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The power of Natural Linguistics: Four levels of increasingly persuasive evidence for its superiority over other linguistic theories

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Introduction

This paper has the ambitious to show that Natural Linguistics is very often the best model of linguistic analyses among all existing linguistic theories, moreover that it has been and still is very innovative.

A certain focus of the paper is on studies I've been involved in myself, because I know them best, and this may exaggerate the importance of studies done in Vienna and Poznań and within my own networks. This is also linked to the fact that I must be very selective due to limits of space. In regard to evaluation of publications and their theoretical stances, I rely on my 60 years of experience in evaluating linguistic work in Austrian and foreign universities and for journals (incl. many editorships) and on my experience in evaluating papers by others in Dressler (1982) and Dressler & Doleschal (1991). If evaluation seemed to be doubtful, I relied on the hermeneutic method of group interpretation initiated by Soeffner & Hitzler (1994) who adapted Popper's falsification method to discourse analysis: each of the participants in a group of discourse analysts has to propose an interpretation; the others have to try to falsify it; which analysis survives falsification attempts best, is considered to be the group's interpretation for the intended publication. On the other, in the analysis of child data I followed also the well-established internationally accepted methodology of MacWhinney (2000), see also our exposition in Dressler, Mattes and Kjærbæk (2021: 5-6) on the advantages and disadvantages of collection of spontaneous data vs. of formal experiments. I have to thank my team and my coauthors for their parts in our join publications that I cite here.

1. First level of evidence

The first level of evidence has the smallest importance for deciding between competing models, because it evaluates just which model has delivered the best analyses (or, at least, most analyses which have a sufficient degree of plausibility) of single topics:

My first example is poetic occasionalisms, defined by the Russian expert of genre analysis and stylistics Erik Chanpira (1966) as new morphologically complex words created for a specific poetic or theatrical function just for one passage in their literary texts and never reused by them afterwards. I have worked on it since Dressler (1981, on German, Ancient Greek, Latin, English, French, Italian authors, Russian futurists, the Polish poet Leśmian). Now in a joint paper on Joseph von Eichendorff, Johann Nepomuk Nestroy, Peter Handke, Arno Schmidt & James Joyce (Dressler et al. 2023) we have advanced to the point that we use 16 criteria for characterizing and differentiating the authors' occasionalisms. For example, the most audacious author in poetic licence is Arno Schmidt, as in G. *die Wolk+in* 'lit. the cloud+ess', which is ungrammatical for two reasons: a) grammatically potential feminine motion is possible only from masculine nouns, but *Wolke* is already feminine; b) feminine motion is only possible from animate nouns. This new creation has a sexist function.

My second example are diminutives. I have worked on them since Dressler & Merlini Barbaresi (1994a, b) and I'm certain that among all the living linguists I'm the one who has published and copublished the most pages on diminutives. We have worked on both occasionalisms and diminutives in German with the help of the most exhaustive national electronic corpus world-wide, the AMC established and annotated in the format of Sketch Engine in the ACDH-CH and which comprises all Austrian print media of the last three decades. More on diminutives later (§ 3, 4, 5).

My third example are tradenames, as described and explained for German and French by Ronneberger-Sibold (from 1996, to 2015; Ronneberger & Dressler 2023), cf. later on extragrammatic and marginal morphology (such as onomastic morphology).

My fourth example is plural formation, where we have published more than others on the following aspects: variation (Laaha et al. 2012; Schrödl et al. 2015; Mörth & Dressler 2014; Werner et al. 2017), acquisition (Laaha et al. 2011; Laaha et al. 2012; Korecky-Kröll et al. 2012; Schrödl et al. 2015) and the influence of pragmatics (Dressler & Mörth 2012; Schrödl et al. 2015; Werner et al. 2017).

Finally, I attribute to the first level of evidence that, in contrast to Natural Linguistics, generative grammar does not include text linguistics, although there are similarities between sentence syntax and text syntax, one difference being that in a discussion with Herbert Clark I metaphorically proposed, that generative asterisks, i.e., stars are much dimmer in the sky of text syntax than in the sky of sentence syntax. Also pragmatics has been only partially a subject of generative grammar, whereas we will see later the important role that pragmatics plays in Natural Linguistics.

This level is least important, since other models may point to specific other areas where they have published most.

