Recast in a New Light:

Insights for Clinical Practice from Typical Language Studies

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Abstract

This article reviews the nature and function of RECASTS, a well-documented way of responding to young children. Recasts have featured in intervention programmes for children with language delay (LD), but with mixed success. The aim of the current review is to provide a theoretically-motivated account of just those recasts that are likely to benefit LD children. To this end, the Contrast theory of corrective input is invoked, where the focus is on adult models that are directly contingent on child errors (Saxton, 1997). Both theoretical and empirical evidence suggests that this kind of input can facilitate the acquisition of adult-like grammatical competence.

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Recasts in Child Language Development

It has long been observed that when adults talk to young children, they often pick up on what the child says and reflect it back to them with certain embellishments (e.g., Brown & Bellugi, 1964; Cazden, 1965; Brown, Cazden & Bellugi, 1968). In current terminology, the adult RECASTS the child utterance, and in so doing "expands, deletes, permutes, or otherwise changes the [child utterance] while maintaining significant overlap in meaning" (Bohannon, Padgett, Nelson & Mark, 1996:551). Examples of recasts are given in (1) to (4) below.[1]

(1) Child: Does the bike go more quicker?

Adult: No, the car's quicker.

(2) Child: It might get loosed down the plughole.

Adult: Lost down the plughole?

(3) Child: You hold it.

Adult: I hold it, yeah.

(4) Child: A table.

Adult: Yeah, we'll have a little table here.[2]

The feature that unites these examples is the preservation by the adult of (much of) the child's meaning. As a conversational gambit on the part of the adult, recasts have a number of advantages. First, one can be more confident of gaining the child's attention, since one is talking about topics of interest to the child. There is also a

strong likelihood that the child will comprehend at least part of what is being said to them, since lexical items are being reflected back to them from their own utterance. Recasts are thus an effective means of maintaining conversation with very young children. It is not surprising, therefore, that they figure heavily in child-adult discourse (e.g., Brown & Bellugi, 1964; Chouinard & Clark, 2003). Of note is the fact that parents do not need to be prompted or trained to recast their children's speech. Instead, recasting seems to fall out naturally from the constraints imposed by the challenge of talking to a linguistically naive interlocutor. The easiest way to guarantee conversational success would appear to be to take the child's own speech as the impetus for developing the discourse.

The role of recasts in facilitating the flow of conversation is not in doubt. Less well understood is their role in facilitating the process of language ACQUISITION. A number of studies have reported an association between the provision of recasts and progress in the development of grammar (e.g., DePaulo & Bonvillian, 1978; Nelson, Denninger, Bonvillian, Kaplan & Baker, 1984; Seitz & Stewart, 1975). In addition, recasts have featured prominently in therapeutic intervention programmes for Language Delayed children (e.g. Camarata, Nelson & Camarata, 1994). However, discussion of the mechanisms by which recasts might exert their influence on the child is rather limited. Additionally, the reported effects of recasts are somewhat equivocal (e.g., Morgan, Bonamo & Travis, 1995; Proctor-Williams, Fey & Loeb, 2001). There are good reasons, therefore, to review the theoretical status of recasts for language development, as a prelude to considering their potential value in clinical interventions with Language Delayed children. In this way, both the efficiency and efficacy of such interventions may be enhanced.

This review will first focus on findings from Typical Language research in connection with the correction of grammatical errors. Two competing approaches will be considered, as a prelude to discussing the use of recasts in clinical practice with Language Delayed children. It will be shown that there is much overlap in the approaches of the two fields. In particular, it will be argued that recent work on corrective input with TL children provides a useful theoretical basis for interpreting the effects of (some) recasts. In particular, two aspects of recasts will be emphasised as bearing the potential to facilitate language development: (1) adult models directly contingent on child errors; and (2) the presentation of such models in a naturalistic, conversational manner. This approach stems from the so-called Contrast theory of corrective input (Saxton, 1997). It will be argued that this theoretical model provides a useful framework for empirical research on clinical practice with LD children.

Recast-as-Correction

Since the 1980s, recasts have attracted considerable attention in the Typical Language domain, owing to their potential function as a form of corrective input for grammatical errors (e.g., Bohannon & Stanowicz, 1988; Farrar, 1992; Morgan et al., 1995). Interest was inspired by the high face validity many recasts have in this respect. That is, many recasts LOOK, prima facie, like corrections, as in the following examples:

(5) Child: He's got little nice feet.

