

Blind Alley Developments (BADs): In defense of our approach

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In their discussion paper Payne & Young (henceforth **P&Y**) have clearly distinguished many points of discussion. We are answering only those related to differences in our approaches and in data interpretation.

We agree with P&Y (end of §1) that the two most puzzling questions are:

(a) “what exactly leads children astray into BADs – and why not all children?”

(b) “how do they manage to escape?”

But we must split up question (a) into two questions:

(a’) “what exactly leads children astray into [engaging in] BADs?”

(a’’) “why [do] not all children [engage in BADs]?”

Our basic answers, which we will specify and try to explain throughout our paper, are:

(a’) BADs represent a radical example of self-organisation.

(a’’) Especially strong BADs (as the most radical examples of BADs) are potential but unlikely developments, i.e. BADs are rather exceptional developments. Normal language development is represented by the absence of BADs. In addition to our types of weak BADs, that we discussed in our previous paper, there exists another type of weak BADs in simultaneous bilingual children. In a very recent paper, Čamber & Dressler (2022) have observed this type of language development with new data not disseminated so far; hence, evidently unknown to P&Y. We will also reinterpret fillers as weak BADs and end with an outlook on language change, which can never be produced by BADs.

Thus, P&Y’s examples of inflectional errors which all children tend to make (root infinitives in the second paragraph of §3.2 and of wrong strong preterits in mid §3.2) are not BADs, first because they are not opposed to what we also find at least rarely in adult language, second

because they are ephemeral phenomena, which may result in language change.

(b) Children escape by giving up BADs and by trying to use more adult-like forms, because they are constantly exposed to correct forms, which they receive in child-directed speech (CDS).

For example, our main Greek examples of strong BADs show first an expression of subjunctive via vowel lengthening, although Modern Greek has no long vowel phonemes. Afterwards, subjunctives are expressed in a second strong BAD via reduplication which is closer to adult models, such as the following:

1. syntactic reduplication (see Kallergi 2014), as in *víma víma* ‘step by step’;

2. the Ancient Greek lexical (not morphological) fossils of total reduplications *várvaros* ‘barbar’, *vórvoros* ‘muck/mud’, *tártara* ‘deep inside the earth’;

3. infrequent onomatopoetic word formations, e.g. *kakarízo* ‘cluck’, *mamadízo* ‘I act like a mother’.

However, none of these reduplications can be a model for the morphological child reduplications expressing the adult subjunctive.

The last stage of an escape from BADs is still more adult-like and consists in approaching the correct use of the correct verbal particle *na*, introducing all subjunctives which correspond to secondary clauses in other languages.

Let us start with the more important type of BADs, strong BADs (such as the two Greek ones mentioned above):

In the first paragraph of their §3.2, P&Y are wrong in stating about Greek and Russian child expression of subjunctive and verbal aspect respectively via reduplication that “reduplication, as a formal pattern, does appear in both languages”. For these are syntactic repetitions of whole words of all word classes (e.g. Greek *pende pende* ‘5 5’, i.e. ‘in groups of five’) or inflected word forms, cited as such already in our original paper, a far cry from inflectional word-initial repetition of one syllable.

We cannot follow P&Y’s interpretation of the French infinitive *partir* ‘go away’ in (3b) as root infinitive, because it represents an elliptic answer to the preceding question *Que veux-tu faire?* ‘what do you want to do?’, an ellipsis which is usual and correct in many languages. And the French examples of infinitives in (5a-b) can only be safely interpreted when the context is provided.

That generative interpretations (cf. Hoekstra & Hyams 1998) of root infinitives by universals of generative theory may be illusionary, appears in two (or even three) points:

1. Whereas French present infinitives are unmarked base forms of a verbal paradigm in addition to the present singular, English ‘infinitives’ are the basic uninflected word or citation forms. Therefore, root infinitives do not emerge in Finno-Ugric and Turkic, where the base form is the 3SG present and not the infinitive.