2. Second level of evidence

Innovations on broader topics without comparably extensive and in-depth analysed correspondences in other theories are more important criteria for deciding among models:

My first example is phonotactics, where Dziubalska-Kołaczyk (starting with 2014, 2015), has innovated a lot with her team (e.g., Dziubalska-Kołaczyk et al. 2013).

This is the creation of her Beats-and-Binding-Model and by the introduction of the principles of Net-Auditory-Distance (NAD), which is clearly superior to sonority-based models, n also further and still ongoing progress made by her and her team. More on this later, when I'll deal with morphonotactics vs. pure phonotactics.

My second example are again diminutives, where the width and breadth of work on DIMs in Vienna and Poznań has no correspondence in other models. Here I exclude the grading of morphosemantic transparency/opacity I'm going to speak in the next section about the third level of evidence.

Rather I deal with the contrast between the semantically synonymous Austrian DIMs Common Geman *-chen* and typically Austrian and Bavarian *-erl*, as in *Kind+chen, Kind+erl* 'child+DIM'. They differ mainly in two pragmatic perspectives:

The first is the frequent pragmatic reference of *-erl* to Austrian identity (Ransmayr et al. 2022; Dressler et al. 2020), as in typically Austrian recipes and traditions in regard to types.

The second pragmatic perspective is the frequent emotional load of *-erl* DIMs and their often more ludic, non-serious character than of *-chen* DIMs as

theorized in general for DIMs by Dressler & Merlini Barbaresi (1994) and empirically proven, as will show in the next section on the third level of evidence.

As to *-erl* vs. *-chen* DIMs let us look at the results of Schwaiger et al. (2019), where we compared the relative frequency of tokens of *-erl* vs. *-chen* DIMs in different genres in Austria. In the exhaustive electronic corpus of Austrian print media in the AMC there are approximately twice as many *-chen* than *-erl* DIMs. In the much smaller and unpublished corpus established by Katharina Korecky-Kröll it's the other way round; but if the same mothers of this corpus speak to their children, i.e., in child-directed speech (CDS), the often use more *-chen* DIMs, in the wrong illusion that they are "more beautiful", as they say, as if German German were in general more beautiful than Austrian German. However, their children use more *-erl* DIMs, because they appear to feel more comfortable with them. Nothing like that has been ever done for any other language. But the greatest linguistic surprise in my more than 60 years as a linguist has come when the Alsatian Adrien Barbaresi analysed for our paper the use of both DIMs in Austrian tweets. In fact *-erl* DIMs are used 280 (!) times more often than *-chen* DIMs! This is the most massive proof for our claim in Dressler & Merlini's (1994) book that DIMs have more often pragmatic than semantic functions, specifically for their often non-serious and ludic use. Generally, tweets are considered to be a ludic and not very serious genre of personal messages – with partial exceptions in the intentions of Donald Trump.

More evidence for our claims on the priority of pragmatics over semantics in DIMs will be given in the next section on the third level of evidence.

My third example on this second level are excessives, the very highest degree of adjective gradation. The first linguist who dealt with them in Danish and Hungarian has been the founder of glossematics Louis Hjelmslev. The next and deeper analysis occurred in Dressler & Kiefer (1990). But the most extensive analysis of excessives took place in a special chapter in Dressler & Merlini Barbaresi (1994) with examples from Danish, Dutch, German and Hungarian. This was done in regard to a) pragmatic speech situations, as in *aller+höch+st* 'lit. all-highest' in reference to God or to a majesty, cf. *der aller+christlich+ste König von Frankreich*, German translation of Fr. *le roi tout chrétien de France* 'lit. the totally Christian king of France'. b) the analysis was also done in regard to pragmatic speech acts as in the very last culmination point of a listing text. An example in a fictive Nazi text by the Anti-Nazi writer Kurt Tucholsky was:

(1) Goethe war ein großer Deutscher
'Goethe was a great German'

(2) Zeppelin war der größte Deutsche
'Zeppelin was the greatest German'

(3) Aber der allergrößte Deutsche ist Adolf Hitler
'But the very greatest of all Germans is Adolf Hitler'

This is also an example of the Jakobsonian principle of the iconic coordination of the paradigmatic and syntagmatic axis of language, i.e., on the paradigmatic axis excessives represent the highest degree of adjective gradation, on the syntagmatic axis, excessives tend to in last position after a superlative.

