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Psycholinguistics

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Hybrid academic disciplines are at once the easiest and the most difficult entities to define. It would be easy enough to refer to psycholinguistics as the study of the interaction between 'psychology' and 'linguistics', or 'psychological behaviour' and 'linguistic behaviour', and this is what some definitions do: 'the study of the relationships between language and the behavioral characteristics of those who use it' *(The Random House Dictionary).* But this does not get us very far. It leaves open the question of the 'direction' of the study: Is psycholinguistics primarily (a) the study of psychological behaviour using linguistic theories and techniques of analysis, (b) the study of linguistic behaviour using psychological theories and techniques of analysis, or (c) both of these? It also leaves open the question of how much of the two contributing disciplines is involved – all of psychology, and all of linguistics? Or only certain aspects of the possible relationships between these fields? In principle, one imagines that psycholinguistics, as an academic discipline, would aim to be comprehensive and systematic in its coverage of the relationships between psychology and linguistics. In

practice, familiar limitations – of time, personnel and money, and the technical impracticability of researching certain kinds of topic – as well as the special influence of certain themes and personalities in the recent history of ideas have led to the emergence of a discipline which, after 30 years of development, is still fragmented and unbalanced in its coverage of the subject.

A convenient approach is to take the two constituent disciplines and specify their subfields as a means of identifying the putative domain of a psycholinguistic theory. Using various conventional sources in psychology and linguistics, I would hope that the following characterisations would receive a fair measure of agreement. First, psychology, characterised as the scientific study of the behaviour of organisms (typically, man) and of the principles governing this behaviour, as the organism interacts, socially and biologically, with its environment. Table I provides a more detailed specification of this field. On the left of the table is a general analysis in terms of the widely used model of information processing. On the right is an inventory of the main subfields within psychology, as

Table I. The domain of psychology

Input processes	Comparative psychology
The way in which we select information from our environment;	Physiological psychology
how it is perceived, physiologically responded to, and initially stored	Neuropsychology
Mediating processes	Cognitive psychology
The way in which we organise information; how information,	Perception
once received, is learned, organised and made available for future use	Awareness
(i.e. retrieved)	Intelligence
Output processes	Memory
The way in which we use information to construct our individual patterns	Motivation
of behaviour (biological and social), in relation to our motives, drives,	Thought
skills, etc.	Learning
	Personality
	Individual differences
	Developmental psychology
	Social psychology
	Abnormal psychology
	Applied psychology
	Educational
	Industrial
	Clinical

usually encountered in courses and text-books.

Table II provides a similar characterisation of the field of linguistics, conventionally defined as the scientific study of language structure and use. Alternatively, one might simply add 'linguistic' to the above account of psychology: the scientific study of the linguistic behaviour of man (linguists typically do not ascribe 'language' to other organisms) and of the principles governing this behaviour, as man interacts, socially and biologically, with his environment.

In practice, as soon as any of the theories, methods or findings from within the subfields of table I are brought into relationship with those of table II, we have a psycholinguistic study. In practice, the range of possibilities has been considerably restricted, for four main reasons.

(1) Differences Inherent in the Subject-Matter. There are certain subfields which are unlikely ever to be brought into correspondence in this way. Most of comparative psychology makes little or no point of contact with anything going on in linguistics. Similarly, historical linguistics would find no clear equivalent subject-matter within psychology. Much of physiological and social psychology has only the remotest of connections with linguists' concerns. Psychologists rarely find themselves worrying about the field of phonetic notation, and the mastery of the ear-training and performance skills which such notation implies. At the other extreme, of course, there are very close correspondences. A course on individual differences in psychology would find much in common with a linguist's concerns in stylistics. Perception relates closely to auditory phonetics. Aspects of

Table II. The domain of linguistics

Language						
Structure				**Variation**		
Phonetics	Phonology	Grammar	Semantics	Temporal	Social	Personal
Articulatory	Segmental	Syntax	Lexicon	Historical	Socio-	Stylistics
Acoustic	Non-	Morphology	Discourse	linguistics	linguistics	
Auditory	segmental					
				Child	Ethno-	
Graphetics	Graphology			language	linguistics	
				acquisition		

General linguistics, descriptive linguistics, comparative linguistics.
Applied linguistics: clinical, foreign language teaching, mother tongue teaching, translating, interpreting, lexicography, etc.

social psychology relate closely to sociolinguistics. And above all, developmental psychology makes contact with language acquisition. It is not surprising, then, to find such areas providing the focus of psycholinguistic studies.

