EDITORIAL

This issue of NLC is on children's language and communication, and arises partly from the Child Language Seminar held at the University of Nottingham at Easter 1977. Some of the contributors kindly offered us their papers for publication, and two further papers on related topics are also included.

We are honoured to have among our contributors a psychologist of international eminence in the field of children's development, well-known researchers on children's language, and an undergraduate student. We leave it to our readers to identify, if they wish, these descriptions with the names and articles.

We begin at the beginning with an article on prelinguistic communication, by Nancy Ratner and Jerome Bruner; and a theoretically very suggestive paper on the communicative functions of children's first words, by Alison Gopnik. Celia Noble presents a fascinating and informative account of a type of speech event found amongst school-children, which, as far as we know, has not previously been described. We finish with two articles on the concept of language deficit, a topic which has received much discussion recently, and which requires much more. Gordon Wells provides a tightly argued and important critique of Joan Tough's influential work. And J.C.B. Gordon provides a general survey of deficit theories.

Michael Stubbs
Guest editor for this issue on children's language.

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Erratum. Numerate readers of the last issue of NLC may have noted a discrepancy in the volume numbering. Whereas the issue was numbered Vol 6 No 1 (correctly) on the cover, it was numbered Vol 5 No 3 (wrongly) in the front matter. The editors are grateful to a conscientious and confused librarian for pointing this out.

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NOTICES

(1) Forthcoming Meetings

London	4-6 November 1977	⟩	Linguistics Association of Great
Lancaster	Spring 1978	(	Britain.
Manchester	Autumn 1978	⟨	Details from Meetings Secretary,
Hull	Spring 1979	⟩	Paul Werth, Dept. of Linguistics,
Birmingham	Spring 1980	⟩	University of Hull, N. Humberside.

Birmingham 16 December 1977   Speech Group of Institute of Phonetics: meeting on 'Machine recognition of Speech'. Details from Celia Scully, Secretary of Steering Committee, Dept. of Phonetics, University of Leeds.

Birmingham 3-7 April 1978   5th International Symposium on the Use of Computers in Literary and Linguistic Research. Details from Prof. D.E. Ager, Dept. of Modern Languages, University of Aston, Gosta Green, Birmingham.

(2) Reports

British Council Summer School: 'The Usage and Teaching of Contemporary English', University of Nottingham, 11-30 July 1977

For three weeks during the summer vacation, I had the pleasure of acting as Director of Studies in charge of a British Council Summer School on aspects of the usage and teaching of present-day English language.

Sixty teachers of English from twenty different countries participated in the course, which covered the areas of Spoken English (tutor: W.J. Ball, ex-British Council Representative), Methodology of TEFL (tutor: Donn Byrne, then Director of the English Language Teaching Institute of the British Council), Communicative Approaches to English Grammar (tutor: Paul Fletcher, University of Reading), and Varieties of English (tutor: Mike MacTear, Polytechnic of N. Ireland).

Course members and staff alike very much enjoyed the opportunity of meeting and working with colleagues from such a wide variety of backgrounds, and we all finished the course much the richer for our experiences.

A similar course, concentrating rather more on methodological issues, will take place in Nottingham next summer under the directorship of Walter Grauberg, Director of the Language Centre at Nottingham. It is hoped that further courses will be arranged in future years.

C.S. Butler

GAMES, SOCIAL EXCHANGE, AND THE ACQUISITION OF LANGUAGE

Nancy Ratner and Jerome Bruner

University of Oxford

(Paper read to the Child Language Seminar,
University of Nottingham, 24-25 March 1977)

It has been a commonplace since Wittgenstein's Philosophical
Investigations to comment upon the game-like nature of language rules
and to speak of different forms of language use as "language games".
Indeed, some have made so bold as to suggest that the "simulative mode"
of play (Reynolds, 1976) that emerges in higher primates is part of the
evolutionary trend that eventuates in the appearance of rule-bound
language in our own species. It is even possible (even, perhaps, a bit
too easy) to write language-like rules for the observed play of children
(Garvey, 1977; Bruner and Sherwood, 1976) with the implicit assumption
that, in some unspecified way, the mastery of these rules constitute a
propadeutic to or an aid in the learning of language - or at least that
part of it that has to do with such matters as turn-taking, role dif-
ferentiation, the meeting of felicity conditions in discourse, and so
on. But, in fact, there have been virtually no studies done to explore
in detail how such rule learning (in game-like play) affects the
child's progress in the mastery of language.

This is the more surprising since it has been noted incidentally
by many writers that language often proliferates, or is at least more
forthcoming, when the child is in "playful" situations - a point most
recently made by Dore (in press) and G.A. Miller (in press). Why
might this be the case?

There are perhaps three things about formulated (i.e., more or
less rule-governed) play that would suggest themselves as relevant
"aids" in the child's acquisition of language. The first is that the
semantic domain in which formulated play occurs is most usually highly
restricted and well understood or conceptualized by the child. (We are
here restricting ourselves to social-exchange games, for these are
ones in which an adult tutor can enter into the situation and provide
a "scaffold" for the child's activities as well as a model of relevant
linguistic rules.) Such early games as peekaboo, hide-and-seek, build-
and-bash involve a restricted format, a limited number of semantic
elements, and a highly constrained set of semantic relations. The second
reason to suppose they are useful is that such games have a clear-cut
task structure which, though permitting variation, nonetheless permits
a high degree of prediction of the order of events, with a clearly
marked beginning, middle, and end. In this sense, they can be thought
of as possessing highly structured aspect in the linguistic sense of
that term (temporal positions marked with respect to the course of an
action). Included in this aspectual structure are positions for
appropriate vocalization, and these vocalizations can be used in a
generalized way to mark variations in these positions. This type of
structure, moreover, permits anticipation of events as a spinoff of the
predictive simplicity of the games usually played. This permits both
requestive and vocal marking activity for the partners in the game.
Thirdly, games of this sort have, as already noted, a clearly demarcated
role-structure. But that is only one part of it. The role structure

almost invariably has the property of being reversible. In peekaboo, the mother can hide, or the infant. In build-and-bash, the mother can build and the child knock down, or vice versa. It is typically the case that as the child progresses in his sensory and motor control, he takes on an increasing initiative in starting and in controlling the games. This also permits him to introduce variants in the pacing and order of the game, as well as expanding the so-called semantic elements comprised in the play. He can hide behind a nappy in peekaboo, or behind a book, his hands, the couch, whatever. We shall be considering all this in what follows.
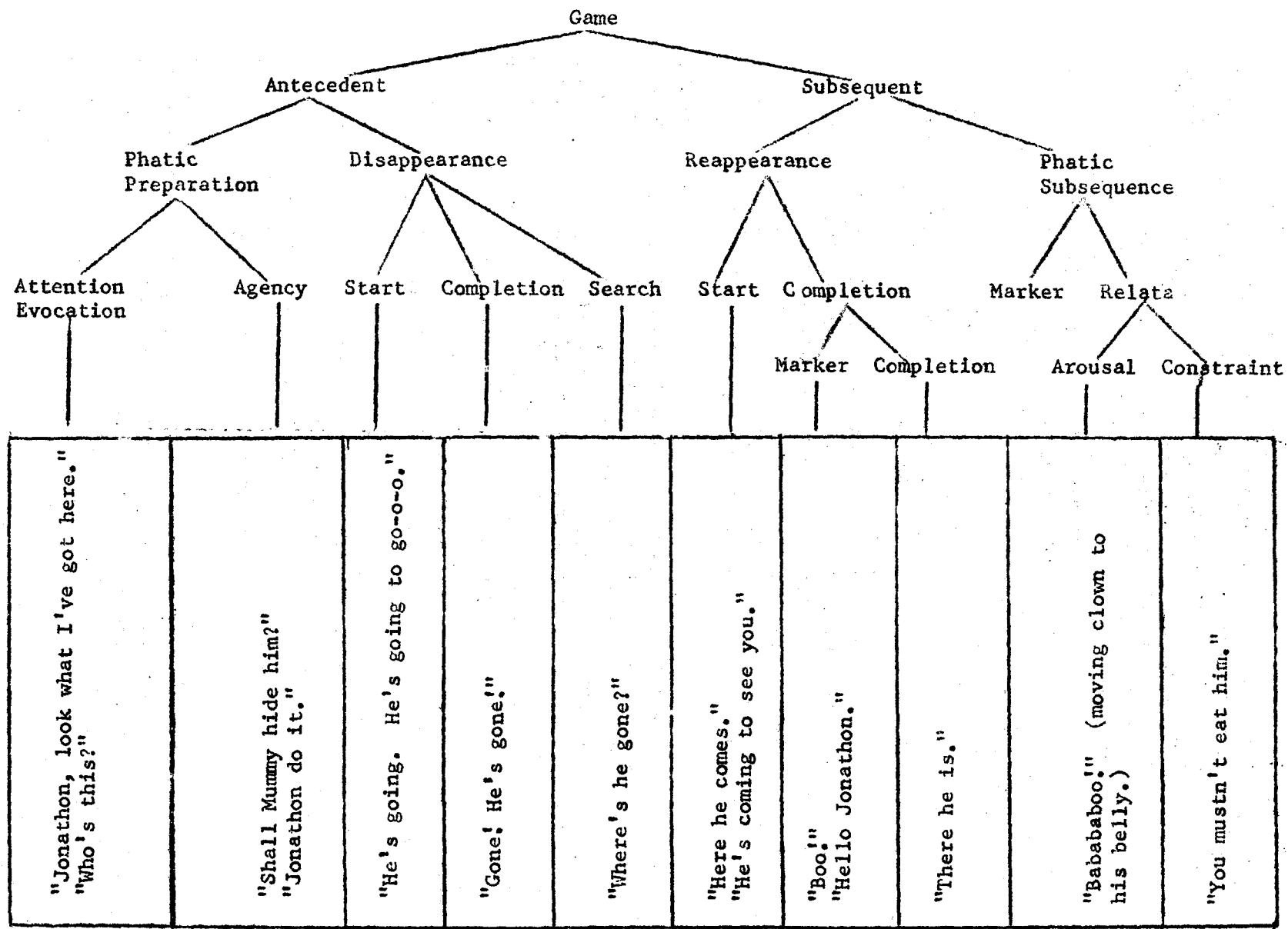
We shall be concerned in this study with two children between the ages of five months and nine months. They are both subjects in a longitudinal study aimed at elucidating the transition from pre-verbal communication to the use of language. The "games" we have selected for analysis are all built around the appearance and disappearance of objects.

Jonathan, whom we shall consider first, was very taken with "games" having to do with the appearance and disappearance of objects. Whatever the "motivation" of the game - whether a concern with "object permanence" or with other aspects of achieving predictability of objects in the immediate environment - Jonathan's mother came to count on his interest and very early began to elaborate a highly structured game, made up of quite predictably linked segments. At the outset, Jonathan smiled at the climax but was little more than a spectator. He then began to show increasing anticipation since he could predict what the objects would do next. Finally, he was able to carry out the game with himself and his mother alternating the roles of agent and experiencer.

The game itself involved a clown that could be withdrawn inside a cloth cone on a stick and then made to reappear. It was first played when Jonathan was five months old - after he and his mother had been playing a direct peekaboo game for two months. It continued in each of our three-weekly recordings along with other forms of peekaboo until nine months, disappeared, and then reappeared at 14 months.

We defined a round as one complete cycle of the clown's disappearance and subsequent reappearance, and a game to consist of any uninterrupted sequence of rounds. We observed eight games over the period studied, comprising some seventy-four rounds in all. In a normal round, the gross components of the game - preparation, disappearance, reappearance, and subsequence - would be highlighted by the clown's movements as the toy would be moved, shaken, or otherwise made attentionally salient. At disappearance, the clown would be pulled into the cone with either seductive slowness or almost startle-evoking swiftness. Reappearance again was varied from creeping slowness to explosive re-entry. Subsequence involved moving the clown to Jonathan's nose or chest. Jonathan's mother highlighted at least one of these features by an utterance, often more than one, but from one round to the next she selected different features to highlight. Over time, several features disappeared altogether. The game soon became routinized, though with variation as noted. Her moves were segmented and her verbal accompaniments were quite readily classifiable: since the game was so structured, we use the notation of a tree structure to depict its constituents (Table 1). Obviously, such a notation produces ambiguities and some incompleteness in description. It does not do full justice to paralinguistic features of the mother's utterances.

Table 1.

Game
- Antecedent
  - Phatic Preparation
    - Attention Evocation
    - Agency
  - Disappearance
    - Start
    - Completion
    - Search
- Subsequent
  - Reappearance
    - Start
    - Completion
      - Marker
      - Completion
  - Phatic Subsequence
    - Marker
    - Relate
      - Arousal
      - Constraint

Attention Evocation	Agency	Start	Completion	Search	Start	Marker	Completion	Arousal	Constraint
"Jonathon, look what I've got here." "Who's this?"	"Shall Mummy hide him?" "Jonathon do it."	"He's going. He's going to go-o-o."	"Gone! He's gone!"	"Where's he gone?"	"Here he comes." "He's coming to see you."	"Boo!" "Hello Jonathon."	"There he is."	"Babababoo!" (moving clown to his belly.)	"You mustn't eat him."

Nor does it represent the subtleties of phasing and timing and how the baby's responses are related to the mother moving from one phase of the game to the next.

We have referred to the opening and closing of the game as having principally a phatic role, to keep the players in contact. Phatic preparation included attentional evocation followed by agency establishment - whether mother or child were to take the lead (although it was not until late in the day that the latter occurred). Disappearance had three constituents when fully realized - start, completion, and search, all marked distinctively. One element of variation waɔ the possibility of "deletion" of one of these, or more properly, their collapse into a single "chunk". The intonation pattern for each of the disappearance constituents was in the exaggerated register of Baby Talk (Ferguson, 1977):

He's going.

Gone. He's gone.

Where's he gone?

In the fully realized version, there were pauses between each of the constituents. The same was true of the three constituents in the reappearance segment of the game, the prosody being just as well marked, and chunking again being possible. In the phatic subsequence, we note first a marker, movement of the clown toward Jonathan, accompanied by an arousing sound when the object was brought to his body, then followed by exaggerated sham concern, as in:

You mustn't eat him.