My fourth example refers to grading the amount of morphotactic and particularly of morphosemantic transparency/opacity of morphologically complex words. We have done that first for German noun-based DIMs in Ransmayr et al. (2016; Schwaiger et al. 2017), where we differentiated 10 degrees: the most transparent can be exemplified by G. *Hos+erl* 'lit. trousers+DIM', the second degree by quasi-synonymous *Hös+chen*, with the pragmatic restriction that it can be used only about or towards children and women, but not about or towards men (a distinction that is never included into any dictionaries); an example for the third degree are *Frau+erl, Herr+l* (with haplology of underlying *Herr+erl*) 'lit. wife/woman+DIM, master+DIM' for the relation between dogs and their owners; the ninth degree can be illustrated with *Mädchen* 'girl' (younger than a woman), which has no synchronic base, but synonymous *Mäderl, Mädi*, which also appear to end in a DIM suffix; an example for the tenth, the most opaque degree is the baseless flower *Veilchen* 'violet', which appears to end in a DIM suffix and is not a very big flower.

As expected, we found a large amount of correlation between degree of morphosemantic transparency and type and token frequency: the more transparency, the more frequent.

Much earlier we had started to differentiate degrees of morphotactic transparency (as in the above-cited examples of Polish vodka, with most transparent suffixation, less transparent modification and least transparent subtraction, expressing, as noted already, a tendency for iconicity between morphotactics and morphosemantics. But here we can add that there is also a parallel tendency towards a corresponding degree of morphotactic and morphosemantic transparency.

Smaller scales of the degree of morphosemantic transparency have been used for English compounds by Mattiello & Dressler (2019, 2022).

My fifth example is the observation that the first semantic change effected by a first process of derivational morphology is much greater than the second. In Dressler & Merlini Barbaresi (2010) it has been explained why a violoncello is bigger than a viola. The original first Italian instrument was a *viola* (named after the similarity with a *Schnee+glöckchen* 'snowdrop, lit. snow+bell+DIM). From this base both the DIM *viol+ino* and the AUGM *viol+one* 'contrabass'. Since the amount of size change by a DIM and by an AUGM is the same, one could infer that its DIM *violon-c+ello* is as big as a viola. But the meaning change effected by the first process is more important than by the second.

There is an essentially similar case in Polish: I plan to coauthor a paper with the Poznań linguist Paulina Zydorowicz, on the similar two-part derivation change in Pol. *wod-a* [voda] 'water' → DIM *wód+k-a* [vudka] 'Polish vodka' → AUGM *wód-a* [vuda] 'a certain quantity of bad vodka'. Again, the meaning change effected by the first process is more important than the change by the second. This leads to a second explanation by NatLing on an abstract level of iconicity: the more important meaning change 'water' → 'vodka' is iconically expressed by two formal processes (suffixation and root vowel change), the less important meaning change 'vodka' → 'bad vodka' by just one formal process. A similar case is It. *libro* 'book' → DIM *libr+etto* 'libretto' → AUGM *libr+ett+one* 'unusually long libretto'.

The first step of the Polish derivations is more natural than the second step in regard to iconicity: the first consists of the most iconic process of suffixation and of the moderately iconic process of modification, the second step of the anti-iconic, and thus very unnatural process of subtraction.

Our explanation is insofar one of NATLing, because there is an iconic relation between form and meaning, second by the general cognitive principle of precedence.

This seems to be a rather local phenomenon, but we can show that this is a general phenomenon of derivational morphology, such as in the two-part derivational change *nominal* (several meanings) → *nominal+ize* (one specifically linguistic meaning → *nominal+iz+ation* (same basic meaning): again, the first meaning change is more important than the second one. This is also true for pragmatic changes, as in hypocoristics: normal first name *Elisabeth* → pragmatic hypocoristic *Liz* → further hypocoristic derivation → *Lizz+y*; analogously for our PLM organizer: *Katarzyna* → hypocoristic *Kasia* → *Kasi+ula* (her daughter's nickname in infancy), which represents a smaller pragmatic change, only an important semantic change.

This seems to be such a simple explanation, that I was astonished not to have read or heard it anywhere, maybe due to may ignorance or forgetfulness. If this is really innovative, I plan to work on it more, together with the Italian anglicist Elisa Mattiello. Then this may rather belong to the next higher level of importance.