(2) The Bias of the Investigator. When you bring a subfield from each discipline into correspondence, several possible directions of study emerge. As an illustration, consider the relationship between human memory and any aspect of language structure, such as syntax, which would be of central concern to any psycholinguistic theory. As a psycholinguist, one would wish to have equal knowledge of the two subfields, and to study the relationship between them in the balanced way implied by such definitions as 'the study of linguistic behavior as conditioning and conditioned by psychological factors ...' *(Merriam Webster, 3rd New International Dictionary).* In practice, such equal knowledge does not usually exist in one person, and as a consequence psycholinguistic studies generally display strong biases. If one is a psychologist interested in human memory, language is one – but only one – of the phenomena which may be investigated as a means to this end. The linguistic features studied will be chosen because of their relevance to psychological hypotheses, and will often, from a linguist's point of view, seem restricted or arbitrary. Typical criticisms would be the overreliance on a particular model of syntax for the description of sentence structure, or the ignoring of other levels of inquiry, such as sentence intonation or stress. Conversely, if one is a linguist interested in the way limitations of memory constrain linguistic performance, a similar selectivity and arbitrariness may take place. Typical criticisms here would be the overreliance on a particular model of memory as an explanation for performance effects, or the ignoring of other psychological considerations, such as attention or motiva-

tion. Additional, methodological differences in approach abound, such as the experimental tradition of psychological study, with its accompanying statistical sophistication, and the descriptive tradition of linguistic inquiry, with its accompanying attention to naturalistic detail, and notational sophistication. In theory, it should make no difference if a psycholinguistics textbook called *Language and Memory* were to be written by a psychologist or a linguist. In practice, two very different books would emerge.

(3) The History of Ideas. Osgood and Sebeok defined psycholinguistics in 1954 as the study of 'the processes of encoding and decoding as they relate states of messages to states of communicators' (p. 4). In 1971 *Hörmann* [1971/79, p. 18] gives a similar definition: 'the relation between messages and the individual transmitting or receiving these messages'. While the definitions are similar, the subject-matter of the two books altered radically in the intervening period, due primarily to the impact of *Chomsky's* linguistic thinking. *Greene,* writing in 1972, goes so far as to subtitle her book: *Psycholinguistics: Chomsky and Psychology.* In a statement which again illustrates the 'directional' issue referred to above, she says that psycholinguistics 'remains a sub-discipline of psychology ... its practitioners believe in the value of looking to linguistics for an analysis of language' (p. 13). But in fact she looks only at Chomskyan linguistics, and her whole approach is based on the assumptions and models of generative grammar. At one point, she states that psycholinguistic research 'rests on the assumption that grammars describe the linguistic competence of the language user' (p. 93), but only a generative conception of competence is expounded. Other books,

written in the late 60s and early 70s, display the same biases, and testify to the enormous impact *Chomsky's* ideas had on the thinking of academic psychologists during this period. These days, the limitations of the approach are more evident, as more recent models of generative grammar come to show up the weaknesses in earlier ones, and alternative conceptions of linguistic analysis become known. The fundamental insights of generative grammar remain influential, but there is no longer an uncritical reliance on the specific properties of particular grammatical models, such as dominated psycholinguistic thinking in the 1960s. In the 1980s, one of the most fruitful areas of psycholinguistic study is the role of prosody in speech production and perception, but investigators who wish to work in this area have to look elsewhere than generative grammar for their descriptive frameworks, for this subject has always been neglected in generative models of language.