The fully realized version, in the mother's control, was paced to some considerable (though, alas, unmeasurable) extent by Jonathan's response to the proceedings, so that even when she was in full control, he also had some control by his timing of response.

Jonathan's "entry" into the game, and the change that occurs over the seventy-four "disappearance-reappearances" of the clown is of especial interest. Over the period from five to nine months he clearly began to adopt a more active role in the game. His mother, a keen observer of his participation, skilfully altered her game accordingly, by chunking elements in one round or eliminating them in another to produce the varying patterns and pace which continually caught him off guard. There were, for example, eleven possible juncture points within each round of each game that she could mark with a token of a vocalization type - the eleven elements in the terminal string, based on the final elements of the tree-diagram. These were, as noted, in quite typical language and intonation. The few variations she did introduce were in the form of elaborations rather than substitutions. Take, for example, "Where's he gone?" (used as her disappearance search question 43 times between Jonathan's fifth and ninth month). At 7 months, she added to this standard phrase "Where is he?"; at 8 months, "Is he in there? Can you see him?"; and at 9 months, "Where's the clown?" (introducing the nominal) - all supplemental features to the standard disappearance constituent which occurred in every episode where the constituent was marked verbally until about 14 months when Jonathan himself was able to serve as the agent during part of the game.

At the start of the first game, Jonathan's mother highlighted nearly every juncture of the clown's movements. But as she moved from one round to another these began to vary. At 5 months, for example, she marked as many as 9 junctures in one round, 7 in another round, but only one juncture in each of several later rounds. By Jonathan's 9th month, her verbally marked junctures had been dropped to a maximum of four. In general, the features marked shrank from about a third of the possible junctures during the early months to roughly a quarter by his 7th and 8th months. Three elements in particular were sacrificed to sustain Jonathan's interest: the starter phase of the disappearance ("he's going"), the starter phase of the reappearance ("here he comes") and the completion of the reappearance ("here he is"). What remained were the quick withdrawal ("gone!") and explosive re-entry ("boo!") and a far greater use of constraints ("Don't eat him" or "No, I don't think you'd better put that in your mouth") - utterances which by their nature were much more closely tied to the child's actions and presumed intentions and far less ritualized in character.

Looking at the child's responsiveness to the mother's vocalizations we see his role developing even more clearly. At five months, manipulatory responses dominated, later accompanied by undifferentiated vocalizations, quietly uttered while reaching or manipulating (6 months). At 7 months, instead of vocalizing while reaching for the reappeared clown, he began vocalizing and laughing while looking towards his mother. These responses were particularly prevalent at two junctures: during the "search call" phase of disappearance and during the "marking" phase of the reappearance. Whereas earlier his responses were more broadly distributed throughout the game, by 7 months he began to respond to the rhythm of the game, taking pleasure in interacting socially with his mother whilst correctly anticipating where the clown would be.

Another transformation in his role appeared at his 8th month. More adept physically, he was no longer content to attend passively to objects that were within his reach. Where before he had seemed pleased to be surprised by the clown, now he was requesting a more active role, wishing to explore the clown by himself. When his mother did not comply or when she limited his explorations, his attention lagged and he was easily distracted by other attractions in the room. During five out of thirteen rounds, at eight months (either after the completive-disappearance or after constraint by the mother), Jonathan abruptly abandoned the clown-target for other objects. His mother had either to adapt her game to hold him, or lose him altogether. Her solution was to let him take possession of the clown more often, while sharply reducing the game to its two essential features ("gone!" at disappearance and "boo!" at reappearance). And by 9 months, he was permitted to touch and hold the clown during nearly every round. The major constituents of the game (appearance and disappearance) were losing their appeal, giving way to manipulatory exploration by the child.* If his mother removed the clown to prevent Jonathan from exploring any further, he protested.

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* Percentage of rounds in which child manipulates clown:

Jonathan's age in months:	5	6	7	8	9
% rounds in which child manipulates clown:	.18	.45	0	.53	.75
Total number of rounds:	11	23	16	17	8

The game had lost favour. Jonathan's attention wandered from the clown in the cone to matters that allowed his growing sensory-motor powers greater scope. But, in general, play with appearance and disappearance persisted. Midway through his ninth month, for example, peekaboo re-surfaced. But it had a new feature - just as the game that had just gone out of fashion with him was to reappear later with a new feature. Now peekaboo was quite simple, almost minimal: the mother hid a toy animal behind her back, then "surprised" Jonathan with its sudden appearance and pronounced "boo!" surprise marker. But now, for the first time, Jonathan attempted to match his mother's utterances with a regularized one of his own (a labial vibrato, the "raspberries"). From this small beginning, an expanded pattern began to elaborate. A month later his mother hid herself behind a chair, Jonathan waiting on the other side, watching, vocalizing, and laughing in _anticipation_ of her appearance as well as after her reappearance. His vocalizations were not regularized: exuberant calls as she disappeared and reappeared. But he regularly looked away immediately after her reappearance but then joined gaze with her before her next disappearance. After another two months (midway through his 12th month), we saw Jonathan hiding himself behind the same chair. He not only initiated the hiding but terminated it on reappearance with a regularized "ooo!". And during the same episode, when the experimenter joined in and disappeared Jonathan commented "gone!". He had not only taken on initiation of the game as agent, playing to another as experiencer, but was able to share the role and to keep a part of it for himself - by providing the verbal marking.

Two months later, the clown-cone game returned to favour. Now Jonathan was capable of participating as part-agent and part-experiencer. Interestingly, there was more negotiating over agency once Jonathan was capable of the dual role. Indeed, he played the agent rather well: first ejecting the clown from its cone while vocalizing his variant of "boo!" ("ooo!"), then approximating his mother's "all gone" ("a ga") while stuffing the clown back into its cone. And finally, he imitated his mother's "peekaboo" with "pick" as he yanked the clown out again and again stuffed it back. And when his mother served as agent, he gestured (raising his arm) and vocalized ("ah") to signal the reappearance of the clown. He had not only mastered the structure of the game but learned to coordinate his own gestures and vocalizations at appropriate junctures in its course - whether he was agent or experiencer. Now together, facing and smiling at each other, they could call out "boo!" in unison, whichever one manipulated or simply watched.

By the end, then, Jonathan had learned the structure of a game - a highly regularized one - and finally outgrown it, as his need to manipulate the elements "swamped" his interest in anticipation. By the second phase of peekaboo, he could both initiate the game and serve as agent of the action. The rudiments of agency also appeared and with them, the appropriate accompanying actions. By the time the cycle was complete, he was able to return to the initial clown-and-cone game, to serve as agent or as experiencer and to vocalize at appropriate junctures in the game in either role. In Hockett's sense (1963), he had not only mastered interchangeability of roles in this routine game format, but also become master of the felicity or appropriacy conditions inherent in executing the task properly. And no minor point: he had adopted what Dore (in preparation) refers to as a "phonologically constant form" (PCF) of utterance to mark the various junctures appropriately - "all gone", "boo", "pick". The game itself seems to have provided a framework or scaffold to which he could assimilate his burgeoning linguistic capacities and master their use.

With Richard, our other child, peekaboo was more directly inter-
personal from the start, and followed a slightly different course.
Its structure resembled Jonathan's clown-and-cone format, though it
could be either he or his mother who was made to disappear behind a
screen - with the occasional toy being the target in the game. The
games varied more than Jonathan's, Richard's mother being more given
to variations on a theme. Or perhaps peekaboo lends itself more to
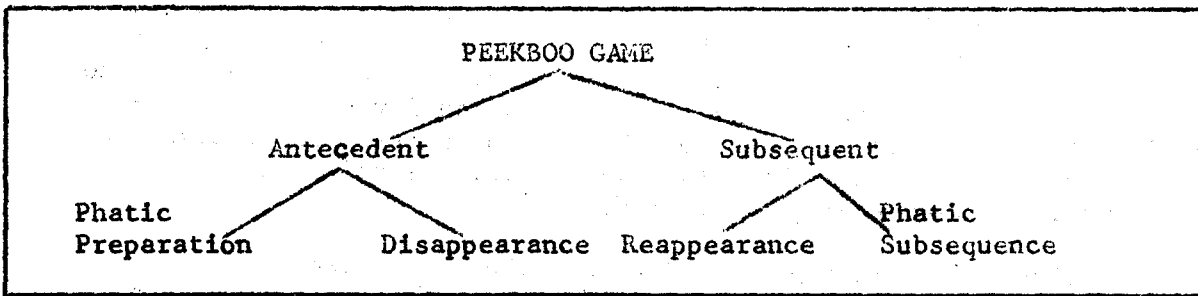variation.

In peekaboo, the constituents of the game were the element hidden,
the screen or device for hiding, the agent effecting the hiding, and
the agent effecting unmasking or reappearance. Between 6 and 11 months,
71 rounds were observed during 20 different games. As was the case
with clown-cone, it then went underground, not to appear again until
14 months. It was then observed in altered form for another 29 rounds
until 15 months, when it went underground again. At 21 months it re-
appeared, but in a form that could be played by the child alone, without
a partner.

Consider the early game (6-11 months). Again, we can infer the
mother's version of the game's structure from her moves and from her
verbal marking of them. Roughly, it exhibited the same "higher
structure" as clown-and-cone, though t__ terminal string was such from
the start that, early on, Richard could take over the role of agent at
all junctures. In the beginning, however, agency was almost completely
handled by the mother (Table 2). She always did the hiding, about half
the time covering herself. By 14 months, the pattern was transformed:
nine out of ten times, it was the child who did the hiding, and
inevitably he hid himself. In reappearance, again the mother initiated
most of the time in the early months, invariably reappearing with a
smile and "hello!". Richard "helped" by reaching toward the mother's
mask one time in five. When he was hidden, however, he generally
unmasked himself. Later in the first phase, if he did the hiding,
which he did increasingly, he did all his own unmasking.

As he moved from the role of spectator in the first phase to
that of actor in the second, his vocalizations changed. Note that he
could vocalize before or after the reappearance of the hidden subject -
i.e., in anticipation or announcement of what was to happen, or upon
completion of the act. In the early phase, these were equally divided.
In the later phase, there were six completives to one anticipatory
(Table 2). And while in the earlier period his vocalizations were
excited babbles, the later period was marked by lexemic-like, PCF
sounds, principally directed to the partner in the game, including (at
15 months, 3 weeks) Peeboo, da, hi da, dere, ahh. Since many of these
were also used in contexts other than peekaboo, functioning as greetings
(hi) or demonstratives (ahh, da, dere) it is possible that by the
second phase, peekaboo was no longer a self-contained format. The
migration of hi and da into the routine suggests that perhaps it was
becoming extended to include greeting and showing, although we cannot
be sure that hi was not an attempt at the word hide.

During the three months demise of Peekaboo (11-14 months),
Richard had started on another appearance-disappearance format involving
active search for objects placed inside containers or closed fists.
The hiding was always done by an adult - his mother or the experimenter
- and the searching and finding by Richard himself.

Table 2

PEEKBOO GAME

Antecedent   Subsequent

Phatic   Phatic
Preparation   Disappearance   Reappearance   Subsequence

Percentage of Rounds during which Mother or Child Initiated Hiding:

Richard's Age in Months

	6-11	14-15
Mother initiated hiding	100.0%	21.9%
Child initiated hiding	-----	78.1%
	(73 rounds)	(32 rounds)

Percentage of Rounds during which the Mother, the Child, or an Object was Hidden:

Richard's Age in Months

	6-11	14-15
Mother hidden	43.8%	6.2%
Child hidden	28.8%	93.8%
Object hidden	27.4%	------
	(73 rounds)	(32 rounds)

Percentage of Rounds during which Mother or Child Removed Mask:

Richard's Age in Months

	6-11	14-15
Mother removed mask	75.3%	12.5%
Child removed mask	24.7%	78.1%
Both removed mask	------	9.4%
	(73 rounds)	(32 rounds)

Percentage of Rounds during which Child's Vocalizations Occur Before and After Reappearance Phase:

Richard's Age in Months

	6-11	14-15
Before reappearance	20.5%	6.2%
After reappearance	20.5%	37.5%
No vocalizations	63.0%	56.2%
	(73 rounds)	(32 rounds)

When Peekaboo reappeared at 14 months, he was able to take the role of agent at all junctures. At first appearance, he watched his partner hide behind a videotape box twice, and then "took over". He hid behind the same box 16 times consecutively, each time responding to his partner's "boo!" with a smile and an occasional vocalization. But by 15 months, the game had been converted into an even more active form, Richard screening and unmasking by going behind the sofa for disappearance, and reappearing on his own.

Peekaboo for Richard as well as Jonathan was a game with repetitive format. Fifty-five out of 75 rounds, for example, used a nappy as screen. As with Jonathan, it lost favour as a game at 11 months (and stayed out of favour till 14 months). During the interim, Richard played on with hidden objects in a less ritualized routine, as when his mother hid keys under cups or in her hands, Richard having to choose the correct hand or cup. And by 13 months, he was putting objects inside cups himself. When Peekaboo reappeared, at 14 months, it then seemed to combine two games - "search-for-the-hidden-object" and Peekaboo proper.

By 15 months and after, Richard and his mother played Peekaboo rarely. But object hiding continued. The last appearances of Peekaboo surfaced six months later (21 months, 2 weeks), after Richard had acquired a fair amount of language. But, interestingly enough, this time it was a solo, between Richard and objects he had hidden and then caused to reappear. For all its solo quality, however, it was highly ritualized, as a "pretend" game in which reappearing objects were greeted socially as if they were people. An example: Richard having filled a large kettle with pieces from a puzzle, greeted each piece with "hello house!" when he spied it in the pot that he uncovered, sharing a smile or laugh with his mother as he did so. He repeated the routine again and again, each "hello house" followed by a "bye-bye house" as he replaced the lid. During this routine, it happened that the doorbell rang. Richard swung around, pointed to the door, calling out "hello!", experiencing no difficulty in shifting from the pretend hellos of the game to the conventional mode of greeting. His contrastive "hello" and "bye-bye" could now be placed systematically in a game or in a greeting at appropriate junctures in the action. He could also manage interchangeable roles. The following month, for example, he asked "Where Mummy" when she hid and said "hello" when she reappeared - roles hitherto controlled by his mother only, in "real" Peekaboo.