Adult: Oh, he has got nice little feet.

(6) Child: All by her own.

Adult: All by herself?

In the wake of these studies, two theoretical accounts have been advanced to help explain precisely how the child might exploit any corrective information on offer. The first account is inspired by the empirical discovery of DIFFERENTIAL RESPONDING, while the second focuses on specific points of CONTRAST between child and adult utterances. The notion of differential responding stems from the finding that parents recast ungrammatical child utterances more frequently than their grammatical counterparts. There is, then, a differential in the pattern of adult responding, whereby adult recasts are associated with child errors. This pattern has been established and confirmed in several studies of TL children aged between 1 and 5 years (Bohannon & Stanowicz, 1988; Demetras et al., 1986; Farrar, 1992; Hirsh-Pasek et al., 1984; Penner, 1987; Morgan & Travis, 1989). It seems conceivable, therefore, that children might learn to interpret recasts as a corrective signal. The idea is simply that a given recast has a fairly high chance of being associated with a grammatical error. In consequence, the child might be alerted to those occasions when the linguistic form of their speech is not acceptable from an adult standpoint.

Unfortunately, the simplicity of this proposal is deceptive, and a slew of conceptual problems were quickly raised against it. The core of the problem is that recasts are not EXCLUSIVELY associated with child errors (Marcus, 1993). They merely follow errors more often than correct utterances. In examples (1) and (2) above, the adult recasts child errors, while in (3) and (4), perfectly grammatical child utterances have been recast. As Bowerman (1988, p.96) observes, "if a child's first impulse on hearing such

responses is to question the adequacy of his grammar, he would be continually trying to revise perfectly acceptable rules." Since the child would, at the same time, be revising unacceptable rules, they would end up lurching from ‘good’ grammar to ‘bad’ to good again in a process of constant vacillation. However, this vision of instability is one that we can reject with some confidence. For progress in grammar, if measured in terms of the grammaticality of child speech, tends to be both incremental and gradual in its convergence on the adult state (e.g., Brown, 1973). In consequence, the fact that recasts are not exclusively associated with child errors presents a serious blow for the differential responding approach.

A further problem with this account is the implicit assumption that the CATEGORY of adult response (recast) is what the child identifies and responds to. What matters, on this view, is for the child to identify only that a recast has been supplied, since it is the response CATEGORY that signals (probable) ungrammaticality. Yet this places a heavy burden on the child, since the category of recast is extremely nebulous. Given the injunction to preserve a "significant overlap in meaning," everything else is free to vary. In fact, there is no limit (hence infinite variety) to the changes that can be rendered to the original child utterance. Moreover, these changes may apply equally well to phonological, semantic and/or pragmatic form as they do to the grammatical form of the child utterance. How is the young child of 18-months to identify the category of recast, as a signal concerning grammaticality, amidst this sea of changes? What would motivate such an endeavour in the first place? The child's ability to identify recasts and, moreover, identify their potential function as a form of corrective input for grammatical errors, is thus called into question.

This discussion has important consequences for the use of recasts in clinical practice with Language Delayed children (see below). Evidently, many practitioners regard recasts as a beneficial feature of interventions, whether or not they make the explicit link with grammatical errors, as in the TL studies. However, it is important to emphasise that whatever benefits are envisaged, they cannot derive from the young child's ability to identify the CATEGORY of recast. Instead, we should acknowledge that recasts are no more than an artefact. They are a product of discourse analysis, imposed on the data by researchers who are equipped with a panoply of linguistic and metalinguistic skills. More generally, it is important to establish secure theoretical grounds for the use of recasts. An explanation is required that considers both the needs of the language-learning child and also the mechanisms by which key input might meet those needs. Without an empirically testable model of this kind, there is a real danger that time, effort and resources will be wasted in the execution of clinical interventions.