(4) The Influence of Applied Fields. If psycholinguistics had been left to itself, as a theoretical field, it would doubtless have developed a clear identity, as a bridge between theoretical linguistics and cognitive theory, as suggested by several definitions: '... the mental processes underlying the acquisition and the use of language' [*Slobin,* 1971, p. 5], and '... fundamentally the study of three mental processes – the study of listening, speaking, and of the acquisition of these two skills by children' [*Clark and Clark,* 1977, p. vii]. But very early on, people began to expect psycholinguistics to be useful, to help solve problems in language acquisition and use. The problems were most notable in the area of language learning – primarily, in relation to speech pathology, the teaching of reading, and second language learning. And when lan-

guage professionals, such as teachers and speech therapists, come to be interested in an academic subject, especially an immature one, it is unlikely that the practitioners of that subject can remain unaffected by their concerns. Certainly, in the case of psycholinguistics, there has in recent years been a trend to investigate a range of problems which arise neither from linguistics nor from psychology, but from fields as diverse as medicine and literary criticism. The result has been an even greater diversification of subject-matter for the subject, and a range of overlapping interpretations of what psycholinguistics is, deriving from the different perspectives of different applied areas. For many teachers, who first encountered psycholinguistics through the work of various researchers into reading, the subject is a theory of reading. I have heard some teachers talk of '*the* psycholinguistic approach' to the teaching of reading. For many speech therapists, who first encountered the subject in relation to child development, the term is synonymous with language acquisition studies.

This diversity of subject-matter can also be found in modern textbooks on the subject. *De Vito* [1971] refers to speech pathology in his account of the subject – naturally enough, for it was written for a series on communication disorders. *Steinberg* [1982] has a chapter on the nature and teaching of reading, and also one on second language acquisition and teaching – naturally enough, for the author works in a TESL department. But in *Slobin* [1971], *Greene* [1972], *Hörmann* [1971/79] there are no chapters on speech pathology or second language learning – again, naturally enough, for their motivation was theoretical, not applied.

The problem with applied developments in an emerging discipline is that they lack coherence and direction. The subject is pulled in various directions. Competing theoretical models are propounded whose justification is said to be 'pragmatic' – that is, useful for one applied area, but not necessarily for others. There is often duplication of research, for example, into the teaching of reading a first language, and into the teaching of reading as part of foreign language acquisition. When in addition there are variations in research method, due to the differing backgrounds of the researchers, and changes in theoretical assumptions, reflecting developments within linguistics and psychology, it is not surprising to find a situation which is, to put it mildly, confused.

Applied Psycholinguistics

An essential distinction, which helps to clarify some of these issues, is that between 'theoretical' (or 'general') and 'applied' psycholinguistics. The crucial difference is in the use of the word 'problems', which plays no part in the definitions of the subject quoted above. By contrast, here is the statement of editorial policy of the new journal *Applied Psycholinguistics,* which 'publishes papers reporting work in which applied problems are approached from the standpoint of basic research and theory in experimental, developmental and social psycholinguistics and related areas of cognitive psychology.' The further details of the kind of problems envisaged make interesting reading: 'work on both normal and disordered language and communicative development in children and normal and disordered language and communicative functioning in adults.' The following topics are said to be of particular interest:

Table III. The domain of psycholinguistics

Linguistics (study of languages and language universals)		Psychology (study of behaviour and underlying principles)		
Psycholinguistics (study of the processes governing linguistic behaviour)				
Applied psycholinguistics (study of the problems in learning and using language in the light of these processes)				
In speech pathology	In dictionary-making and use	In translating and interpreting	In literary style	In reading etc.
'Clinical psycholinguistics'				

'reading, writing, learning from texts and lectures, second language learning and bilingualism, dialect and social-class differences, the assessment of linguistic maturity and communicative competence, the application of psycholinguistics to computer language design and the design of written and oral information (e.g. instructions), nonverbal communication (e.g. sign language, gestures), delayed language development, adult and childhood aphasia, reading and writing disorders, disorders of articulation, phonology, or speech sound perception, autistic and childhood schizophrenic language and disorders associated with mental retardation, environmental deprivation, motor impairment, specific learning disabilities, and sensory deficit or dementia.'