The final episode in the saga of Peekaboo occurs at twenty-three months, two weeks. Richard had lost an object behind the sofa cushion. He had been able for months to deal with such situations by searching and finding on his own or by calling for aid. But now the act of finding "for real" was assimilated to the old play format. Searching in earnest, he called out "allu down dere", followed by "effort" sounds he used in calling for aid. Having succeeded at that, albeit with the help of the experimenter, he then reverted to the play format, now putting pencils intentionally where before they had gone accidentally, even greeting their retrieval by the experimenter with his call of "allu".

Richard's language for appearance and disappearance had developed in highly controlled, predictable, play formats. But once developed it could be used for "seriously instrumental" objectives as well. The instrumental use seemed an extension of what had originally developed in play contexts where the relation between means and ends was non-serious, irrelevant to practical needs of any manifest kind. One gets

the impression that without the sustaining game-feature, instrumental communication often regresses to demand vocalization, the kind of effortful grunting to which Richard resorted when trying to enlist an adult's help.

In brief summary, then, Richard and his mother (like Jonathan and his) gradually establish a ritualized game in which they share excitement and genuine pleasure. The game diversifies and provides an increasing place for the child's initiative, both as he learns to initiate the game and to execute the moves with a real interchange-ability of roles. In Richard's case, the appearance and disappearance of objects also becomes a matter of lively interest. In time, the two games combine. And indeed, into each also migrate, so to speak, his procedures for social greeting - whose very acquisition might have related to the Peekaboo game itself. The games themselves, limited as they are in variation, become boring after a time. But the framework is retained. For when new variants appear much later - as in his solo game - the old moves have been inserted in the new game. In the end, he is able to transpose the game into the realm of pretend, and is capable of shifting from pretend into the real world.

A Brief Conclusion

We commented initially that early games might be expected to give the language-acquiring child assistance in mastering forms of his native language. They do so by (a) limiting and rendering highly familiar the semantic domain in which utterances are to be used; (b) providing a task structure that can be easily predicted and that offers clear-cut junctures at which functionally intelligible utterances can be inserted, and (c) by allowing easily for the development of reversible role relationships between speaker and hearer. We should probably add a fourth and fifth element: (d) the tasks involved are very amenable to having their constituents varied, not only for the mother as tutor, but for the child as agent, and (e) the playful atmosphere doubtless permits the child to "distance" himself from the task sufficiently to sustain a readiness to innovate without erring and thereby to avoid frustration.

In the two children examined, these factors have been observed to operate in a way that leads the child into appropriate dialogue and also into speech usage on his own with objects, people other than his mother, and with the realm of objects and events that are on the level of "pretend". It is striking that many of the forms that later occur in practical situations make their first appearance in the safe confines of structured games.

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NO, THERE, MORE, AND ALLGONE:

WHY THE FIRST WORDS AREN'T ABOUT THINGS

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Department of Experimental Psychology
University of Oxford

(Paper read to the Child Language Seminar,
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Recently, there has been a renewed interest in the "one-word" stage of language development. The new emphasis on semantic as well as syntactic development has contributed to this interest. If we think of meaning as the relationship between linguistic and cognitive structures, we may imagine that the first marriage of these structures, the first meaningful expressions, will be illuminating.

Contemporary studies have concentrated on two approaches to the one-word stage. One group of studies tries to apply the semantic feature hypothesis to early expressions. These studies argue that semantic development involves the accumulation of features, which are associated with properties of objects. So that the child first uses an expression to pick out, say, all four-legged creatures, and gradually adds more features which enable him to differentiate big and small four-legged creatures. Eve Clark (1973) is perhaps the principal exponent of this approach, but it has also been suggested by Brown (1958) and Nelson (1974). Studies of this kind, and many other studies, have assumed that early expressions are primarily used to name objects, and to classify objects by means of names.

Other studies have applied the holophrastic hypothesis to early expressions. Roughly this hypothesis claims that single expressions express complex propositions. These propositions may not be reflected in the surface structure of the child's language. More and Ice, for instance, may express the same complex proposition, while two utterances of More may express different complex propositions. This fact creates profound methodological problems. Holophrastic studies include the work of Antinucci and Parisi (1973), Greenfield and Smith (1976), and Rodgon (1976).

One of the discoveries of the study of later language development is that, in addition to using names, children use what seem to be more abstract expressions at an early stage. These expressions tend to occur in the "pivot" class, and although there were only a few of them, they occur again and again in different corpuses. These expressions include No, There, More, Allgone, Down, Mine, and Uh-Oh. These expressions are also frequently mentioned in accounts of the one-word period; Bloom called them "function words". But it was not clear when these expressions began to appear, how frequently they appeared, how they were related to names, what precisely they meant, how their meanings changed, and why they developed at all. The studies I have mentioned do not provide answers to these questions. These expressions do not seem to name objects or to pick out features of objects, unless "feature" is used in a way so general as to be meaningless, so that the semantic feature hypothesis is not helpful. On the other hand the holophrastic work refuses to consider separately a surface class of expressions, like No, There, Allgone, etc.

For the past year I have been studying the role and development of these expressions, which I shall call non-nominal expressions, in the early language of three children, Jonathan, Henry, and Rachel. I visited the children every two to three weeks in their homes and audio-taped an hour of their speech. The tapes were supplemented by my observation of the contexts in which speech occurred. The children were 11;3.3, 12;2.2, and 12;2.5, when I began my visits, and none of them was using any expressions. I stopped my visits when the children reached the two-word stage.

In order to discover the meaning of the children's expressions I examined the situations in which they were uttered. I assumed that if I could find a common element in all the situations in which a particular expression was used, which was not consistently present in situations in which other expressions were used, I could at least guess that that particular expression was encoding that aspect of the situation. Sometimes, no single common element could be found, and I was forced to conclude that the expression was being used in several ways. Often the meaning of the expression changed as the child developed. These factors complicated the original simple procedure.

I defined the class of non-nominal expressions as expressions which did not encode objects or properties of objects, using the criterion just described. In other words, I was interested in expressions which occurred in contexts whose common element was not an object, or a class or objects. These expressions turned out to be similar to Bloom's (1973) "function words" and to include Brown's (1973) "operations of reference". They included There, Oh dear, No, More, Allgone and Down.

I discovered that these expressions were prominent in the children's early speech. They occurred from the very beginning of language for all three children. They were among the first expressions to occur. One child used exclusively non-nominal expressions in the first 5 sessions, another child in the first 12 sessions. They were also used more frequently than nominal expressions in early speech. All of the children used more non-nominal expressions than nominal ones until shortly before they entered the two-word stage. On the other hand, as the later studies might suggest, non-nominal expressions were less varied than nominal ones. While children used more non-nominal expressions over all, they used fewer different non-nominal expressions than nominal ones. This may explain the neglect of these expressions in the literature. Most accounts of the one-word stage have relied on diaries. In a diary one is more likely to note the occurrence of a new expression than the recurrence of a familiar one.

At least for these children, the first words are not primarily about things. If we concentrate on object naming we will miss an important part of the semantic development of this period.

We may examine the meanings of these expressions in more detail. There was a striking degree of uniformity in the expressions the children used, and in the concepts these expressions encoded. I will describe seven classes of expressions that appeared most frequently in the corpus, and were used by more than one child. These expressions seem to encode concepts of notice, success, failure, refusal, repetition, and direction.

Notice: Jonathan used Dere and Henry Whatsat to indicate their interest in various phenomena. These expressions ofter accompanied pointing. The phenomena that elicited these expressions could not be defined in terms of their intrinsic properties, the crucial factor being

of bricks fell, or when they pushed toys on to the floor. The children never used the expressions to talk about the position of objects, only their movement. Jonathan used <u>Up</u> and <u>Down</u> contrastively, Henry only used <u>Down</u>, and Rachel used <u>Down</u> for both upward and downward movement.

All these expressions had some interesting general character-istics. They did not seem to have any particular emotional or social content. They did not resemble Nelson's expressive utterances. Occasionally they were used emotionally, or to communicate a need; <u>No</u> sometimes accompanied tantrums. But usually the expressions occurred in a playful, relaxed setting. Furthermore, while one-year olds are rarely alone, these expressions often did not seem to have any communi-cative or social intent. They occurred when the child was quietly playing in a corner by himself. Like adults, the children could use these expressions in a social or emotional context, as well as in apparently solitary and unemotional play. But the meanings of these expressions could not be defined in terms of the emotional or social context.

The expressions often seemed to involve the child's actions. We can see how this is true of success, failure, and refusal, but it was also true of repetition, disappearance, and direction. The children tended to talk about repetitions of their own actions, about dis-appearances that they brought about, or about either their own movements or movements that they had brought about.

How are we to interpret this data? What cognitive structures are encoded by these non-nominal expressions?

Several possibilities are excluded. These expressions are not concerned with objects, or properties of objects, or even relationships between objects <u>per se</u>. On the other hand they are not concerned with the child's actions <u>per se</u>, nor with emotional states or social relation-ships. All these expressions occur in contexts that involve a wide variety of objects, a wide variety of actions, and a wide variety of emotional and social situations. The crucial factor is the relationship between the child, his actions, and the objects around him. Success may involve blocks, steps, jigsaw puzzles, or pen and paper and it may involve piling, climbing, putting together, or drawing, but for the child to say <u>Dere</u> these actions and objects must be related to him in a certain way. The actions must be an attempt to change a state of affairs involving the objects, and the objects must change in the desired way. The same objective state of affairs may elicit <u>Dere</u> or <u>Oh dear</u>, depending on its relationship to the child's plans.

We can try to characterize the meaning of the expressions I have described using this concept of a relationship between the child, his actions, and objects, in the following way:

<u>Notice</u>: The child notices, marks, or is interested in an object.

<u>Success</u>: The child's action brings about a planned change in the objects around him.

<u>Failure</u>: The child's action fails to bring about a planned change in the objects around him.

<u>Refusal</u>: The child intentionally does not perform an action, or the child refuses to let a certain change take place in the objects around him.

<u>Repetition</u>: The child desires the repetition of an action, or intends to repeat an action.

Disappearance: The child cannot see an object.

Movement: The child performs an action that causes him to move in a certain direction, or causes an object to move in a certain direction.

The child's early meanings could have been quite different. The child could use his early speech primarily to name objects, to pick out object properties, express emotions, establish social relationships, or proclaim actions. In fact, most writers have suggested that early speech is primarily used in one of these ways. But none of these hypotheses can provide an account of the meaning of the non-nominal expressions I have discussed. These expressions which, at least for these children, are the first expressions to occur, and are the most frequently used expressions during most of the one-word period, seem to encode relationships between the child and his actions, the child and the objects around him, or all three.

We have taken some steps towards discovering what the early non-nominal expressions mean: we may now indulge in some speculation and ask why they mean that.

There is an interesting feature of many of the cognitive structures encoded by these expressions. I' all of these situations, except perhaps Notice, the child must be able to conceptualise an action or an object without actually performing the action or perceiving the object. When the child expresses success or failure, he must have an idea of the state of affairs he wants to bring about, even though that state of affairs is not yet realised. Otherwise he would not be able to comment on the match or mismatch of the real state of affairs, and his planned state of affairs. In announcing his intended direction, as the children often do, before actually moving in that direction, he must be able to think of an action, and a consequent state of affairs, before the action is performed, or the state of affairs realised. In Refusal, he must be able to conceptualise the action he is requested to perform, without actually performing it, or his No would have no point. In Disappearance, he must have a concept of an object that is not perceptually present, and sometimes, as in the empty box case, never was perceptually present. In Repetition, the child must have a concept of an action that will only take place in the future, and may never take place at all.

If it were true that the child's early expressions just picked out objects or properties, or expressed emotional states, or were "pure performative" accompaniments to actions, we would not have to assume that the child had these conceptual abilities. An emotive, or social, or performative expression might just be a habit, an automatic response to an internal stimulus. A name, a la Quine (1960), might just be a response to an external stimulus, or a class or stimuli.

The cognitive structures encoded by these non-nominal expressions, however, all involve a certain symbolic capacity. We might almost say that the ability to think about something that isn't there, or think about doing something without doing it, is precisely what we mean by symbolic capacity.

There is something intriguing about this connection between the emergence of language, the symbolic skill par excellence, and cognitive structures that seem to require a symbolic capacity. It may be that if, as Piaget (1952) has argued, language depends on the development of a more general symbolic capacity, it is plausible to suppose that language

would emerge in situations that involved that general capacity. On the other hand it may be that, as Vygotsky (1962) claims, language enables us to develop this more general symbolic capacity. If language is a tool that enables us to solve certain problems, it might seem plausible that it should first be used in situations that involve those problems.

Finally, and here we are indeed in the realm of speculation, if we accept a nativist, maturational view of language development, and assume that ontogeny recapitulates phylogeny, these findings might suggest a new slant on the evolution of language. Language might have more to do with our conceptual evolution, than our social evolution; it may have developed because it provides cognitive, rather than communicative advantages. We are told that the great evolutionary advantage of man is his ability to radically alter his environment, and his own behaviour. This flexibility would not be possible without the ability to create visions of a new world and a new man. Perhaps language, from the very beginning, is bound up with the creation of visions.

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'WEAK SPEAK': AN INVESTIGATION OF SARCASTIC SLANG

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This article is based on an investigation of a particular kind of schoolchildren's language, which may be peculiar to an eleven-to-sixteen comprehensive school and a sixth-form college in Guisborough, Cleveland. As far as I know, this language variety has not previously been described: the Opies (1959), for example, do not mention anything closely similar to it. I will refer to the language variety as Sarcastic Slang, a name suggested by one of my informants, for reasons which should soon become obvious.

The general principle appears to be that the more emphasis a speaker wishes to put on something, the more syntactically and lexically complex the utterance becomes. For example, in order to add emphasis to an ordinary statement such as

This lesson is boring.

the speaker may simply use direct sarcasm, in effect:

This lesson is interesting.

However, speakers of sarcastic slang are able to increase the amount of emphasis by adding certain syntactic embellishments, for example:

Hey, says this lesson's interesting, isn't it

and further, by applying even more complex rules to the sentence:

Loads of interestingness on this lesson I thought.