A number of other problems emerge with the notion of 'recast-as-correction', when differential responding is taken as the framework for analysis (see Saxton, 1997 for more detailed discussion). Of these, just one final issue will be considered here, given its relevance for discussion of the second (contrastive discourse) approach to recasts mentioned above. This problem also stems from the primacy of the CATEGORY of recast, since an adult response category cannot target individual grammatical structures in need of repair. Instead, they apply blanket-fashion to an entire child utterance and, at best, can supply no more than a signal that "something is wrong somewhere." However, information of this calibre is not especially helpful. Instead, the child needs

to be apprised of which specific aspects of their utterance require attention (Pinker, 1989).

Overall, it is evident that patterns of differential responding are highly unlikely to function as a source of corrective information for the child. This conclusion is forced by the realisation that we cannot cast the young child as a "little linguist," analysing the input to carve it up into discourse categories like recast (Sully, 1895). And yet one is faced with the strong intuition that exchanges like those in (1), (2), (5) and (6) above constitute corrections by the adult of child grammatical errors. Likewise with the exchanges in (7) and (8) below. The second approach to these data takes this observation on board. In so doing, the so-called Contrast theory accepts as relevant only those recasts where the adult substitutes the correct alternative directly following a child error (Saxton, 1997; 2000).

(7) Child: He BITED someone.
Adult: He BIT someone?
(8) Child: I'm not INTERESTING of lunch.
Adult: You're not INTERESTED?

Of interest in this account is the direct contrast between critical linguistic forms across turns in the discourse (highlighted in (7) and (8) above). That these adult utterances also qualify as a form of recast is irrelevant, if not unhelpful, on this view. Observe that many recasts fall by the wayside in this approach, including the many recasts that are not even contingent on erroneous child utterances (e.g., (3) and (4) above). Many error-contingent recasts are also rejected, on the grounds that the changes rendered to

the child utterance are not relevant to the correction of the child's grammar. One is left, then, with a subset only of the recasts investigated by many researchers. It will be argued below that this subset of responses should be of particular interest to clinicians. More broadly, clinical practice with LD children might be usefully informed by a keener awareness of different kinds of recast and their potential to function in different ways for the child.

The Direct Contrast hypothesis explains how adult responses of the kind in (7) and (8) might fulfil a corrective function for the child. The corrective power of such exchanges lies in the immediate juxtaposition of child error and correct adult alternative. In this context, the contrast between the two forms is thrown into sharp relief. In (7), despite the fact that child and adult are talking about the same topic at the same time, the adult chooses to spurn the child selection bited, in favour of an alternative, bit. But why should the adult do this? If bited were a perfectly acceptable form, then the child might expect the adult to use it also (Levelt & Kelter, 1982; Bock, 1986). The adult's repudiation of the child form is especially salient in this context, since it immediately follows the child's own preferred form. In consequence, the child might be apprised of the contrast in usage between child and adult forms when it comes to the past tense form of bite.

It is predicted that direct contrasts, of the kind exemplified in (7), yield two critical pieces of information for the child. First, they inform the child about what is grammatical. And second, they reveal that their own form is ungrammatical. They bear the potential, therefore, to realign the child's knowledge of grammar in the direction of the adult system. Without the contrast in usage created in this context,

there is nothing in the adult use of bit that might lead the child to reject bited. And, in fact, it is a well-observed phenomenon that child speech often exemplifies alternate forms like bit and bited for many months, even years (e.g., Marcus, Pinker, Ullman, Hollander, Rosen & Xu, 1992). The same is true for many children with Language Delay (e.g., Leonard, 2003).

It is worth pointing out also that direct contrasts should, in principle, be applicable equally well to both errors of commission and errors of omission. Errors of commission include the case of bited, where the correct adult form has been overtly transformed in some way, often, as here, indicating the overly-general application of regular rules to irregular forms. Errors of omission, on the other hand, include all cases where the child omits obligatory elements, including morphemes, as in (9) below, an example constructed for expository purposes.

(9) Child: He's got coat.
Adult: Oh yes, he's got a coat.

The adult production of the obligatory indefinite article, a, contrasts with the child's preceding omission. It is plausible, therefore, that the contrast in usage between adult and child speech with regard to obligatory morphemes is rendered as salient as possible in exchanges of this kind. The Direct Contrast hypothesis thus provides a theoretical justification for investigating the use of error-contingent models in clinical practice with LD children. This point is lent weight by the fact that morpheme omission is tantamount to a defining characteristic (among others) when identifying

cases of Specific Language Impairment and other forms of Language Delay (Leonard, 2000).