2. Root infinitives in many child languages often occur in a salient, word final position and are also prosodically salient, which facilitates their intake (Rowe 2015) by children (see Gillis 2003 for Dutch, Laaha & Bassano 2013 for German and French, Gagarina 2007 for Russian and in general on their positional prosodic and semantic salience).

3. Varlokosta *et al.* (1998) even claimed a Modern Greek correspondent of root infinitives (but this language has no infinitives, a property of the Balkan Sprachbund). This has been refuted by Hyams (2002) and by Christofidou & Stephany (2003), who argue that they should be described as perfective and imperfective non-past 3rd person singular finite verb forms.

Note that all morphological patterns replaced by our BADs are prosodically non-salient and all, with the exception of word-initial reduplication, are also positionally non-salient. For reduplication, this means that giving up internal vowel lengthening as Greek BAD and replacing it with the reduplication BAD, represents a progress in positional salience.

P&Y are right in stressing that morphological richness favours language acquisition via richness in their input, i.e. in CDS. We have shown this statistically both in general (Xanthos *et al.* 2011) and specifically for richness of diminutive systems (Dressler *et al.* 2019) and of other word formation systems (Dressler *et al.* 2021).

We cannot contribute anything directly to P&Y’s recent formulation of Yang’s Tolerance Principle (§3) and we agree with their statement about an inevitable shortcoming of spontaneous child language corpora in regard to “vocabulary measures of children”: “even the full transcripts can only capture a subset of the children’s vocabulary”. The only exceptions may be high-density corpora: whereas for adult vocabulary representative data may be available, this is impossible for continuously evolving child data.

Now let us turn to weak BADs (§3.1), such as the conspiracy (an old generative notion, which means that two different processes conspire in having the same effect, cf. Grannis 1972) in German compounds of both preserving first-constituent word-final *-e* with neither eliminating it nor adding the correct *-n-* interfix, as in *Lippe + stift* ‘lip stick’ and adding a wrong *-e-* interfix, as in neologistic *Zwerg + e + spiel* ‘dwarf-play’ for potential *Zwerg(-en)-spiel*: P&Y are correct in considering them analogies, but they are a specific kind of analogies, in so far as they are BADs

and cannot result in language analogy, in contrast to many analogies. In the German compound case, analogy is part of a conspiracy. Correct adult alternatives creating a compound from a word ending in *-e* (/ə/) are, e.g., from *Sprache* ‘language’ plus *Unterricht* ‘education’, either *Sprach + unterricht* or *Sprache + n + unterricht*.

In the Greek example of repetition of a diminutive suffix, as in *mam-ák-aka* ‘mum-DIM-DIM’, the Standard Greek prohibition of repetition (but not of combination) of diminutive suffixes is violated. This regards the word-final position which, due to the greater importance of the recency effect than of the primacy effect in early childhood (cf. Mehrani & Peterson 2017), is more salient positionally than the word-initial position in early childhood, such as the reduplications mentioned above.

What is still missing for a comprehensive view of weak BADs is a systematic comparison with adult slips of the tongue (lapsus).

We have to comment on P&Y’s observations on over-irregularisation: for a long time, we have replaced the binary opposition between regular and irregular (e.g. verbs) by arguing for an intermediate category of semiregular. Thus, especially riming words (cf. for French Kilani-Schoch & Dressler 2005) are often semiregular, such as English *sing*, *sang*, *sung* whereas the paradigm *bring*, *brought*, *brought* is irregular. Semiregular patterns can be easily extended in child language by analogy, such as in *bring*, *brang*, *brung* (cf. German *bring-en*, participle *ge-brung-en*), in contrast to irregular patterns. For example, conceivable preterits/participles like *flought* ← *fling*, have to our knowledge never been found in English child data. This can be probably explained by the Tolerance Principle.

One thing that we overlooked in our original paper is that “the possible rise and inevitable fall of fillers” (Dressler & Kilani-Schoch 2001) can be considered to be a weak BAD. They emerge and are later given up not only in French but in all other languages where they emerge in early language acquisition. They are weak BADs because of their (at least distant) relation to the input. This can be both a (free, clitic or bound) morpheme or a non-morphological salient part of a word.