It may be useful to apply Labov's (1970) distinction between what is said and what is done - in effect, between surface syntax and underlying message - to the above examples, thus:

	WHAT IS SAID	WHAT IS DONE	Increasing emphasis
1.	This lesson is boring.	This lesson is boring.	
2.	This lesson is interesting.	This lesson is very boring.	
3.	Hey says this lesson's interesting isn't it.	This lesson is really boring.	
4.	Loads of interestingness on this lesson I thought.	This lesson is incredibly boring.	

The article is divided into three sections: in the first I deal with some of the sociolinguistic aspects; in the second I provide some recorded data with details of the speech situations in which they occurred; and in the third I suggest some of the rules which govern the language, with more examples from recorded data.

1. SOCIOLINGUISTIC ASPECTS

I investigated the sociolinguistic aspects of the speech event by compiling a questionnaire and handing it out to a number of pupils from both schools. From the information I obtained in this way, and also from my own observations, the main points of interest are as follows:

(i)   The speech event, unlike 'Playing the Dozens' (cf Labov 1972) or 'Rhyming slang' for example, does not have an accepted name. The label 'Sarcastic Slang' was merely one informant's suggestion, prompted by the questionnaire itself.

(ii)   The acquisition and use of Sarcastic Slang is conscious and deliberate rather than unconscious.

(iii)   It is claimed to be restricted to the secondary schools in Guisborough.

(iv)   The language is initiated by older children and picked up by younger ones. My younger informants (those attending the comprehensive school) all claimed to have 'picked it ɔ from older kids' or 'from kids their own age'; whereas the older informants (the sixth formers) claimed to have 'picked it up from kids their own age' or more usually to have 'made it up themselves'.

(v)   The older children use it more than the younger ones. The younger informants agreed that 'the first years gradually pick it up, and it becomes more widely used as you move up the school'; and the older informants showed a certain amount of possessiveness, with comments such as 'we started it, and we use it most', and 'we, the pioneers, use it most!'.

(vi)   The older children tend to use more complex forms of Sarcastic Slang than the younger ones. There seems to be a definite prestige value amongst the older ones, in inventing the most obscure forms of Sarcastic Slang, which means that new forms are always appearing. The use of Sarcastic Slang follows a general sociolinguistic trend: in effect, when a lower social group (here, the younger children) begins to use features of speech associated with a higher social group (here, the older children), speakers in the higher social group tend to abandon these features which were once prestigious, and move on to using other, new prestige forms.

(vii)   Sarcastic Slang is male-innovated and male-dominated. Amongst the older children (who actually go so far as to claim that they invented the speech act), only the boys use it: in fact none of the sixth form girls were aware of it! However, amongst the younger children it is spreading to the girls; a fact which is causing resentment amongst some of the boys.

(viii) The children use Sarcastic Slang mostly when talking to members of their peer group, and particularly at school or college. However, its use is not restricted to peer group interaction: it is used at home in conversation with other members of the family, but only very occasionally is it used when talking to teachers or strangers.

(ix)   Sarcastic Slang is predominantly a phenomenon of spoken communication, although it is sometimes written, for example, in informal letters to friends or members of the family.

(x)   When using Sarcastic Slang, the speaker often assumes an exaggerated local accent which also contributes to the emphasis. Sarcastic Slang makes use of local dialect words including gimmer or bure (girl), and gadge (man, fellow). There is also much use of sentence initial forms such as ee, ey, eh, which I believe are peculiar to Northern speech. This, combined with the use of say, says, sez, see, is in fact one of the distinguishing features of Sarcastic Slang, and will receive further discussion in the third section.

2. INITIAL EXAMPLES FROM RECORDED AND OBSERVATIONAL DATA

(i)   The following example was tape-recorded during a family meal.

A: I want a new bike.

B: Celia said she'd let you use hers.

C: You can have it as long as I can use it when I wanted it - if you weren't using it, that is.

B: There you are, what's the point of buying another one. It's rare that you'd both want to use it at once.

C: And if we do, then you use it.

B: (Joking): You can use mine (N.B. a man's bike)

A: Eh - ah'd gerron yours wouldn'ah! (15 year old girl)

The following examples I noted down at random.

(ii)   Informant looking through some transformational-generative grammar notes:

        I think I understand this don't I.

(iii)   Informant describing a hike:

        Unlike tiring!

(iv)   Informant describing a boy of phenomenal eating habits:

        Says I haven't seen Jem eat Rich Tea biscuits in one go.

(v)   Crime film on television, criminal in locked room, police at the door requesting to be let in. Informant's comment:

        'Let us in!' Eh - bound to is he.

(vi)   Informant describing pain after being hit:

        Ee - it hurt none!

(vii)   Informant's comment after an unpopular lesson:

        Just beaut I thought.

(viii) Informant's comment during a hard homework:

        Sez not twenty hardness on this.

(ix)   Informant's reaction to being offered a magazine which he has
no intention of buying:

<u>I think I want twenty.</u>

(x)   Informant's downright refusal when it is suggested that he goes
in for some kind of competition:

<u>Eh - I think I might.</u>

3. RULES AND FURTHER EXAMPLES

A general principle of Sarcastic Slang is that the more rules
that are applied to the original sentence, the greater the degree of
emphasis. In most cases there is no order of application for the rules
- in effect, if one rule is applied after another, it does not affect
the result of the first rule, in that it does not change the intended
meaning of the sentence, but simply increases the emphasis, by adding
another feature. Therefore in many of the sentences used for exempli-
fication in the following analysis, it is important to bear in mind that
there is more than one rule at work, and that each rule as I present it
in isolation, will only explain one feature in a sentence. The notion
used is as follows:

$x \longrightarrow y$: x in Standard English becomes y in Sarcastic Slang.

$y = z$: y and z are equivalent in meaning within Sarcastic Slang.

Round brackets ( ) indicate optional items. Curly braces $\{\ \}$ indicate
items in free variation. Square brackets $[\ \]$ conflate rules as follows:

$$x \begin{bmatrix} A \\ B \end{bmatrix} \longrightarrow x \begin{bmatrix} B \\ A \end{bmatrix} \qquad \text{conflates}$$

$xA \longrightarrow xB$ and $xB \longrightarrow xA$.

(i)   The simplest rule in Sarcastic Slang, and one which comes nearest
to the rules of ordinary sarcasm, is for the speaker to use a lexical
item which is the opposite[1] to what he means.

eg   <u>Really loving and considerate.</u>
      <u>Just great that.</u>
      <u>We saw loads.</u>

RULE 1: Substitute opposite adjectives.

(ii)   Use of the lexical item <u>weak</u>: this is the most common adjective
in Sarcastic Slang. For emphasis, <u>weak</u> is used where the very opposite
is meant. Furthermore, it not only appears as an opposite to <u>strong</u>,
but also as an opposite to many other adjectives.

eg   <u>Weak crash!</u> (where <u>weak</u> is acting as the opposite of terrible)
      <u>Weak amount of homework!</u> (where <u>weak</u> is the opposite of great)
      <u>Weak car!</u> (where <u>weak</u> is the opposite of impressive)
      <u>Weak!</u> (where <u>weak</u> is the opposite of <u>superb</u>, <u>excellent</u>,
          <u>fantastic</u> etc.)

Variations on <u>weak</u> include:

<u>Fair</u> as in <u>fair boringness, fair bloke.</u>
<u>Small</u> as in <u>small speed, small length on this book.</u>
<u>Crap</u> as in <u>crap amount of homework. crap bure</u> (This, believe it
or not, means the same as <u>she's a bit of alright!</u>).

These four adjectives appear to be in free variation in Sarcastic Slang.

RULE 2:

$$\text{Adjective} \longrightarrow \left\{ \begin{array}{l} \underline{\text{weak}} \\ \underline{\text{fair}} \\ \underline{\text{small}} \\ \underline{\text{crap}} \end{array} \right\}$$

(iii) Use of quantifiers:

Numerical quantifiers are used, as in:

<u>I think I want twenty.</u>
<u>Sez not twenty hardness on this.</u>

There does not seem to be any specific rule as to which number to use,
but for some reason, <u>twenty</u> (or <u>twenny</u> as it is pronounced) seems to be
popular.

RULE 3:

$$\left\{ \begin{array}{l} \underline{\text{a lot}} \\ \underline{\text{lots}} \\ \underline{\text{a lot of}} \\ \underline{\text{lots of}} \end{array} \right\} \quad = \quad \text{any number.}$$

Other quantifiers include:

<u>Wagons</u> as in: <u>Wagons of brains on that kid.</u>
<u>Loads</u> as in: <u>Loads of interestingness on this I thought.</u>

RULE 4:

$$\left\{ \begin{array}{l} \underline{\text{a lot}} \\ \underline{\text{lots}} \\ \underline{\text{etc.}} \end{array} \right\} \quad = \quad \left\{ \begin{array}{l} \underline{\text{wagons}} \\ \underline{\text{loads}} \end{array} \right\}$$

RULES 3 and 4 can be conflated thus:

RULE 5:

$$\left\{ \begin{array}{l} \underline{\text{none}} \\ \underline{\text{no}} \\ \underline{\text{a few}} \\ \underline{\text{etc.}} \end{array} \right\} \longrightarrow \left\{ \begin{array}{l} \underline{\text{a lot (of)}} \\ \underline{\text{lots (of)}} \end{array} \right\} \quad = \quad \left\{ \begin{array}{l} \underline{\text{any number}} \\ \underline{\text{wagons}} \\ \underline{\text{loads}} \end{array} \right\}$$

(iv) Use of lexical item <u>none</u> as in:

<u>Eh - it hurt none.</u>
<u>Eh - we saw none.</u>

RULE 6:   <u>a lot</u> ————→ <u>none</u>

(v) Use of numerative <u>no</u> as in:

a) <u>Oh no hardness</u> (meaning <u>a lot of hardness,</u> i.e. <u>very difficult</u>)

<u>No freak on that gadge</u> (meaning <u>a lot of freak on that gadge</u>
i.e. <u>That man is very strange</u>).

RULE 7:   a lot of ————→ no

   b) Sez you're no lunatic (a contracted form of sez you're not a lunatic meaning You are a lunatic)

RULE 8:   not a = no

Similarly, not in:

    Sez not twenty hardness on this

is explained by the following:

RULE 9:   There is not = not

(vi) Use of lexical item unlike for emphasis, as in:

    Unlike tiring!
    Unlike Edward!

RULE 10:   Very + Adjective ————→ Unlike + Adjective

RULE 11:   Very like + Noun ————, Unlike + Noun

Because unlike in Sarcastic Slang is equivalent to very or very like in standard English, it always directly precedes the word it is modifying. So, for example, one finds

    The hike was unlike tiring.

but not

    * Unlike the hike was tiring.

(vii) The following items are in free variation in Sarcastic Slang:

$$
\left.\begin{array}{l} \underline{ee} \\ \underline{ey} \\ \underline{eh} \\ \underline{hey} \end{array}\right\} \quad \text{and also} \quad \left.\begin{array}{l} \underline{I\ see} \\ \underline{see} \\ \underline{say} \\ \underline{says} \\ \underline{sez} \end{array}\right\}
$$

but from now on, I shall use only the forms eh and sez when referring to them. (Sez was a spelling regularly given me by informants in written data.) A distinguishing feature of Sarcastic Slang is the occurrence of these items in sentence initial position, as in the following examples, which all mean It was difficult:

    Eh it was easy
    Sez it was easy
    Eh sez it was easy
    (It was easy)

but not * Sez eh it was easy.

So more precisely, their distribution is shown by the following rule:

RULE 12:   (eh) (sez) S

When the utterance is not a complete sentence, that is, where it is simply an adjective, an affirmative or a negative, such as

eg   Eh - wise
        Eh - yeah

the distribution rule is as follows:

RULE 13: $\left\{\begin{array}{l} \text{Adjective} \\ \text{Affirmative} \\ \text{Negative} \end{array}\right\}$
          (Eh)

(viii) Use of various forms of the verb to think, as in:

      Loads of interestingness on this I thought
      Just beaut I thought
      I think I want twenty
      Eh I think I might

The distribution of the forms of the verb is shown by the following:

RULE 14:   S (I thought)

RULE 15:   (Eh) (I think) S

(ix)   Another common feature of Sarcastic Slang is the reversal of the polarity of the verb, as in:

      Sez I haven't seen Jem eat Rich Tea biscuits in one go.
      Eh sez they couldn't wreck it.
      Sez it wasn't stolen.

Sentences where the reversal is from negative to positive can also have an optional tag on the end:

      Eh ah'd gerron yours (wouldn' ah)
      I think I understand this (don't I)
      Eh - it is (isn't it)
      I believe you (don't I)

where the verb in the tag has the opposite polarity to the verb in the matrix sentence.

RULE 16:

$$ S \begin{bmatrix} \text{positive} \\ \text{negative} \end{bmatrix} \longrightarrow S \begin{bmatrix} \text{negative} \\ \text{positive} \end{bmatrix} \begin{bmatrix} \emptyset \\ \text{(negative tag)} \end{bmatrix} $$

This can be conflated with RULE 12 to give:

RULE 17:

$$ S \begin{bmatrix} \text{positive} \\ \text{negative} \end{bmatrix} \longrightarrow \text{(eh)} \text{(sez)} \; S \begin{bmatrix} \text{negative} \\ \text{positive} \end{bmatrix} \begin{bmatrix} \emptyset \\ \text{(negative tag)} \end{bmatrix} $$

However, this rule does not deal with the following piece of data where the tag verb has the same polarity as the matrix verb:

      'Let us in!' Eh - bound to is he.

The fact that this is the only example of its kind in my data suggests that it may have been a slip of the tongue, where the informant meant to say

'Let us in!' Eh - bound to isn't he.

in which case it would be dealt with by RULE 17.

However, the fact that the subject and the auxiliary of the matrix sentence are omitted altogether in this example could mean that a different rule applies - possibly one which states that when the subject and auxiliary in the matrix sentence are omitted, the polarity of the auxiliary in the optional tag is the same as that of the omitted matrix auxiliary.

It would be interesting to see if further data supported this rule, thus establishing it as a regularity, rather than a slip of the tongue which is a rather unsatisfactory explanation.

(x)   Finally, there is the characteristic formation of nouns such as

        interestingness, boringness.