A number of studies provide empirical evidence in support of the Direct Contrast hypothesis (e.g., Farrar, 1992; Saxton, 1997; 2000; Saxton, Kulcsar, Rupra & Marshall, 1998; Strapp, 1999; Strapp & Federico, 2000; Otomo, 2001; Chouinard & Clark, 2003; Saxton, Backley & Gallaway, 2003). In particular, four key findings have emerged. First, error-contingent adult models are more effective than adult models which are not contingent on child errors in improving the grammaticality of child speech. Second, the effects of corrective input have been recorded both in the child's immediate speech output and over longer periods of time (e.g. 5 weeks in Saxton et al., 1998; and 12 weeks in Saxton et al., 2003). Third, the effects of corrective input have been observed in naturalistic adult-child discourse for a wide range of different grammatical categories. And fourth, the effects of negative evidence can be isolated using an experimental methodology based on the use of novel verbs (Saxton, 1997).

Recasts with Language Delayed Children

Numerous studies have investigated recasts in the input to children with Specific Language Impairment or other forms of Language Delay (e.g., Camarata, Nelson & Camarata, 1994; Fey, Cleave, Long & Hughes, 1993; Nelson, Camarata, Welsh, Butkovsky & Camarata, 1996; Hovell, Shumaker & Sherman, 1978). These studies have demonstrated that parents of LD children naturally recast their children's speech, a finding which suggests that corrective input of the kind discussed above is not confined to TL children. At the same time, it has also emerged that recasts are often supplied less frequently for LD children than for their TL counterparts (e.g., Conti-

Ramsden, 1990; Conti-Ramsden, Hutcheson & Grove, 1995; Nienhuys, Cross & Horsborough, 1984). In addition, Fey et al., (2003) argue that, in order to be effective, Language Delayed children require recasts at the rate of about two per minute, a rate that is twice that found in normal conversation with TL children. However, it has also been demonstrated that parents of Language Delayed children can be trained to supply recasts as part of an intervention programme. For example, Fey, Cleave & Long (1997) report beneficial effects of recasts supplied by parents, although they do point out that clinicians achieved the most impressive results. It is clear, though, that recasts form a natural part of parent-child interaction with LD children, and also that the rate of occurrence can be increased via training of parents.

Recasts also feature as an important component in many speech and language therapeutic programmes for Language Delayed children. Their effects have also been monitored for a number of special populations of children who experience speech and language problems. These include: children who STUTTER (e.g., Weiss, 2002); children with PHONOLOGICAL DISORDERS (e.g., Forrest & Elbert, 2001); DEAF CHILDREN (e.g., Nienhuys, Cross & Horsborough, 1984; Pemberton & Watkins, 1987; Prinz & Masin, 1985); children with DOWN SYNDROME (e.g., Eadie, Fey, Douglas & Parsons, 2002; Yoder, Hooshyar, Klee & Schaffer, 1996); children with GENERAL LEARNING DISABILITIES (Yoder, Spruytenburg, Edwards & Davies, 1995); and children on the U.S. HEAD START programme (Pemberton & Watkins, 1987). Many of these studies report beneficial effects for recasts (e.g. Camarata et al., 1994; Hovell, 1977; Nelson et al., 1996). Yet there are several other studies where the findings are more equivocal. In this latter category, some studies report no effects of recasts on the learning of specific aspects of grammar in LD children (e.g., Fey & Loeb, 2002; Proctor-Williams et al., 2001).

Other studies report that recasts yield no special advantage over other forms of clinical intervention such as modelling (e.g., Fey et al., 1993; Forrest & Elbert, 2001; Pemberton & Watkins, 1987; see also below).

It is important to consider, therefore, just how efficacious recasting can be as an intervention technique. This is especially true when one considers that the use of recasts has risen in popularity, in some cases at the expense of other intervention forms such as modelling and imitation (Fey et al., 2003). In this regard, it behoves researchers to examine carefully the specific kinds of recast that are supplied to children. The preceding discussion of TL research has underscored the fact that RECAST is an extremely broad category. It is possible, therefore, that different interventions are supplying quite distinct forms of input to LD children, and a comparison of relevant studies provides some support for this suspicion. For example, in some cases, it is clear that the recasts supplied are closely akin to the Direct Contrasts described above (e.g., Fey, Cleave, Long & Hughes, 1993; Fey, Cleave & Long, 1997). In other cases, the recasts provided for children seem much more broadly based. For example, Fey & Loeb (2002) assessed the effects of yes-no questions, viewed as a form of "question recast," on the acquisition of auxiliary verbs. Yet such recasts do not automatically provide the kind of contrasts discussed above.