We largely agree with P&Y’s cautious conclusions (§4), but we doubt that their statement “every little perturbation, such as a morpheme segmentation error (Peters 1983), can give rise to BADs” has some probability to be true, because in the massive amount of spontaneous data of dozens of children covering between 3 and 5 years of development of our Crosslinguistic Project in Pre- and Protomorphology in Language Acquisition, the only BADs that we found are those that we collected in our original paper, plus the fillers mentioned above.

We answer the initial question (a) “what exactly leads children astray into BADs – and why not all children?” for strong BADs in the following way within the framework of Natural Morphology (cf. Dressler et al. 1987; Dressler & Kilani-Schoch 2016): children have the option of any cognitively or semiotically based natural strategy, in our cases lengthening and reduplication, which are iconic for marked categories like subjunctive (*vs* indicative) and telic (*vs* atelic) aktionsart. But the constant direct or indirect contrast with their input (for the latter cf. Kilani-Schoch et al. 2009) is a formidable obstacle to use them and finally induces children to give them up.

As for the two strong BADs of the Greek boy Christos, we may now add that he is an analytic child and as such employs rather systematic strategies for creating form-meaning correlations (see Plunkett 1991).

We hope to have shown that for BADs we can, to a large extent, obtain the essential epistemological goal of restraining Paul Feyerabend’s ‘everything goes’. But more has to be done in contrasting and explaining frequent, less frequent and exceptional developments like BADs (cf. also Gülzow & Gagarina 2007).

We hope to have shown that the tools of Natural Morphology, as practiced in our research, can explain not only BADs to a certain extent, but also the relative chronology of different BADs, when compared with each other: the Greek diminutive suffix repetition, as in the call *mam-ák-aka!* ‘mum-DIM-DIM’, comes first of all BADs (except Russian reduplication, see below), since it is positionally more salient (due to the recency effect preferred in early childhood) and prosodically salient (because stressed). Greek reduplication comes later, because it is prosodically non-salient (because unstressed) and positionally less salient (because the primacy effect is less important than the recency effect). The German and French BADs emerge later: both are positionally and prosodically non-salient. The total reduplication of Russian emerges by far first of all BADs observed, because its total reduplication is most iconic and most salient, both prosodically (because stressed) and positionally (due to the recency effect).

The rarity of BADs means that normal child language development is represented by the absence of BADs. But there exists a type of child language development, which is opposite to BADs, and was never observed and described before Čamber & Dressler (2022). This paper describes and explains how the child development of two simultaneously acquired languages adapted to the input of both languages: Viennese simultaneous bilingual children adapted the only homophonous plural suffixations of Croatian and German (in *-e*) in each of the two languages to properties of both languages at the same time. We expect that this

type of weak BADs is more frequent than other BADs. This is now studied (in addition to her other topics) by Silvia Clemenzi in her Viennese PhD thesis on the acquisition of Italian and German by simultaneous vs successive bilingual children. Since Russian *-e* suffixation is more similar to the Croatian one than the Italian one (where the plural is differentiated according to gender), we hope that Gagarina's rich data of bilingual German children acquiring simultaneously Russian and German could be searched for BADs.

Labov (2001: 416) observed that "children must learn to talk differently from their mothers" and considers this an important source of language change. But BADs cannot lead to language change (already claimed for fillers by Dressler & Kilani-Schoch 2001). Also a language change resulting from mutual impact, as conceivable from simultaneous bilingual development, as described by Čamber & Dressler (2022), has never been observed in contact morphology.

What P&Y correctly identify as a central missing piece in many accounts of morphological acquisition, i.e. a learning-theoretic account of how children learn morphology, is still missing. However, Elizur Dattner (Tel Aviv University) has proposed (personal communication) at the recent international Pre/Protomorphology-workshop (Vienna, February 2023) that biological models of self-organisation (autopoiesis) could be adapted for modelling the development of morphological BADs.

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