RULE 18:   adjectival -ing-form + ness = noun

The task of working out the rules which govern Sarcastic Slang has been complicated by the fact that the forms are rather unstable. They are continually developing, with the introduction of new features which require additional rules. However, the basic rules and features do not appear to change, and it is this more permanent core which I have tried to describe.

Although the description of the speech act is by no means complete, and the rules could be more economically formalized, I hope I have suceeded to some extent in providing an explanation of what Sarcastic Slang involves, both sociolinguistically and grammatically -

                          Weak effort!

                              NOTE

1.   Exactly how antonyms can be formally defined is not entirely
        straightforward, but for the purposes of this article, "opposite"
        can be left with its intuitively obvious meaning. Hale (1971)
        discusses a comparable problem in his article on the tradition of
        tjiliwiri or up-side-down talk used by Walbiri men in Central
        Australia. Types of semantic pig-Latin are found world-wide!

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LANGUAGE USE AND EDUCATIONAL SUCCESS: A RESPONSE TO

JOAN TOUGH'S THE DEVELOPMENT OF MEANING (1977)

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There are many ways of considering variation in child language: one can attend to differences of form, of content, or of function; and each of these can be examined in terms of rate of development, of departure from a hypothesised universal developmental sequence or in terms of habitual use. Each of these forms of variation can then, in turn, be related to the linguistic input that the child receives, or to group differences within the population, or they can be considered in terms of their relationship to educational success.

Given the potential practical applications of an understanding of this latter form of variation, it is hardly surprising that it has been the subject of a great deal of theoretical speculation; although a rather smaller amount of empirical research has been devoted to the identification of particular parameters of linguistic variation that are associated with differential school achievement. The recent publication of Joan Tough's investigation The Development of Meaning (Tough, 1977) is thus a welcome contribution to this field of study, not least because it presents for the first time in detail the empirical evidence on which her large and influential curriculum project* is based.

The essence of Tough's theoretical position is very similar to Bernstein's, namely that, as a result of their primary socialisation, children develop preferences for using their language resources for different purposes. However, aware of the problem of setting up two distinct linguistic codes, she prefers to talk of a continuum of uses from which some children habitually select a rather restricted set, whilst other children use the full range. The educational significance of this variation in language use is that it is just those uses of language that are selected more frequently by the children she labels "advantaged" that are essential if a child is to benefit from the opportunities provided by formal education. These uses include the analytic interpretation of experience, logical reasoning, projecting into possible future events, and into the experiences and feelings of others, and the creation of imaginary situations through purely verbal means. The habitual use of language for these functions results, she argues, from the experience of hearing language used in these ways in the pre-school years, and it is precisely the lack of such experience that puts some children at a disadvantage when they arrive in school, where much pupil learning depends upon being able to manipulate experience verbally for the purposes identified above.

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* Communication Skills in Early Childhood: Schools Council Curriculum Project, 1973 - ongoing.

Her research set out to demonstrate that it was in precisely these uses of language that children who could be contrastively described as educationally "advantaged" or "disadvantaged" would be found to vary. In order to do this, she selected two groups of 24 children, one whose parents "followed professions which are generally reached through a course in higher education, that is, they were teachers, doctors, lawyers, and others of similar status. The parents of the remainder of the children had completed their education at the minimum age, and worked in unskilled or semi-skilled occupations" (p 2). No child was selected with an IQ of less than 105 on the Stanford-Binet scale, nor was any child included from a family of more than 6 children. A further variable was attendance at nursery school, but at the beginning of the study no child had yet received any nursery education. The children were observed at ages 3, 5½ and 7½ years, but it is the first observation at three years that provided the basis for most of her detailed analysis. A sample of language was obtained from each child as he "played with his chosen companion with a collection of play materials which would be the same for all" (p 7). The children's talk was recorded for about an hour in each case with the researcher present "to give support and encouragement to the children as they played" (p 7) and to keep a record of the accompanying activity.

The resulting transcripts were then subjected to a syntactic analysis in which differences were found between the two groups in the typical length and complexity of their utterances, although it was not the case that the children in the disadvantaged group were unable to produce long and complex utterances but rather that they did so less frequently. However, since length and complexity as such have little importance, except as indices of social or occupational group membership, Tough next tried to find a way of comparing the children's utterances in terms of the complexity of meaning expressed. Taking "use" as more or less equivalent to "meaning", she proceeded to classify the utterances according to the framework of functional uses set out in Table 1. She claims "there were few problems when deciding to which function utterances should be allocated, and the application of the general rule by which utterances were allocated to the use of language, or to the strategy, which was judged to be the most complex of those intended within the utterance, resolved most differences". The data from this analysis are presented in Table 2 (based on Tough, op cit pp 190-1, with the nursery and non-nursery groups collapsed and printing errors corrected). On the basis of these results she concludes "there were differences between the advantaged and the disadvantaged groups of three-year-olds in the kinds of meanings that they were imposing on their experiences and that were expressed through language" and she goes on to hypothesise that "these differences of language might be the expression of a range of differences which exist between children in their cognitive dealings with experience" (p 85).

Differences within the sample were of course to be expected, but such a marked difference between the two groups is somewhat surprising. Could it have been in part an artefact of the way in which the groups were selected? Of course the method of contrasting polarized groups in order to show dramatic differences is not without precedent, but it carries with it the serious danger that the polarizing procedure of the researcher may lead to a possibly erroneous conclusion that there are two different kinds of human beings, one being superior to the other. It seems to me that there is a strong hint of such a conclusion in Tough's discussion of her results. Would this conclusion be justified, however, if one considered the full spectrum of family backgrounds from which the school population is drawn?

The Bristol Language Development Research Programme* offers an excellent opportunity to test out this question, so I decided to attempt a small-scale replication of Tough's investigation, insofar as the design of our research would allow. The children in the Bristol project were selected from an initial random sample to give equal representation to four classes of family background, which together span the full spectrum. (As in Tough's study the occupation and education of both parents were taken into account in arriving at each child's index of family background). From this sample I selected four boys and four girls from each of the four classes of family background and analysed the transcribed recordings of the first observation of each child which was made at the age of 3½ years. It is important to point out, however, that no IQ score or size of family measure was used as a cut-off to exclude children from the sample. Furthermore, the recordings were of entirely spontaneous speech, recorded in the children's homes in samples of 90-seconds at approximately 20-minute intervals over a complete day, during which no member of the research team was present in the child's home. Thus the speech samples were not drawn from one supposedly equivalent situation for all children, but from whatever situations happened to occur naturally at the times at which the automatic timing device switched on the recorder. As a result, the data are not strictly comparable. However, if it is the home experience which shapes the children's predisposition to use language for particular functions, recordings made of spontaneous behaviour in the home should only serve to magnify whatever differences there may be between children from different home environments.

These transcripts were then analysed according to Tough's functional model, the child utterance being assigned to one of the listed categories. The children were then grouped according to class of family background and group totals calculated for each category. The results of this analysis are presented in Table 3, which is set out alongside Tough's results in order to facilitate comparison.

Unfortunately, Tough presents no statistical treatment of her data, and without information about group means and standard deviations, it is difficult to know how far the differences between the advantaged and disadvantaged groups in the frequency of any particular category were contributed equally by all members of each group, and how far individual children contributed disproportionately to a particular frequency. The Bristol data reveal large within-group differences, particularly for the more complex categories. However, even a casual inspection of Tables 2 and 3 shows that, when the full spectrum of family background is included, the picture is far less clear-cut than her results suggest: where she found very considerable differences between the advantaged and disadvantaged groups, the Bristol data show much smaller differences, with very few cases of a clear trend over all four classes of family background. Using a chi square test on the frequency, for each class, of utterances assigned to any category compared with the frequency of utterances assigned to all other categories, the direction of the discrepancy between observed and expected frequencies can be determined and an estimate calculated of the significance of the distribution of each category. As can be seen, with only one exception, the differential frequencies of the two groups in Tough's study are significant at the .001 level for each category. Whilst similar significance levels are achieved for some categories in the

Bristol data, there are very few simple linear trends over the four
classes A to D, and in 2 out of the 3 relatively clear cases, the trend
is in the opposite direction from that predicted by Tough. In the case
of the remaining categories, however, the relationship is more complex,
with large contributions to the significant value of chi square being
made by the difference between observed and expected frequencies in the
intervening social classes B and C.

      Tough selected her two groups of children on the basis of pre-
dicted educational advantage and disadvantage resulting from membership
of the social classes at the extremes of the class continuum. Following
Bernstein, she sees differences in the habitual uses to which language
is put as the mediating factor between social class and educational suc-
cess. The follow-up into school of 20 of the Bristol sample* allows
this relationship to be put to at least a partial test. Combined scores
on the Carver (1970) and Neale (1966) tests of reading, administered at
the end of the first year of schooling, were used to arrive at a rank
order of reading attainment for these 20 children. This rank order was
then correlated with a rank order of language use, calculated on the
proportion of each child's utterances that had been assigned to each of
three groupings of Tough's categories from least to most complex. Each
of these rank orders was also correlated with a rank order of family
background, using a twelve-point scale that takes account of the occu-
pation and education of both parents. The data for, and results of,
this analysis are presented in Table 4. As can be seen, the initial
correlations range from 0.39 to 0.57. However, when the contribution of
social class to the correlation between use of language and reading has
been partialled out, this correlation is reduced to 0.19, which is not
significant. On the other hand, even with the effect of language
partialled out, the correlation between social class and reading is still
0.47, which is significant at the .05 level.

      All these results taken together suggest that, whilst there is a
statistical relationship between social class and both use of language
and educational success (as measured by reading attainment after one
year), it is not the differential use of language for the purposes
identified by Tough that is the mediator between home background and
school success. More importantly, the results of the analysis of use of
language show that the relationship between class membership and
language use is much more complex than Tough's simple equation would
suggest, and that any simple division of the population into two non-
overlapping class groups, such as Tough claims to have found in her
study (p 85) seriously misrepresents the full picture.

      Before going on to discuss the implications of the discrepancy
between the results of these two investigations, it is necessary to look
more carefully at the procedures by which they were obtained, about
which I have a number of reservations. Firstly, my experience of clas-
sifying utterances from a wide range of situations occurring throughout
a normal day leads me to have grave doubts about the validity of making
large-scale generalisations about children's habitual use of language
from speech samples obtained from one limited situation, even though
that situation might be claimed to be fairly representative of early
school experience. Furthermore, Tough's claims, made on the basis of
later observations of the same group of children, that the differences

between the two groups became progressively larger, are open to the same sort of objection, for the situations in which the language samples were collected at ages 5½ and 7½ were similarly restricted and non-spontaneous. Although the external features of the situations may have been the same for each child, there is no certainty that each child's perception of the task demands was the same. Nor can it reasonably be inferred that, because a child did not choose to use language for a particular function within a particular interview situation, he cannot and does not do so in other situations, where the relationship between the communication partners is different.

My second reservation concerns the possibility of actually replicating Tough's research. Here I am referring in particular to the difficulty of applying her functional classification of language in a way that accurately matches her original use. It may already have been noticed that the categories included in Table 2 do not match those in Table 1 in any simple one-to-one manner; nor is there any indication in the book as to how one set should be converted into the other. (In fact I obtained this information by writing and asking for it.) To add to the confusion, the only illustrative example of the application of the categories to running text (pp 70-77) introduces new labels such as "representing events", "possible cause", "reporting-recall". Nor is there any clear statement of the criteria on which to base classification decisions. Tough resolutely argues against "analysing the forms of the utterance, that is, relying on structural features for classifying utterances" (p 43), but she offers no clear alternatives. She may feel this is good enough for teachers, but it is most unsatisfactory in a professional presentation of research. There is equally no indication as to which utterances are to be classified. Clearly, not all, since questions receive an independent analysis; but what about repetitions and the ubiquitous "yes", "no" and other one-word utterances? One assumes that there must have been some coding manual with clearly defined criteria, for Tough claims a correlation of 0.9 between the judgements of the two people who analysed her data. Without such criteria, however, I experienced a growing sense of dissatisfaction with the subjectivity - not to say arbitrariness - of a large number of my decisions and this must cast considerable doubt on the reliability of any application of her classificatory framework.

Finally, the categories themselves. There seem to me to be some notable omissions. For example, I could find no category that seemed appropriate for utterances such as "You look nice", "I'm wiping this for you, Mummy", "I like you", all of which occurred in the transcripts that I analysed. Surely one should not completely ignore the social and affective aspects of experience merely because one believes that education puts a premium on the more cognitive aspects. Perhaps these utterances should have been assigned to the self-maintaining category, since its superordinate function is labelled relational. However, the self-maintaining is almost exclusively self-oriented and, from the examples given, seems to be concerned only with satisfying one's needs and defending one's rights. Of course children do make considerable use of language for these purposes but I would have expected to find distinctions made between at least the following:

a: using language to control others in order to meet one's needs, defend one's rights, and enhance one's self image
b: using language to plan one's behaviour in collaboration with others by asking for permission for intended actions or by stating one's intentions in order to allow others to offer their comments
c: using language for the presentation of self and for self-discovery (the "Here I come" use of language identified by Halliday)

Some of the problems of applying the scheme are well illustrated by the excerpt contained in Appendix 1. For example, in the first part (1-15) should Richard's utterances be classified as Self-Maintaining or not? On one reading, they may be taken as instances of Self-Emphasis. Taking intonation into account, though, it might be more appropriate to classify 1-4 as Reporting-Elaboration of Detail or Association and Comparison, and either of these would be considered to be more mature than Self-Emphasis. As questions, 6 and 8 pose a different problem for it is not clear whether they should be assimilated to the response categories or not. If they are to be included, Tough would want to classify them as 'Self-Maintaining' (cf p 81); however, an equally strong case could be made for treating them as 'Directive: collaborative action'. Again 11-12, 14-15 could be classified as either 'Self-Emphasis', 'Reporting: association and comparison' or possibly even 'Reasoning: recognizing dependent and causal relationships'.

However, my most serious misgiving concerns the conceptualisation of meaning-making and communication that underlies the whole categorisation scheme and the curriculum work that has developed from it. For it seems to be based far more on what count as satisfactory answers to teachers' questions than on a serious attempt to discover how people use their linguistic resources to achieve effective inter-personal communication.

