentation in a Graeco–Latin square design.

Subjects. The subjects were all patients receiving speech therapy for dysphasia resulting from tumour, cerebravascular accidents and other traumas. Subjects were screened to exclude gross visual agnosia by applying three picture-to-jumble-pictures matching tests from the Southern California visual/ground test [22]. Two patients who made more than one mistake in this task were excluded as were two others with gross articulatory difficulties. A final total of 21 patients provided the data.

Method. The test for visual agnosia was followed by three preliminary items: a drawing of a cigar, a photograph of a book and a real mug. In the test proper if patients could not find the name they were encouraged to try to write it if that would help. Only the initial spoken responses were counted as correct however. Responses were counted as correct if one phoneme was incorrect (as "fandle" for "candle") missing ("panner" for "spanner") or added, provided the response did not form another proper word. In certain other cases discretion was used, as in allowing "pot of tea" for "teapot".

Results

The total correct for the three methods of presentation out of a maximum of 147 were object—123; photo—111; drawing—113. These differences did not reach even the 0·1 level of significance when treated by objects or by patients, with a Friedman two-way analysis of variance. A Spearman rank correlation between word frequency and the total correct for an item gave a corrected $r_s = 0{\cdot}665$ for which $P < 0{\cdot}005$.

FINAL CONCLUSIONS

We have found no evidence to support the idea that realism or plausibility has any effect upon the finding of object names. Given that a patient recognises a drawing of an object he is as likely to name it correctly as the object itself (Experiment III). Appropriate contextual information is no more likely to lead to a correct response than the object in isolation (Experiment II) or possibly misleading contextual information (Experiment I). These results have been found in spite of a prior belief by 4 of the 5 experimenters to the contrary.

Given that patients have been suitably screened to exclude those with visual defects the process of naming can be regarded as having the following distinct stages:

1. Recognition of the object—i.e. assigning it to a class of objects.
2. This leads to recovery of knowledge about the object.
3. This knowledge is then used to find the name of the object.

With normals and with material presented in a tachistoscope the first of the above processes is affected. With aphasics of the types we used only the third operation is affected. The name-finding (note that we use the word "find" in a general sense, not necessarily implying any active operation) is affected by word frequency and by *priming*, that is, the effect of prior use of the word. The priming can occur within the task, as in Experiments I and II, or in a separate task. Thus we would see WEIGL'S [23, 24] effects as the same phenomena. Beyond this it seems likely that there are some specific interverbal links which are to be distinguished from effects we might call "semantic", or knowledge based. It is not clear to us, however, whether the production, by the aphasic, of the utterance "chair" in completion of the phrase "sit on the . . .", affects the same system as that used in naming. Certainly it is our experience with many aphasics that a second or so may elapse after such an utterance before they realise it is the word they are looking for. It is rather as though they had to hear themselves in a manner similar to hearing another speaker.

Finally we can conclude that ability to name can as easily be tested with line drawings as with real objects. There may be some effects of motivation, as claimed by some therapists but at the moment, even that belief has no easily visible empirical foundation. The only exceptions are the result by BISIACH [13], previously mentioned, and one by BENTON, SMITH and LANG [25] where there were differences between real objects and reduced line drawings. These results are offset by those of CORLEW and NATION [26] who reported finding no differences in naming between objects and pictures of the objects. There are a number of possible explanations for the discrepancy. These could arise because of differences in the objects used in the different studies, or in the case of Bisiach's experiment, in the selection

of "optico-amnesic" patients. If there are any real advantages of realism in confrontation naming they are probably restricted to a very small group of patients.

Finally, we can return to the issue of the relationship between aphasic and normal processing raised in the Introduction. Since context does help normal processing and does not appear to affect aphasic processing we are inclined towards believing in qualitative rather than quantitative differences. Certainly, proponents of the opposing viewpoint will have to explain why context does not resemble word frequency as a potent variable in aphasic performance.