Several points should be noted about such a list. Firstly, the list is not comprehensive, but is a selection reflecting the editor's awareness of what is going on in the field. There is no significance to be attached to the mention of certain topics in speech pathology and the omission of others. Secondly, the list reflects the influence of the three main fields of applied concern noted in my previous section: speech pathology, the teaching of reading, and second language learning. Thirdly, the

orientation of work in this area is in the direction of theory. The aim of the subject is to explain the nature of linguistic problems in these fields, not to solve them. No doubt, the more we understand about the nature of linguistic disability, the more our clinical intervention will be successful. But it does not follow that, lacking such understanding, our clinical work is doomed to failure. It is commonplace to achieve success, without knowing how we did it. And conversely, it does not follow that our understanding of a particular disability will guarantee successful intervention. That is the essential difference between psycholinguistic theory and therapeutic practice.

But there is another way to put this emphasis on linguistic disability into perspective, and that is to look at the *potential* scope of applied psycholinguistics. It is far greater than the above list would suggest. Language problems requiring psycholinguistic explanation turn up in several other areas, such as the compilation and use of dictionaries, the making and evaluation of translations, the

provision and assessment of foreign language interpretation, the writing and appreciation of literature, or the production and judgement of linguistic usage. Each of these topics falls under the remit of psycholinguistics in that they have an encoding and a decoding aspect; they are candidates for applied psycholinguistic study because they present as problems. Is the dictionary typographically clear and aesthetic? Is its information well-organised? Does it meet the needs of the user? What factors led a writer to construct a poem in a certain way? What factors constrain the reader of the poem to evaluate it in a certain way? There could be a psycholinguistic theory of literature, and one of lexicography, alongside the more familiar theories of learning. One could even speculate about the relationships there might be amongst them all. It is possible that what we learn from our literary investigations might assist us in our clinical work, and vice versa. After all, the notion of 'deviance' is a topic both fields have an interest in elucidating.

The relationship between these various notions is outlined in table III, which should be seen as the relevant perspective for a more detailed consideration of one of the subfields: clinical psycholinguistics.

Clinical Psycholinguistics

Ervin-Tripp and Slobin, in a 1966 review, referred to psycholinguistics as 'a field in search of a definition'. Psycholinguistics has a definition now, though it still lacks an agreed set of investigative procedures and a coherent theory. 'Clinical psycholinguistics' is in the opposite position from that of its mother-subject 20 years ago. Here, we have a definition in search of a field. For example,

on the basis of the frame of reference discussed above, a reasonable definition would be: 'the study of breakdown in man's linguistic behaviour, and of the principles governing this breakdown, as he interacts, socially and biologically, with his environment – and especially, with his clinician, clinical materials and clinical settings.'

But there is no recognised training or literature which relates to the focus of this definition. Practitioners of different disciplines investigate aspects of the field – speech therapists, linguists and psychologists, in particular – but each group has different ends in view, and uses different techniques to achieve those ends. The 'clinical linguist', for example, is at present [*Crystal,* 1981] largely taken up with descriptive concerns: the need to provide precise descriptions of a patient's language, and to develop more detailed techniques of assessment and remediation based on these descriptions. In due course, he would hope to broaden his aims, and move from the study of individual patients to groups of patients, generalising his descriptions, and arriving at a concept of linguistic diagnosis. Further, the clinical linguist worth his salt would not wish to stop with his own language, but would want to compare the descriptions of patient behaviour in other languages – and, in theory, in all languages – with the aim of identifying universals of language breakdown. It ought to be possible to say what happens when a linguistic system breaks down, or fails to develop – *any* linguistic system – and it is the aim of clinical linguistic theory to provide an explicit account of the linguistic factors involved.

Clinical psycholinguistics has a far more general role to play, in that it takes into account from the outset the relationship be-

tween linguistic behaviour and such psychological factors as memory, attention and perception, in attempting to explain language breakdown. We are all familiar with the complex interdependence between these variables, as manifested in children and in adults. The clinical linguist can describe the patterns of linguistic disability which emerge, and sometimes can explain the nature of the patient's handicap purely with reference to his procedures. But, more often than this, the explanation of the patient's handicap lies wholly or partly elsewhere – in his disordered short-term memory, or in his emotional disturbance, for example. In such circumstances, the clinical linguist's account will not satisfy, and a more general perspective must be achieved. It is this perspective which a clinical psycholinguistics aims to provide.