One reason for this may well be that the research, both in conception and in presentation, is firmly based within the didactic perspective of the primary classroom. A second, and related, reason may be the strong influence of Piaget, who despite his very important contribution to cognitive developmental psychology, seriously under-estimates the social interactive basis of early learning. Reviewing recent research on child development, Newson and Newson (1975) in contrast with Piaget, stress the importance of what has come to be called "inter-subjectivity" - a word which draws attention to the general principle "that human cognitive understanding arises as a process of negotiation between two or more human beings, and (which) suggests that it may not be sensible to seek the roots of those shared understandings which constitute human knowledge within the action patterns of any one individual viewed in social isolation" (p 442). The acceptance of such a point of view must surely lead to a revaluation of the large place that egocentrism plays in Piaget's work, and to a much greater recognition of the child's considerable skill in forming representations about the internal representations of others (Shields, 1976). Such a conception of the negotiative nature of learning also leads to a much greater wariness about viewing language as a transparent medium for the expression of thought and about treating children's utterances as little more than convenient "thought-tokens". On all these points, it seems to me, Tough gives insufficient emphasis to the interactional nature of communication. She writes frequently of extending children's language and thinking through dialogue, but her conception of dialogue is overly dependent on the question-and-answer model of the classroom, in which teachers ask the questions and pupils do their best to formulate the answers that they think the teacher requires. Not altogether surprisingly, this is not what most children's experience at home has taught them about the nature of communication, and some seem to have more difficulty than others in learning to play this particular classroom language game.

Let me make it clear, though, that I am not questioning the importance of being able to use language for the more complex purposes in Tough's taxonomy, nor doubting that the habitual use of language for

such purposes will contribute to a child's success within our educational system. But I do question the assumption that such uses of language are the most important, and, as such, are central to skill in communication. Much more important, in my view, is being able to relate to one's communication partner and to collaborate in the joint construction of a shared reality. The danger is that, by focussing on a graded taxonomy of decontextualised functions, one is likely to encourage teachers into mistaking the emission - or lack of emission - of the more complex functions for evidence of the quality and organisation of the conceptualisation of experience, and into believing that attempting to provoke such response tokens is the same thing as teaching skill in communication.

The mistake is a common one amongst teachers, as Moffett points out in his penetrating analysis of 'Teaching the Universe of Discourse' (Moffett, 1968). Using the analogy of the triangle to explore the relationship between Speaker, Listener and Spoken-about (the I, the You and the It), he writes: "I and you pre-empt the communication process, just as transmitter and receiver exist before message ... One failure of English teaching has been to consider only messages, or to consider them before or without placing them in the whole context of the communication frame wherein the student can see the operation of all relations" (pp 11-12).

"Enabling" parents, as Tough calls them, seem to be intuitively aware of this, however. Listening to our recordings of the spontaneous conversations of children in their home surroundings, one does not find that it is the differential frequency of logical reasoning or of the other complex functions that stands out as the characteristic distinguishing between the 'enabling' and the 'non-enabling' home. (In fact the frequency of dialogues of this kind is very low indeed in all homes). But rather it is the presence or absence of genuine reciprocity and collaboration. One quickly comes to understand why a small proportion of children use language almost exclusively for self-maintenance: they are fighting for personal survival. In one case, for example, the mother is almost completely preoccupied with the housework and with talking about domestic problems with relatives who call in and Mary has to repeat her utterances up to six times before her mother notices that she is almost in tears as a result of her inability to gain some response or recognition. Philip's case is less extreme, but he too rarely gets his parent's interested attention. Mother is busy studying and the au pair girl seems a less-than-adequate conversational partner.

In two cases - both girls - it is a next-door neighbour who fulfils this necessary function of providing an opportunity for talk with somebody who is prepared to share their interests. But for the most fortunate children it is the parents who provide this experience of negotiated construction of shared meaning. And it seems to be the 'sharing' that is so crucial. Certainly this quality characterises the speech at home of all the children who are making above average progress after one year at school (as judged by their success in learning to read).

However, it is a much more difficult matter to pin down the criteria by which successful communication can be measured, particularly since it cannot be identified by examining the utterances of either the child or his interlocutor independently. What is required is some measure of the interrelatedness of the utterances of both participants - something like an index of Conversational Cooperativeness and Mutual Relevance, which is what the next phase of our research will be attempting to construct. Work to date suggests that it will be possible to

identify formal correlates, such as grammatical cohesion, thematic
continuity and certain uses of intonation and paralinguistic features
of voice quality. In the absence of such clearly worked out criteria,
however, the best I can do at present is to let some of the examples
speak for themselves (Appendix 2). James' conversational experience
is perhaps the clearest example, and excerpts of this kind are to be
found in all the recordings made of him between 3½ and 5 years.
Significantly, James is second in the rank order of reading attainment.
Wendy, who is fourth in the rank order, provides an interesting con-
trast in that, although she clearly scores highly in terms of success-
ful communication, she achieved a very low score on Tough's categories,
being ranked only 16th out of 20. This is because 27% of her utterances
were classified as Self-Maintaining and a further 8% as having a Social
function, which could not be accounted for in terms of Tough's cat-
egories. However, this merely reinforces the point made earlier about
the important qualitative differences that are to be found within the
Self-Maintaining Function.

Ann, the third example, who is seventh on the rank order of
reading attainment, is different in yet other respects. Few of the
characteristics of the "educated" home are to be found in her recordings,
and her mother is much more likely to speak to her sharply on occasions.
But in terms of the warmth and reciprocity of the communication that she
has with her mother, Ann's is clearly a sufficiently "enabling" home to
give her a good start on her school career. The final point to be made
about these examples is that the educational success achieved by these
children cannot be predicted either by their social class membership or
by their score on Tough's categorisation of language use. Wendy is from
Class A, James from Class C, and Ann from Class D, and their respective
ranks on language use were 16, 9 and 10.

What conclusions can be drawn, then, about the relationship between
variation in children's language and educational success? That there is
considerable variation between children at age 3 or 5 or 7 in the extent
of their control of the language system and in the uses to which they
habitually put their linguistic skills cannot be doubted. Wells (1976)
demonstrated that in a sample of 16 children from the Bristol study,
including many of those used for the present investigation, there was
wide variation in Mean Length of Utterance, Syntactic Complexity,
including control of the Auxiliary Verb System, Semantic Complexity and
Pragmatic Range, and other studies have found similar variation (eg, Templin
1957, Menyuk 1971, Hawkins 1969, to name but a few). Most investigations
have, like Tough, also found a correlation between whatever aspects of
language they have investigated and the social class of the children's
parents, and have drawn the conclusion that such linguistic differences
provide a way of explaining the undoubted relationship between social
class and educational success.

The Bristol results, in contrast, run counter to the general trend
and so it will be particularly interesting to see whether the younger half
of the sample, who are currently being followed up as they embark on their
formal schooling, follow the same pattern as the older age group. However,
on the evidence available from the older children, as argued in the pre-
ceding pages, it seems clear that there are too many exceptions for the
simple equation between class, linguistic behaviour and educational suc-
cess to be accorded any explanatory, or even practical, value. Of course,
those who wish to show that the language of lower-class children is dif-
ferent will always find evidence to prove their point, but it does not
follow that such differences necessarily put these children at an edu-
cational disadvantage - unless they trigger off expectations that all too
easily become self-fulfilling.

However, this is not to say that variation between children - from whatever social class - in their linguistic experience and ability does not differentially predispose them to benefit from their formal education. But it seems less likely than was first supposed that the important dimensions of such linguistic variation are to be found in characteristics of the children's utterances when these are abstracted from their context of communication.

If learning takes place through communication, and communication requires collaboration between the participants in the negotiated construction of a shared reality, it seems that it will be in the further exploration of the complex nature of linguistic communication that the contribution of language to educational success will be found.

TABLES

Table One: Classification of Language Functions (From Tough, 1977: 68-9)

Function	Uses of language		Strategies
The directive function	1. Self-directing	i ii iii	monitoring actions focusing control forward planning
	2. Other-directing	i ii iii iv	demonstrating instructing forward planning anticipating collaborative action (self and other)
The interpretative function	1. Reporting on present and past experiences	i ii iii iv v vi vii viii ix	labelling analytical strategies including: elaboration of detail association and comparison recognising incongruity awareness of sequence recognition of associated actions or events absence of conditions recognition of a central meaning reflecting on the meaning of experiences
	2. Reasoning	i ii	recognising dependent and causal relationships the recognition of a principle or determining conditions
The projective function	1. Predicting	i ii iii iv v	forecasting events anticipating consequences surveying possible alternatives forecasting related possibilities recognition of problems and predicting solutions
	2. Empathetic	i ii iii	projecting into experiences of others projecting into other people's feelings anticipating reactions of others
	3. Imaginating	i ii iii iv	renaming commentary on imagined context building scene through language language of role (strategies of the directive and interpretative functions will be used within imagined contexts)
The relational function	1. Self-maintaining	i ii iii iv v	referring to needs protection of self-interest justification criticism threats
	2. Interactional	i ii	self-emphasising strategies other-recognising strategies

Table Two

	Advantaged Frequ.	%	Disadvantaged Frequ.	%	x^2 Sig.
1 Self-Maintaining	200	5.9	518	14.1	.001
2 Directive					
a: monitoring own actions	275	8.1	1064	29.0	.001
b: extend action & collaboration in action	89	2.6	34	0.9	.01
3 Interpretative: Present					
a: identifying	390	11.5	993	27.1	.001
b: extension ref detail etc	368	10.9	229	6.2	.001
c: logical reasoning	150	4.4	19	0.5	.001
Past					
a: identifying	54	1.6	10	0.3	.001
b: extension ref detail etc	64	1.9	7	0.?	.001
c: logical reasoning	43	1.3	6	0.?	.001
4 Projective 1 Predictive	242	7.1	106	2.9	.001
2 Empathetic	13	0.4	1	0.0	--
3 Imaginative					
a: monitoring own actions	491	14.5	345	9.4	.001
b: extending actions	663	19.6	120	3.3	.001
c: identity/represent.	80	2.4	55	1.5	.01
d: extens. imag. context	140	4.1	40	1.1	.001
e: logical reasoning	52	1.5	4	0.1	.001
f: role taking	75	2.2	115	3.1	.05
Total	3389	100	3666	100	--

Table Two: Functional Distribution of Utterances (Based on Tough 1977 : 190-91)

Table Three

	Class A Frequ.	%	Class B Frequ.	%	Class C Frequ.	%	Class D Frequ.	%	x^2 Sig.
1 Self-Maintaining	190[-]	22.4	156[-]	20.3	184[-]	22.5	180	26.4	.05
2 Directive									
a: monitoring own actions	84[-]	9.9	144[+]	18.8	96[-]	11.8	111[+]	16.3	.001
b: extend action & collaboration in action	140[-]	16.5	108[-]	14.1	150[+]	18.4	132[+]	19.4	.05
3 Interpretative: Present									
a: identifying	82[-]	9.7	108[+]	14.1	157[+]	19.2	90[-]	13.2	.001
b: extension ref detail etc	66[+]	7.8	73[+]	9.5	73[+]	8.9	27[-]	4.0	.001
c: logical reasoning	14	1.6	14	1.8	13	1.6	6	0.9	n.s.
Past									
a: identifying	5[-]	0.6	22[+]	2.9	18[+]	2.2	7[-]	1.0	.01
b: extension ref detail etc	2	0.2	8	1.0	8	1.0	1	0.1	--
c: logical reasoning	0		0		0		0		--
4 Projective 1 Predictive	14[-]	1.6	21[+]	2.7	23[+]	2.8	5[-]	0.7	.05
2 Empathetic	3	0.4	2	0.3	8	1.0	1	0.1	--
3 Imaginative									
a: monitoring own actions	27[+]	3.2	3[-]	0.4	12[-]	1.5	29[+]	4.3	.001
b: extending actions	38[+]	4.5	21	2.7	13[-]	1.6	13[-]	1.9	.01
c: identity/represent.	23	2.7	2	0.3	1	0.1	1	0.1	--
d: extens. imag. context	98[+]	11.5	12[-]	1.6	28[-]	3.4	23[-]	3.4	.001
e: logical reasoning	4	0.5	0		1	0.1	0		--
f: role taking	59	6.9	73[+]	9.5	30[-]	3.7	55[+]	8.1	.001
Total	849	100	767	100	817	100	681	100	--
Social	30		53		60		15		
Text	22		45		50		50		
Total	901		865		927		746		

Table Three: Functional Distribution of Utterances (Wells)

Table 4: Rank Orders of Sub-sample

	Uses of Language	Reading	Family Background
Alan	11	16	18
Andrew	4	15	13
Ann	10	7	15.5
David	1	13	2.5
Derek	8	9	8.5
Elizabeth	2	6	6
George	20	20	20
James	9	2	10.5
Jane	14	17	15.5
Janet	15	11	13
John	3	3	2.5
Judy	19	8	10.5
Kathleen	13	14	8.5
Mary	18	12	18
Paul	12	19	18
Peter	5	10	13
Philip	17	18	5
Sandra	6	5	2.5
Susan	7	1	7
Wendy	16	4	2.5

Correlation Table *

Use of Language x Reading
0.39 (p<.05)

Reading x Class of Family
Background 0.57 (p<.01)

Use of Language x Class of
Family Background 0.46
(p<.05)

Use of Language x Reading with
Class of Family Background
partialled out 0.19 n.s

Reading x Class of Family
Background with Use of
Language partialled out
0.47 (p<.05)

* A one-tailed test was
used in all cases

APPENDICES

Conventions and Layout for Transcription

      The speech of the child being studied is set out in the left hand column. The speech of all other participants is set out in the centre column, with identifying initials where necessary. Each new utterance starts on a new line.

      Contextual information is enclosed in square brackets [ ] and set out in the right hand column.

      Interpretations of utterances and descriptions of intonation where applicable, are enclosed in round brackets ( ) and included immediately after the utterance to which they apply.

      Utterances, or parts of utterances, about which there is doubt are enclosed in angular brackets < >; where two interpretations are possible they are both given, separated by an oblique stroke.

      Symbols of the International Phonetic Alphabet are used for utterances, or parts of utterances, which can be clearly heard, but which cannot be interpreted with certainty. Phonetic symbols are always enclosed by oblique strokes. Except where there is doubt about the speaker's intended meaning, the speech is transcribed in Standard English Orthography.