A further case in point is supplied by the intervention studies of Nelson, Camarata and colleagues (e.g., Camarata et al., 1994; Nelson et al., 1996). This work is partly inspired by the Nelson's work with TL children. For example, Nelson, Denninger, Bonvillian, Kaplan, & Baker (1984) investigated the effects of two kinds of recast: SIMPLE RECASTS , those responses in which only one major sentence component (subject,

verb or object) was altered by the parent; and COMPLEX RECASTS, which involved changing more than one component. It was found that simple recasts correlated positively with syntactic growth, whilst the occurrence of complex recasts in parental speech actually had a detrimental effect on the child's syntactic development. Meanwhile, an intervention for children with specific learning difficulties found that complex recasts were especially beneficial and, moreover, their effectiveness was enhanced when no immediate reply to the adult recast was demanded from the child (Nelson, Welsh, Camarata, Butkovsky & Camarata, 1995).

Of interest here is the fact that the definition of recast adopted in Nelson's studies is far removed from the notion of Direct Contrast introduced above. In all likelihood, some Direct Contrasts would qualify as recasts on Nelson's definitions. However, many other kinds of responses would also be included that neither follow errors nor pertain to the grammatical form of the child's utterance. It is difficult, therefore, to determine the precise reason for the successes observed in these interventions. On the one hand, they may be due solely to whatever Direct Contrasts were supplied to children. Alternatively, an entirely separate acquisition process, unrelated to grammatical errors and their correction, may have been responsible. One is faced also with the further complication that interaction effects may arise from a mixture of Direct Contrasts and simple versus complex recasts. There is a need, then, for empirical research that disentangles the various effects of different kinds of adult responses that, hitherto, have been lumped together under the recast umbrella.

Conclusion

Fey et al. (2003, p.5) argue that "grammatical intervention should function to increase the frequency, saliency, meaningfulness, and opportunity to make use of target constructions in pragmatically felicitous contexts." The purpose of this review has been to demonstrate that recasts, broadly construed, do not always conform to these requirements. However, the subset of recasts described here as corrective input for grammatical errors, does conform to Fey et al.'s strictures. Error-contingent adult models, supplied within the context of naturalistic conversational interaction, are associated with grammatical development for a number of grammatical structures (e.g., Saxton, 2000). It is important, therefore, that research on input effects be theoretically well motivated. The equivocal effects of recasts observed in clinical research may well be due to a lack of prior theoretical rigour. In particular, there is a danger that the adult responses identified in these studies are ill-defined and poorly motivated.

As mentioned above, many recasts are not even germane to the grammatical form of child utterances. Their emphasis lies instead on phonology, lexis or the pragmatic functions of language use. Of course, every level of language can be affected in cases of language delay and (some kinds of) recasts may or may not be relevant to the remediation of whichever problems are experienced. However, whatever one's interest, the foregoing discussion clarifies the need to identify precisely the adult responses of interest before embarking on empirical research. In so doing, pre-theoretical categories like RECAST should fall naturally by the wayside.

More generally, it is apparent that research on input effects in language acquisition is more likely to succeed if it finds inspiration in a sound theoretical framework. In this regard, the Contrast theory generates empirical predictions about a well-defined set of adult responses and their effects on the child's developing sense of grammaticality. In particular, it is predicted that the provision of error-contingent adult models can form the basis of a viable therapeutic programme for Language Delayed children. Support for this prediction is already forthcoming from a number of studies (e.g., Fey et al., 1993; Proctor-Williams et al., 2001). Future research within this framework will also yield valuable insights on how best to facilitate the acquisition of grammar in Language Delayed children.

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Footnotes

1 Unless otherwise indicated, all examples of adult-child interaction are taken from the diary study described in Saxton (1995), where the child was aged 4;1 – 4;9.

2 Examples (3) and (4) have been constructed for expository purposes.