As an example of this interaction, let us consider the case of children who, after a period of severe language delay, have mastered the rudiments of simple sentence formation, and have begun to put clauses together into complex sentences, using such connectives as *and* or *'cos*. At this stage in development (stage V on the LARSP procedure) [*Crystal* et al., 1976], certain difficulties regularly emerge. The child may be able to say (or be making only minor errors in) such sentences as *The dog chased the cat* or *The cat ran in the road,* but he has problems in connecting or sequencing these within a single sentence, as in *The dog chased the cat and the cat ran in the road,* or *The cat ran in the road because the dog chased it,* or *When the dog chased the cat, it ran in the road.* Typical errors made by these children include:

(i) The omission of elements of clause structure in the second (or later) clauses, e.g. *The dog chased the cat and the cat in the road* (verb omission), *the dog chased the cat and ran in the road* (subject omission). Sometimes, elements of clause structure are omitted from the first clause, e.g. *The dog chased and the cat in the road* (object omission from first clause, verb omission in second).

(ii) Phrase level errors, which the child had learned to avoid in simple sentences, reappear, e.g. *The dog chasing the cat* ... (auxiliary omission), *and cat runs by a road* (article omission, tense error, preposition error). Problems in the verb phrase (with auxiliary and copula) are particularly noticeable.

(iii) The expected ratio of phrases to clauses is disturbed, in that there are fewer expansions of clause elements, especially in subject position, e.g. *Dog chasing the cat and cat ran in the road* (no subject expansion in either clause). In severe cases, expansions all but disappear, reintroducing the 'telegraphic' style of an earlier stage, e.g. *Dog chasing cat and cat ran in road.*

(iv) Word-endings tend to be dropped, especially in the verb phrase, e.g. *chase* for *chasing, run* for *runs.*

(v) Word order may be disturbed, either slightly (e.g. *cat in road is running*) or severely (e.g. *The dog and a cat and run in the road is chasing*).

(vi) The whole output is accompanied by non-fluency, either slight or severe, involving erratic pauses, segment repetitions and prolongations, loudness and tempo variations, e.g. *the . the . dog chased a . c-cat* ... The non-fluency is especially found early on in the clause (especially on subjects).

(vii) Segmental articulation may be disturbed, with abnormal substitutions and omissions which are often described loosely as 'dyspraxic tendencies', e.g. *the [kɔg] chase a cat and a [ka] ran in [ən] [drɔb].* Parts of the sentence may be wholly unintelligible. Often,

the subject pronoun is so weakly articulated that it is difficult to be sure which one is being used (or whether there is one there at all), e.g. *[ɔ] ran in the road.* Other unstressed grammatical items show similar weaknesses.

(viii) There is a reliance on more primitive structures and lexical items. For instance, a child who had previously regularly used adjectives inside noun phrases, regularly omitted them at stage V, or strung them together loosely at the end of a clause, e.g. *the dog chase a cat and angry.* The usual lexical strategy is to replace specific lexical items by deictics, e.g. *he chase him and it ran in the road,* or (even more extreme) *he do that and it go there.*

(ix) Stereotyped grammar and lexis is often in evidence, especially in adult aphasic patients at a similar stage of re-learning, e.g. *the you know dog is sort of chasing a cat really* ... There may be overuse of a small range of lexical items, expecially verbs, e.g. *put, do, go, got* (all fairly 'empty').