      The following is a list of additional symbols used, with an explanation of their significance. (stops and commas are not used as in normal punctuation)

?   used at end of any utterance where an interrogative meaning is considered to have been intended

!   used at the end of an utterance considered to have exclamatory intention

'   apostrophe: used as normal for contractions and elision of syllables

CAPS   Capitals are used where part of an utterance receives unusually heavy stress to convey emphasis or contrastive meaning

*   used to indicate unintelligibility, for whatever reason. The number of asterisks corresponds as nearly as possible, to the number of words judged to have been uttered

...   stops are used to indicate pauses. One stop is used for a very short pause. Thereafter, the number of stops used corresponds to the estimated length of the pause in seconds. Pauses over 5 seconds
8
...   in length are shown with the figure for the length of the pause

___   underlining. Where utterances overlap because both speakers speak at once, the overlapping portions are underlined

" "   inverted commas are used to enclose utterances considered to be 'speech for self'

⌢   slur mark indicates unbroken intonation contour where a pause or clause boundary might otherwise indicate the end of an utterance

-       hyphen indicates a hiatus, either because the utterance is incomplete or because the speaker makes a fresh start at the word or utterance

(v)   used to indicate that the preceding word was used as a vocative, to call or hold the attention of the addressee

Conventions of Transcription (S Hutcheson)

//   tone group boundary

CAPS   tonic syllable

'   stressed syllable

⟶   lengthened syllable

↑↓   shift up or down of the average pitch range over pre-tonic syllables (ie, high or low "key")

↑↑↓↓   shift to extra high or low "key" (moving outside the normal limits of the pitch range)

*   some aspect of the coding given is problematic

Tone   A system of numbers is used to refer to pitch movement at the tonic, where the tonic is defined as the tonic syllable and any succeeding syllables to the end of the tone group. The pitch range of a speaker is divided into five bands numbered 1 - 5 from high to low. Eg:

```
 ___1_____
 ---2----------------------
 ___3_____
 ___4_____
 ----5----------------------
 ___5_____
```
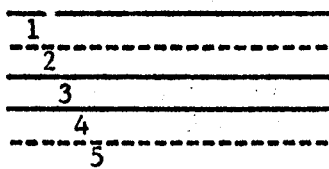
The following information is retrievable from this number coding
a: direction of pitch movement:
        fall: smaller number first (eg, 13, 25)
        rise: larger number first (eg, 31, 43)
        rise-fall: (eg, 324)
        fall-rise: (eg, 243)
        level: repeated number (eg, 33)

b: onset level of the pitch change:
        mid   3
        high   1 or 2
        low   4 or 5

c: range of pitch movement:
        for example with a falling tone
        extra wide   15
        wide   25, 14
        neutral   13, 24, 35
        narrow   12, 23, 34, 45

Note: where (part of) a pretonic is marked for extra high or low "key" (eg ↑↑ or ↓↓), the subsequent tone numbers must be interpreted in terms of the redefined limits of the pitch range

APPENDIX 1

Name: RICHARD   D of B: 16.3.70   D of R: 29.6.73

Sample 4	Participants: Location: Activity: Time:	Richard, Luke, Mother Kitchen Free play 10.05 am

.⁞.

1 //'I`m the 35 LEAder//
2 // And 'Luke's the 24 END//45AREn't
   you?//
                                             [Referring to arrangement of toys in which his is first in the line]

3   L: Yes

4 //No me 35 ISn't//
5 //'Mine is in the 35 MIDdle//   [Rearranges the toys]

6 //Shall I go and get↑ all 24 THOSE   [Referring to other toys]
   things?//
7   L: Yes
8 // ↑143 ALL of them?//

9   L: Yes

10 //232 BUT//

11 //'Not my 232 OLD trumpet//
12 // ↓'Cos I haven't↑ 'got a
    343 OLD trumpet //24 HAVE I?//

13   L: No

14 //I've got a 24 NEW one//
15 //And 'it was being 14 BROKED//
    24 WASn't it?//

16   L: Mm

17 This *-

18   M: What - what was broken?

19 * *

20   M: Was it?
21   'Luke want a trumpet too?

22 //21YES?// (= do you Luke (v)?)

23 //32THERE Luke (v)//   [Gives trumpet to Luke]

24   M: 'D you like a trumpet too?

25   //Can 132 I have one?//
26   //Can 12 I have one?//

27   M: Well yours is downstairs
                                        on the shelf

                                                    [Luke blows his
                                                    trumpet]

APPENDIX   2

Name: JAMES   D of B: 1.9.70   D of R: 4.12.73   Recording no 1

Sample 14   Participants: James, Mother
                 Location: Living room
                 Activity: Watching TV programme about deer
                 Time: 2.07 pm

---

1   - in the front   [explaining to
                                                           James about deer]

2   That one's got horns in
                                        the front

3   Yeh but -

4   In front of its head
                                        it's got two horns

5   Yeh - but it but it looks
        like a deer

6   Mm (agreeing)

7   But it looks like a < little/
        bit of > deer

8   Look!

9   What a nice face it's got

10   Yes
                                     ...

11   Got any eyes?

12   Yes they have my love (v)
13   Look
14   There's their eyes
15   Little black marks -
16   There you are - there's a-
                                        there < they/you > are

                        ...   [Voice of com-
                                                 mentator]

17		That's a baby one (quietly)
		..5.
18		All right my love (v) ⌊James climbs on Mother's lap⌋
		..
19		There's a good boy
20	Lovely deer they are	
21	Lovely deer	
22		Yes - yes - that's right
		....
23	They're ears	
24		That's right - yes
		.... ⌈see more deer on TV⌉
25		Some more
26	What are they playing? < like that >	
27		Well they were just playing -
28		I expect what they were doing is they talk to one another
29		They were going like this (giggles)
	(chuckles)	.. ⌈whispers in James' ear⌉
30	What you doing?	
31		Yes
		..
32		Chewing the grass again
33	They like grass they do	
34		Yes
35		I'm waiting to see it run
36	And me	
37		Ah - they didn't show any of them running (disappointed)
38	No (disappointed)	

39

         ••
Cos it runs very fast

40 Yes but we never <u>seen</u> .. them

41   <u>Ah no</u>

                    •••

42   Never mind
43   We'll see something else in
                      a moment though

                    ••

44 〈 Yes 〉

Name: WENDY	D of B: 24.9.70	D of R: 21.12.73	Recording no 1

Sample 6	Participants: Location: Activity: Time:	Wendy, Mother Kitchen Water play 11.03 am	

1 I'm going to play with the
     water again Mummy (v)!
                                                         [Mother has left
                                                      the room for a
                                                      short time]

                          ••

2 I'm going to play with the
     water again Mummy (v)
                                                            [climbs onto chair]

                          •••

3 'S that all right -?
                                                           [stops mid-
                                                           utterance]
                        ..6.

4 I'm washing this for you
     Mummy (v)
                                                            [A dish]

5   You're being very helpful
                      this morning Wendy (v)
                      (appreciatively)

                    •••

6   Er-

7   Yes (doubtfully)

8   Don't make it TOO bubbly
                      love (v)

                    ••   [Mother comes to
                                                      investigate]

9	Have you put some more -?	[Wash-up liquid in bowl of water]
	•	
10	No (= don't do that)	
11	'Cos Mummy's just wiped up all that lovey (v)	[Mother has just wiped draining board]
12	And I told you I didn't want to get it too wet	[Noise of cloth being squeezed out]
13	Didn't I?	
14 I want to play -		
15	Er - no	
	••	
16	Here we are (accompanying action)	[Mother wipes board again]
	••	
17	Now try NOT to get all the water over there love (v)	
	••	
18	Please	
	.19.	[Mother continues to wipe dishes and put them away]
		[Wendy blows bubbles through a straw - 11 seconds]
19 See those bubbles! (wants mother to look)		
	••	
20 Come and see those bubbles!		
21	Just a minute love (v)	
22	And I'll come right away	
	•••	

Name: ANN   D of B: 17.3.70   D of R: 15.6.73   Recording no 1

Sample 16	Participants:	Ann, Mother
	Location:	Kitchen/Garden
	Activity:	Washing
	Time:	2.45 pm

1 Yes?

2
　　Let me wash your face and hands and put you down a mintue　　[Preparing to meet Darren from nursery school]

3
　　And then we can go and er - pick Darren up

4 Pick *

5
　　How's the water?

6 Eh?

7
　　How's the water? (sounding concerned)

8 All right

9
　　Still got that brown in it?
　　[presumably referring to discolouration]

10 No it's all right
　　(= don't worry on my behalf)

11
　　No it's still got that brown in it

12 It's ALL RIGHT

13
　　Here you are
　　Wipe your face and hands

14 Wipe your face and hands (imitating)

15
　　Yes dear (v)

16 All right

17 "Wipe your face and hands"

18
　　Wash it clean

19
　　And * rub all the dirt off

20 Eh?

21
　　Rub all the dirt

22　's off now (= it's off now)
　　　(sound of pleasure as if breathing
　　　vocally but not laughing)

23　　　　　　　　　　　　　　　Stay there and I'll get you
　　　　　　　　　　　　　　　　a towel

　　　　　　　　　　　　　　　　••

24　　　　　　　　　　　　　　　Certainly madam (teasing)

25　Certainly Mummy (v) * *

26　　　　　　　　　　　　　　　⟨Eh?⟩

27　Oh it's terrible　　　　　　　　　　　　　　　　　　⌈Not clear what she
28　It's terrible i'n't it?　　　　　　　　　　　　　　was referring to⌋

29　　　　　　　　　　　　　　　What is?

30　Terrible

31　　　　　　　　　　　　　　　Wipe your face and hands

32　Wipe your face and hands　　　　　　　　　　　⌈Sound of water
　　　　　　　　　　　　　　　　　　　　　　　　　　running makes speech
　　　　　　　　　　　　　　　　　　　　　　　　　　indistinct⌋

33　Can I play ⟨with cloggies out front?⟩

34　　　　　　　　　　　　　　　Pardon?　　　　　　　　⌈Asking to wear
　　　　　　　　　　　　　　　　　　　　　　　　　　elder sister's clogs⌋

35　Can I got try these
　　　out in front?

36　　　　　　　　　　　　　　　NO

37　I won't break my neck

38　Ma (v)?

39　I won't break my neck

40　Ma (v)?

41　I won't break my neck

42　"If I breaks my neck I * in front"

　　　　　　　　　　　　.23.　　　　　　　　　　⌈Goes into garden
　　　　　　　　　　　　••••　　　　　　　　　　 and talks to self
　　　　　　　　　　　　　　　　　　　　　　　　but indistinct⌋

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LINGUISTICS AND CONCEPTS OF VERBAL DEFICIT

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1.   Introduction

It is remarkable that most of those who propose or subscribe to concepts of verbal deficit make no attempt to reconcile these concepts with linguistic theory and research, and they often seem to be unaware that if any concept of verbal deficit is to be theoretically viable it must make sense in linguistic terms. The purpose of this paper is not to effect a reconciliation between linguistics and concepts of verbal deficit, but to examine various verbal deficit theories from a primarily linguistic point of view.

Any concept of verbal deficit as a permanent feature of the idiolect of a speaker immediately raises the question as to why those people who display a verbal deficit fail to match up to the norm with which their speech is implicitly or explicitly compared. The number of conceivable explanations for the genesis of something that might be labelled verbal deficit is limited to the following:

1.   Certain types of physical or mental infirmity or disorder (e.g. congenital deafness or certain types of brain damage).

2.   Faulty language acquisition mechanisms.

3.   Exposure to an allegedly inferior variety of speech in childhood.

4.   Insufficient exposure to speech in childhood.

5.   Social or psychological 'blocks' affecting performance.

Of these conceivable explanations, the only one that poses no problems for linguistics is the first: linguists are willing to agree that a handful of children may have physical or mental infirmities that retard or impede language acquisition. However, those who propose or make use of concepts of verbal deficit - referred to hereafter as deficitists - do not advance this explanation as it would be plausible in only a very small number of cases; and, without exception, the deficitists claim that the numbers displaying a verbal deficit are substantial - usually whole social classes and large sections of ethnic minority groups. This also accounts for the unpopularity of the second explanation among the deficitists. In practice, most of the deficitists fall into two broad groups: those who propose or imply the third and/or fourth explanations and those who prefer the fifth explanation. Both kinds of explanation are highly problematical from a linguistic point of view.

2.   Theories ascribing verbal deficit to insufficient exposure to speech or exposure to an allegedly inferior variety of speech

The great majority of theories of verbal deficit fall into this category, for example those proposed in Bereiter and Ergelmann (1966), Bereiter et al. (1966), Jensen (1968), and Gahagan and Gahagan (1970). In these theories it is claimed or implied that verbal deficit results

from both insufficient exposure to speech and exposure to an allegedly
inferior variety.

The notion that some varieties of speech are inferior to others
is one that linguistics cannot even begin to take seriously for all
dialects and languages are governed by rules, which are broadly equally
consistent in all cases. Value-judgements on dialects are in fact
always a reflection of prevailing social attitudes, or as Trudgill
observes: 'They are judgements about speakers rather than about
speech.' (Trudgill, 1975:29).

The effects of varying degrees of exposure to speech in childhood
are not easy to assess, if only because it is virtually impossible to
record all the relevant data. But even if it were possible to record
all the speech that a child is exposed to up to the age of, say five,
one would still be left with the daunting task of trying to find some
meaningful way of quantifying what had been recorded, and one would
have to distinguish between speech addressed to the child and speech
directed at others, which would often be difficult. It is known, of
course, that children reared outside human society or in conditions of
extreme isolation from contact with older people do not acquire speech
while in that condition. However, all children, unless they suffer from
certain extremely rare physical or mental disabilities acquire language
in the form of the speech spoken in their environment, or a variety of
that speech. It is possible that children exposed to relatively little
speech, especially speech addressed to them individually, acquire
language somewhat more slowly than others, as is suggested by studies of
children reared in orphanages (see Lenneberg, 1967:137). But this
slight lag in acquisition does not amount to anything approaching the
massive deficit that most of the deficitists have in mind.