REFERENCES

1. HOWES, D. and GESCHWIND, N. *Excerpta Med. Int. Congress,* No. 38. VII Int. Congress of Neurology, Rome 31–35, 1961.
2. HOWES, D. Application of the word-frequency concept to aphasia. In *CIBA. Symposium on Language Disorders,* A. U. S. DE REUCK and M. O'CONNOR (Editors). Churchill, London, 1974.
3. GOODGLASS, H. and KAPLAN, E. *The Assessment of Aphasia and Related Disorders.* Lea & Febiger, Philadelphia, 1972.
4. MORTON, J. Grammar and computation in language behaviour. In *Studies of Language and Language Behaviour,* Vol. 6, pp. 499–545. J. C. CATFORD (Editor), 1968.
5. OLDFIELD, R. C. and WINGFIELD, A. The time it takes to name an object. *Nature, Lond.* **202,** 1031, 1964.
6. NEWCOMBE, F. B., OLDFIED, R. C. and WINGFIELD, A. Object naming by dysphasic patients. *Nature, Lond.* **207,** 1217, 1965.
7. ROCHFORD, G. and WILLIAMS, M. Studies in the development and breakdown of the use of names, Experimental production of naming disorders in normal people. *J. Neurol. Neurosurg. Psychiat.***25,** 22 8–233, 1962.
8. ROCHFORD, G. and WILLIAMS, M. Studies in the development and breakdown of the use of names. Part IV: the effects of word frequency. *J. Neurol. Neurosurg. Psychiat.* **28,** 407–413, 1965.
9. RUBENSTEIN, H. and POLLACK, I. Word predictability and intelligibility. *J. verb. Learn. verb. Behav.* **2,** 147–158, 1964.
10. MORTON, J. Interaction of information in word recognition. *Psych. Rev.* **76,** 165–178, 1969.
11. JACKSON, J. Hughlings. *Selected Writings,* J. TAYLOR (Editor). Hodder & Stoughton, London, 1932.
12. ROCHFORD, G. A study of naming errors in dysphasic and in demented patients. *Neuropsychologia* **9,** 437–443, 1971.
13. BISIACH, E. Perceptual factors in the pathogenesis of anomia. *Cortex* **2,** 90–95, 1966.
14. TULVING, E. and GOLD, C. Stimulus information and contextual information as determinants of tachistoscopic recognition of words. *J. exp. Psychol.* **66,** 319–327, 1963.
15. TULVING, E., MANDLER, G. and BAUMAL, R. Interaction of two sources of information in tachistoscopic word recognition. *Can. J. Psychol.* **18,** 62–71, 1964.
16. PALMER, S. E. The effects of contextual scenes on the identification of objects. *Memory and Cognition* **3,** 519–526, 1975.
17. HATFIELD, F. M. Some uses of videotape recording in language after brain damage. *Medical and Biological Illustration* **21,** No. 3, 1971.
18. GOLDSTEIN, K. *Language and Language Disturbances.* Grune & Stratton, New York, 1948.
19. LURIA, A. R. *Traumatic Aphasia.* Moscow, 1947, Engl. Trans. Mouton, The Hague, 1970.
20. HÉCAEN, H. *Introduction à la Neuropsychologie.* Larousse, Paris, 1972.
21. WEPMAN, J. M., JONES, L. V., BOCK, R. D. and VAN PELT, D. Studies in aphasia: background and theoretical formulations. *J. Speech Hear. Dis.* **25,** 323–332, 1960.
22. AYRES, A. J. The Southern California figure-ground visual perception test. Western Psychological Association, L.A., 1972.
23. WEIGL, E. The phenomenon of temporary deblocking in aphasia. *Z.F. Phon. Spr. Komon.* **14,** 337–364, 1967.
24. WEIGL, E. and BIERWISCH, M. Neuropsychology and linguistics: topics of common research. Paper presented to Congress for Semiotics, Warsaw, 1968.
25. BENTON, A. L., SMITH, K. C. and LANG, M. Stimulus characteristics and object naming in aphasic patients. *J. Commun. Dis.* **5,** 19–24, 1972.
26. CORLEW, M. M. and NATION, J. E. Characteristics of visual stimuli and naming performance in aphasic adults. *Cortex* **11,** 186–191, 1975.

Résumé :

On rapporte 3 expériences de dénomination chez les aphasiques. Dans la première de ces expériences, nous examinons l'effet de la plausibilité du contexte sur la dénomination d'objets. Dans la seconde expérience, nous avons comparé l'effet d'un contexte plausible par rapport à la présentation d'images d'objets isolés. Dans la dernière expérience, nous avons comparé la dénomination de dessins avec celle d'objets réels. Dans aucun de ces cas, nous n'avons pu trouver d'effets des situations expérimentales. Il faut tenir compte de tels résultats pour l'utilisation d'objets réels lors de la thérapie du langage; on doit aussi tenir compte de ces résultats pour envisager un modèle approprié des processus sous-jacents.

Deutschsprachige Zusammenfassung:

Es wird von drei Experimenten berichtet, in denen bei Aphasikern das Benennen von gezeigten Gegenständen zur Anwendung kam. Beim ersten Experiment untersuchten wir die Wirkungen eines passenden Kontextes. Im zweiten Experiment verglichen wir die Benenn-Leistungen bei passendem Kontext mit solchen bei Abbildungen von isolierten Objekten. Im letzten Experiment verglichen wir das Benennen von skizzierten Objekten mit dem einiger realer Objekte. In keinem dieser Fälle konnten wir Auswirkungen der experimentellen Angehungsweise finden. Diese Ergebnisse zeigen, wie wichtig realitätsbezogene Verfahrensweisen sind und wie notwendig ein angemessenes Modell für die zugrundeliegenden Prozesse ist.