(x) Even when grammatical output seems to be developing quite well, there are problems of comprehension, especially in relation to clause sequences. Patients are typically unable to carry out sequences of instructions in the correct order when these are presented as complex sentences, using *after, before, when,* etc., e.g. *Before you give me a pen, put a pencil on the table.*

These ten characteristics identify what I have come to call 'stage V syndrome', found primarily in older children with a history of language delay, but also encountered in adult aphasics (primarily, Broca's). A detailed description of such a patient is given in *Crystal* [1982, p. 46], from which such real utterances as the following have been taken:

'first there look – fishing 'rod/ – thèn 'look/ . 'catch the fìsh/ and 'then 'pushed it ìn/
(1 syllable) got/ – one of thèse/ 'got to 'put up a tràctor/ (2 syllables) 'put it in thère/ dòn't they/ – and and [in] òut/

The identification of the syndrome, as a linguistic syndrome, can be made using purely linguistic techniques. The explanation of this syndrome, however, requires a psycholinguistic investigation. Plainly, the increased complexity of stage V sentences is somehow 'overloading' these patients. They can cope with so much grammatical, lexical and phonological complexity at a time, in single-clause sentences; but as soon as clauses have to be compatibly sequenced into larger constructions, there is a breakdown. What, then, is being overloaded? The most obvious hypothesis would seem to be the patient's short-term memory, though factors to do with perception and attention also need to be considered. The facilitating effect of a structured teaching environment will be a relevant factor, as will the patient's motivation to learn. Personality, too, is part of the picture, with the more outgoing child more readily attempting such sequences and encountering a different range of problems than his more withdrawn counterpart. The investigation of these factors is of course routine in speech therapy, as part of assessment and remediation, but the aim there is to intervene and obtain progress. The psycholinguist's aim is not so vocational: He wishes to study these factors also, in order to understand the reasons for the linguistic handicap. His aim is to model the language behaviour of the patient (cf. *De Vito's* [1971, p. 9] definition of psycholinguistics as 'a model of language performance') to *predict* the patient's language behaviour, in the light of his other behavioural

abilities. The clinical psycholinguist, qua psycholinguist, will stop his investigation, once he can model patients' performance in this way. He will not attempt to do anything about it. That he leaves to others, such as speech therapists, with their own range of special skills.

There is, then, a clear division in principle between clinical psycholinguistics and speech therapy. In practice, the division is sometimes obscured by individual personalities and clinical settings. Many clinicians have nowadays been trained in psycholinguistic theories and techniques, and use them routinely in their work. This is obviously beneficial, for the more a 'working' clinician can inform his therapy with principles deriving from psycholinguistics, the more systematic, economical and effective that therapy is likely to be. But there is no identity between the two roles. A clinical psycholinguist is not a speech therapist, nor is the reverse the case.

This point also emerges if we approach the study from another angle. Clinical psycholinguistics has to be kept distinct from speech therapy, because speech therapists form part of the object of clinical psycholinguistic study. (Or perhaps it should be 'speech therapy', to avoid a possible ambiguity!) The reasoning proceeds as follows. Let us assume that the aim of clinical psycholinguistics is to explain the nature of language disability, in all its forms. This requires the systematic observation of patient behaviour in a wide range of tasks and settings. By the nature of things, these tasks and settings will be predominantly clinical, introduced and monitored by speech therapists. And here we encounter a major theoretical problem. The avowed intention is to model patients' performance, but for the most part, spontaneous

performance is absent from these patients. Most language-disordered children are reluctant to use whatever linguistic skills they have acquired; most language-disordered adults present with similar difficulties of language use or control. The role of the speech therapist is to elicit language from patients who are unable or unwilling to speak, and to control the quality of language once elicited. By the judicious manipulation of clinical materials and settings, and his own linguistic stimuli, the therapist aims to be in sufficient control of his patient's language that systematic progress becomes possible. Without the guiding role of the therapist, so it is argued, the patient would not achieve his full linguistic potential, nor would this be achieved in a manner which would minimise the unhappiness of all concerned – patient, parent, next of kin.