Implicit in deficit theories of the kind cited at the beginning
of this section are generally five basic assumptions:

1. That non-standard dialects are inherently inferior to the
   standard dialect.

2. That all, or virtually all lower working-class children and
   those belonging to certain (usually non-white) ethnic
   minority groups display a verbal deficit.

3. That only, or virtually only, lower working-class children
   and those belonging to certain (usually non-white) ethnic
   minority groups display a verbal deficit.

4. That cognitive development is heavily dependent on linguistic
   development.

5. That the environment provided by the homes and, in particular
   the mothers, of lower working-class children and certain
   (usually non-white) ethnic minority children is inimical to
   normal linguistic and cognitive development.

Of course, these assumptions are often implicit rather than
explicit. For example, whenever these deficitists want to find examples
of verbal deficit they invariably betake themselves to a slum, and their
writings contain many negative value-judgements on lower working-class
speech and culture while praising middle-class speech and life-styles.
Admittedly, they sometimes administer various tests to the children,
but these tests are nearly always IQ tests and vocabulary tests. A
vocabulary test measures at best familiarity with the vocabulary items
in the test, and the results cannot be regarded as indicators of language

acquisition or of speaking ability.[1] But even when these tests produce
results with lower working-class children that are in line with those
obtained by the general population the children concerned are still
regarded as suitable candidates for compensatory, remedial or
'additional' language teaching (see, for example, Gahagan and Gahagan,
1970:25). The conclusion that most deficitists equate non-standard
dialect, verbal deficit and membership of the lower working-class is
inescapable. In effect, they set out from the age-old premiss that the
'lower orders' don't speak properly. Thus the first three assumptions
listed above are no more than a restatement of a well established
prejudice. The fourth assumption is speculative and there is no hard
evidence to substantiate the fifth as far as linguistic development is
concerned.

There is, moreover, a curious contradiction in the reasoning of
many of these deficitists: on the one hand they stress the deleterious
character of the lower working-class child's early upbringing (up to
the time when the child starts school); on the other hand, they are
generally agreed that the deficit that they believe is observable when
the child starts school is much less than it is after the child has
been at school for a few years. If any significance can be attached to
their observations - and the tests on which they are largely based are
of questionable validity - it would seem that verbal deficit is some-
thing acquired at school rather than something that the child brings
with him when he starts school. This would suggest that what appears
as a verbal deficit after a child has been at school for a few years is
primarily an expression of the child's progressive alienation from the
school. However, this is not a view which is explored by these
deficitists: rather, they maintain steadfastly that verbal deficit
stems from inadequate exposure to speech in early childhood and/or
exposure to an inadequate variety of speech. The only way of resolving
the contradiction would be to argue that although the child's speech
is not deficitary when he arrives at school it is somehow programmed
to become so later. However, such an argument would be implausible.

In case it is felt that the deficitists considered in this
section have been treated harshly, it is worth illustrating how out of
touch they are with current linguistic theory and research. Jensen
(1968) writes about working-class and middle-class speech in the fol-
lowing terms:

'For the lower-class person, reading and writing are very dif-
ferent from speech. Also, language in the lower-class is not
as flexible a means of communication as in the middle-class.
It is not as readily adapted to the subtleties of the particu-
lar situation, but consists more of a relatively small
repertoire of stereotyped phrases and expressions which are
used rather loosely without much effort to achieve a subtle
correspondence between perception and verbal expression.
Much of the lower-class language consists of a kind of
incidental "emotional" accompaniment to action here and now.
In contrast, middle-class language, rather than being a mere
accompaniment to ongoing activity, serves more to represent
things and events not immediately present. Thus middle-class
language is more abstract and necessarily somewhat more
flexible, detailed, and subtle in its descriptive aspects.
In all social classes, conversational language serves mainly
as a social lubricant, but in the lower-class the expository
function of language is relatively less prominent than in the
middle-class.' (Jensen, 1968:118-19)

It is also worth noting that although Jensen (1968) is concerned with language acquisition it contains no mention of the work of Ursula Bellugi, Roger Brown, Colin Fraser, Eric Lenneberg, David McNeill or Dan Slobin - to name only some of the more obvious omissions. (All these people had published work on language acquisition by 1967).

Bereiter et al. are not really interested in the way lower working-class children speak and, indeed, treat their speech with utter contempt.

> 'It seems to have been taken for granted by other educators that one must begin by encouraging the child to make the fullest pos-sible use of the language he already possesses before one may set about improving it. Our estimation of the language of culturally deprived children agrees, however, with that of Bernstein, who maintains that this language is not merely an underdeveloped version of standard English, but is a basically non-logical mode of expressive behaviour which lacks the formal properties necessary for the organization of thought. From this point of view, the goal of language training for the culturally deprived could be seen as not that of improving the child's language but rather that of teaching him a different language which would hopefully replace the first one, at least in school settings. The two languages share lexical elements and these we made use of, but apart from this we proceeded much as if the children had no language at all.' (Bereiter et al. 1966:112-13)

The remedy proposed here is the systematic eradication of certain non-standard dialects, and like some nationalistic governments which try to suppress minority languages, Bereiter et al. seem reluctant to accord the speech that they so dislike the status of language at all. Bereiter et al. are, moreover, mistaken in believing that Bernstein main-tains that this language is 'a basically non-logical mode of expressive behaviour'.

Describing the impact of school on the newly arrived working-class child Gahagan and Gahagan (1970) write thus:

> 'A child must learn that sentences are made of separate words which can be changed or rearranged. Also that such substitution and rearrangements are very important for conveying differences in meaning. Yet hitherto his experience may have been limited to invariant inevitable sequences like 'wipeyerfeetorI'lltellyerdad'. He will only have been dimly aware of words as separate entities.' (Gahagan and Gahagan 1970:14)

Clearly, the myth that the middle classes speak in words while the working classes speak in big, chunky, 'invariant' phrases dies hard.

3.   Theories ascribing verbal deficit primarily to social or psychological 'blocks' on performance

The most important exposition of a theory of verbal deficit in this category is to be found in Bernstein's work on language and social class, especially in the papers which appeared after 1961. Bernstein's earliest papers - Bernstein (1958) and (1959) - propose a theory of verbal deficit that occupies a position between that described in the previous section and that advanced in his later papers: on the one hand,

he makes negative value-judgements on working-class speech and stresses
what he sees as its inherent limitations and its deleterious cognitive
effects or correlates; on the other hand, he also sees verbal deficit
very much in terms of performance and specifically social and psycho-
logical constraints. With the introduction of the concepts of
restricted and elaborated codes in Bernstein (1962) there is a move
away from the kind of deficit theory discussed in the previous section,
but elements of Bernstein's early concept of verbal deficit can be
found 'ghosting' as late as Bernstein (1971).[2] In Bernstein's more
recent work,[3] however, the linguistic dimension of his theory of socio-
linguistic codes has become steadily weaker and apparently now relates
purely to performance:

> 'Because a code is restricted it does not mean that a child is
> non-verbal, nor is he in the technical sense linguistically
> deprived, for he possesses the same tacit understanding of the
> linguistic rule system as any child. It simply means that there
> is a restriction on the contexts and on the conditions which will
> orient the child to universalistic orders of meaning, and to
> making those linguistic choices through which such meanings are
> realized and so made public. It does not mean that the child
> cannot produce at any time elaborated speech in particular con-
> texts.' (Bernstein, 1969:197)

The view advanced in Bernstein (1962), that about 29% of the popu-
lation is limited to restricted code, has been discarded and Bernstein
now claims that all social classes are capable of producing at least
short stretches of speech regulated by either code, although access to
elaborated code is socially unequal. It is, however, worth questioning
the usefulness of Bernstein's distinction between competence and perfor-
mance. If, for example, child A finds a certain, recurring type of
situation so threatening that he always produces short, defensive
answers, while child B finds the same kind of situation less intimidating
and comes up with a much wider range of replies, the fact that child A
has the knowledge necessary to produce all the varieties of speech
uttered by child B will avail him nought: child A's short, defensive
answers in that kind of context will appear as part of his communicative
competence and may appear to be a feature of his idiolect.

The verbal deficit of the lower working classes is seen in
Bernstein's more recent work as twofold:

1. Although capable of producing elaborated speech variants,
   the lower working classes have less access than the middle
   classes to elaborated code. (Presumably this means that
   they use fewer elaborated speech variants and are in some
   sense less adept at handling them?)

2. The lower working classes tend to opt for restricted speech
   variants in contexts where elaborated speech variants are
   expected or required of them.

These two contentions are hard to evaluate, not least because
Bernstein's more recent work fails to provide adequate linguistic recog-
nition criteria for speech regulated by the two codes. Implicitness
and explicitness alone are too general for this purpose: what is
explicit for one person is often implicit for another and vice versa.
As far as one can tell from Bernstein's more recent papers and in
particular from Hawkins's two versions of the story about the children
playing football, implicitness consists above all in the alleged

inability of some working-class children to be as explicit in school as their teachers would wish.

It is highly debatable whether this inability - if, indeed, it really is an inability - calls for the elaborate theoretical apparatus of sociolinguistic codes to explain it. There are other, simpler explanations to hand. For example, when starting school some children will have more experience than others in interacting with a range of adults. It would be strange indeed if all children entering school were equally experienced and adept in interacting with a wide range of different people, and obviously some children expand their interactional capacities more than others, and in different directions. The fact that interactional capacities have linguistic correlates does not justify concepts of verbal deficit. In this connection it is interesting to note that some children (often only or first-born children) have difficulty in interacting with their peers. Yet no-one has suggested that this is due to any verbal deficit, despite the fact that some of the manifestations of such difficulties take the form of social or psychological 'blocks' on linguistic performance.

Some children will inevitably have a more positive attitude than others towards school and this may well be reflected, inter alia, in a greater willingness to respond positively to such linguistic demands as the school may make. If the school demands the use of a certain, perhaps rather formal style for some kinds of pupil-teacher exchanges it would hardly be surprising if children with a positive attitude towards school soon learned that style and when to use it, while other children signalled negative attitudes by not using it or even by deviating from it deliberately. After all, similar motives often underlie pupils' acceptance or rejection of other school conventions; and it is in these terms that children's speech in school should be interpreted. Of course, the reasons for children's attitudes towards school are often extremely complex, and it is interesting to note that Bernstein has devoted an increasing amount of attention to this kind of question. (see especially Bernstein, 1972, 1973b, 1975b) There is no good reason to suppose that the relative lack of success achieved in school by lower working-class children has anything to do with a verbal deficit.

It is tempting to speculate on the reasons for the popularity of Bernstein's verbal deficit theory. Could it be that by focusing attention on speech he diverts attention away from the situations in which people find themselves (both in the classroom and in society at large)? His reticence on the actual linguistic characteristics of the two dichotomous modes of speech which he proposes is an open invitation to those who read, disseminate and popularize his work to fill in these details for themselves; and this means that many people equate restricted and elaborated code with their own preconceptions about working-class and middle-class speech. As Rogers (1976:16) so aptly observes:

> 'The relative ease with which Bernstein can be misunderstood
> by even the most well-intentioned reader may partly explain why
> his work occupies a pre-eminent position in the literature of
> deprivation and in much of the educational practice and planning
> arising therefrom.'

Rogers (1976) distinguishes between Bernstein and 'apocryphal Bernstein' - the version of his work that seems to have become part of the folklore of some recently trained teachers. The difficulty with this distinction is that even Bernstein's more recent papers contain things that might merit the description of 'apocryphal Bernstein'.

For example, Hawkins's two versions of the story about the children playing football, quoted in Bernstein (1969) and (1971) present a caricature of the speech of middle-class and working-class children. Hawkins admits that the two versions are 'somewhat exaggerated' (Hawkins, 1969:86). The middle-class version contains no exophoric pronouns at all, while the working-class version has no less than six, or if one includes pronouns referring back to other exophoric pronouns, sixteen! Yet Hawkins's statistics show that when telling the story the middle-class children used on average 2.84 exophoric pronouns each, and the working-class children 4.12 (Hawkins, 1969:89). He does not make it clear whether he included pronouns referring back to other exophoric pronouns. Similarly, the imaginary conversation at the Millers is surely a caricature of middle-class life-styles? Although it is, of course, perfectly legitimate to postulate idealized types, it is a very different matter to offer them as examples; but this is precisely what Bernstein does in these cases. And what is even the 'most well-intentioned reader' to make of a passage like this?

> 'We can now ask what is responsible for the simplification and
> rigidity of the syntax of a restricted code. Why should the
> vocabulary across certain, semantic fields be drawn from a
> narrow range? Why are the speaker's intentions relatively
> unelaborated verbally? Why should the speech controlled by
> a restricted code tend to be fast, fluent, with reduced
> articulatory clues, the meanings often discontinuous,
> condensed and local, involving a low level of syntactic and
> vocabulary selection where the 'how' rather than the 'what'
> of the communication is important; above all, why should the
> unique meaning of the person be implicit rather than verbally
> explicit?' (Bernstein, 1970:146)

4. Conclusion

The deficitists take as their starting-point the relative lack of success among lower working-class children in school and propose various explanations and remedies. It is very doubtful whether the concept of verbal deficit can contribute anything useful in this area. Contrary to the intentions of most of the deficitists it amounts to little more than a re-statement, in pseudo-scientific garb, of the age-old myth that the 'lower orders' can't or won't speak properly. (Even Bernstein's more recent work is not immune to this kind of interpretation).

The main difference between the concept of verbal deficit and the traditional myth is that the allegedly inferior speech of the lower working classes is now ascribed to environmental factors rather than to slovenliness, innate inability or insolence, and no doubt this has the effect of making the myth more acceptable to some.

The concept of verbal deficit has helped to create a climate in which differences in speech are seen as highly relevant in education. Of course, it is important that attention should be paid to the language used in schools and the language that teachers expect of their pupils, but to regard differences in speech as a significant reason for failure in school is, as I suggested in the previous section, to confuse a mere symptom with the real causes.

NOTES

1. See Dale (1972), pp. 267-74 for a discussion of the problem of
    assessing language development.

2. See Gordon (1976) for a discussion of concepts of verbal
    deficit in Bernstein's writings.

3. The term Bernstein's more recent work is used in this section
    and the following section to refer to those of his papers
    published in and after 1969.

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