The problem, then, can be summarised in the form of a question: How near can we get to an account of the patient's own linguistic ability, when most of the data we can obtain is the result of structured intervention on the part of the therapist? Or, putting this another way, whose performance are we modelling, when we study clinical interaction – the patient's or the therapist's? When carry-over is achieved from the clinical setting to the patient's natural environment, the problem disappears. But we all know that carry-over is one of the most difficult things to achieve, and one of the most difficult achievements to prove, in view of the well-known problems of observing patients outside the clinic. So for the most part, we are restricted to data derived from clinical settings. The clinical psycholinguist is therefore faced with the task of disentangling those aspects of the patient's linguistic behaviour which are genuinely under his control, and those aspects which can

be triggered only when the clinical situation is right. To do this, the analyst needs to study the way the therapist speaks and behaves, as well as the patient. Only by fully involving the clinician in his observations can he explain the patient's progress and failure. And a similar set of arguments applies to the nature of the materials the clinician uses, and the settings in which he works.

Conclusion

When one compares the aims of clinical psycholinguistics with the achievements of psycholinguistic studies in general, it is evident that there is an enormous gap which remains to be bridged. The textbooks on psycholinguistics contain a variety of subject-matter, of varying degrees of relevance. Thus the books referred to earlier in this paper deal with the following topics: behaviourist and mentalistic theories of language (usually expounded historically); the general nature of language (competence, creativity, universals, intuitions – often contrasted with animal communication, semiotic behaviour or information theory in general); a specific linguistic model (usually the 1957 or 1965 models of generative grammar, with some reference to more recent semantic theory); a general discussion of the nature of meaning; a discussion of psychological reality (again, usually expounded historically); a developmental section, in which stages of language acquisition are reviewed and relevant theories (*Piaget*, LAD, etc.) recapitulated; a general discussion of language in relation to thought, culture, the world; sentence production and comprehension; speech production and perception (especially with reference to phonetic and phonological factors). A great deal of this

would of course have to be covered in any textbook on clinical psycholinguistics, but there are many topics, implicit in the above discussion, which receive no mention, such as (from psychology) a discussion of task effects in relation to language [*Cocking and McHale*, 1981], or of social psychological factors as these manifest themselves in clinical settings [*Argyle*, 1967]; or (from linguistics) a discussion of techniques of ascertaining linguistic acceptability [*Quirk and Svartvik*, 1966], or of socio-/ethnolinguistic studies of interaction [*Gumperz and Hymes*, 1972]; or (from speech therapy) a discussion of clinical testing, as operationalised in the various procedures used with adult and child patients. The absence of a neurological (strictly, neuropsychological) perspective from the general psycholinguistic literature is also notable, and something which would have to be made good in any approach devised to satisfy the requirements of a clinical psycholinguistic theory. It will make a fascinating textbook, when someone dares to write it.

Zusammenfassung

Bericht über den Bereich der Psycholinguistik und die Rolle der beitragenden Disziplinen Psychologie und Linguistik. Mehrere Unterschiede in Ansatz und Praxis werden festgestellt. Die angewandte Psycholinguistik, und als Teilgebiet davon die klinische Psycholinguistik, werden zum Hauptgebiet in Beziehung gesetzt und von der klinischen Linguistik unterschieden. Die Wechselwirkung zwischen allgemeiner und klinischer Psycholinguistik wird an Hand der Hauptmerkmale einer neuen diagnostischen Kategorie anschaulich gemacht, die innerhalb des Gebiets der Sprachstörungen im Kindesalter vorgeschlagen wird, das «Stufen-V-Syndrom». Der Beitrag schliesst mit einer Diskussion des Unterschieds zwischen klinischen psycholinguistischen Untersuchungen und Sprachheilkunde.

Résumé

Cet article passe en revue le rôle de la psychologie et de la linguistique dans le domaine de la psycholinguistique. Il identifie différentes façons d'aborder cette science et de la mettre en pratique. Il définit la psycholinguistique appliquée (ainsi qu'une discipline dérivée, la psycholinguistique clinique) et montre ce qui l'apparente à la psycholinguistique et ce qui la distingue de la linguistique clinique. L'article décrit les rapports entre la psycholinguistique générale et la psycholinguistique clinique en prenant comme exemple les caractéristiques principales d'une nouvelle catégorie diagnostique proposée dans le domaine des désordres du langage chez l'enfant – «le syndrome du cinquième stade» (stage V syndrome). Pour terminer, l'article discute la différence existant entre la psycholinguistique clinique et l'orthophonie.

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