3. Third level of importance of evidence

To this level I attribute descriptions and explanations of important innovations which have been described and explained much less or not at all in other theories or where our innovations have been widely accepted:

My first example is morphonotactics, introduced as a specific subdiscipline by Dressler & Dziubalska-Kołaczyk (2006), combining the first author's results on the typological impact of morphological richness and the second author's results in phonotactics, as already discussed before. This has led to a great number of publications, especially by Poznanian and Viennese, but also Croatian, Ukrainian, Slovak, Lithuanian, Italian and French authors, ranging from synchronic computerlinguistic descriptions (Dressler et al. 2015; Hliničanová et al. 2017; Dressler & Kononenko 2020; Dressler et al. 2021), early stages of acquisition (as in Zydorowicz 2019; Kelić & Dressler 2019), to diachrony (Ritt 2019; Dressler et al. 2019), casual speech (Zydorowicz 2019). Nothing comparable has been achieved elsewhere.

My second example is again morphopragmatics, created as a new discipline based on NatMorph and the pragmatics of speech situations and speech acts, in the prepublication of Dressler & Merlini Barbaresi (1978), published in 1991a. They further elaborated the theory of morphopragmatics in many publications, notably in their volume of 1994, where they abundantly discussed diminutives andx excessives, as already mentioned, up to Merlini Barbaresi & Dressler (2020). In their book they also dealt with the morphopragmatics of plurals and Japanese honorifics. But their main focus has been on DIMs. They developed and explained the interwar observations of Leo Spitzer and Amado Alonso**,** that the scope of pragmatically used DIMs is often not the word with its DIM suffix, but a whole speech act. This shows in translations, such as in the aria of Figaro in Mozart's opera Nozze di Figaro, when Figaro challenges his absent master, the count Almaviva with a depreciative DIM: the original Italian text is: *Se vuol ballare signor cont+ino* 'lit. If wants to dance Mr./Master count+DIM'. The current German translation is *Will der Herr Graf ein Tänz+chen wagen?* 'lit. Wants

the Mr./Master count a dance+DIM dare?', where the DIM suffix is transposed within the speech act and in the corresponding speech situation.

Further arguments for the non-serious, ludic character of DIMs, not yet mentioned in the preceding section comes from baroque shepherd poetry, where DIMs abound. They also abound in Mozart's opera *Cosi fan tutte*, where love is treated most often as non-serious and ludic, whereas they are much less frequent in his opera Don Giovanni, when love is treated as serious, fatal, even devilish (as in Don Giovanni's end). Merlini & Dressler dealt in other publications (first 1991b) also with interfixes added to Italian DIMs and found that they have only pragmatic functions (cf. also Biscetti & Dressler 2002).

Arguments for the priority of pragmatics over the semantics of DIMs, not yet mentioned, come from the following three areas in regard to their relations to AUGMs, which differ from DIMs semantically by the opposed size change, whereas they have much in common: a) in synchronic variation: when an Italian woman invites her young child or grand-child into her bed, she can use both the DIM *lett+ino* and the AUGM *lett+one*, depending on the context; b) diachrony: the same Latin suffixes have developed to DIMs in French, e.g., in *aigl+on* 'lit. eagle+DIM', the metaphorical eponym of the Herzog von Reichstadt, the son of emperor Napoleon I, who was considered contrastively as metaphorically the big eagle. However, the same suffix has become an AUGM in Spanish *-ón* and Italian *-one*; c) young children use first DIMs only with basic pragmatic meanings, whereas the first use for semantic smallness only adjectives meaning 'small' (Savickiene & Dressler eds. 2007). Only when later Italian children start to use AUGMs, they start to use DIMs also for the semantic meaning of smallness.

Nothing comparable has been achieved elsewhere, and when Spanish and other linguists publish morphopragmatic works, they follow the lead of Dressler & Merlini Barbaresi (1994).

My third example comes also from morphopragmatics: predominantly pragmatical complex words do not block each other. I discuss two instances: a) DIMs, when pragmatically used do not block each other, i.e., there is neither lexical nor pattern blocking. This is illustrated best with Italian DIM suffixations from recent English loan words, e.g., *vipp+ino, vipp+uccio, vipp+e/ar-ello, vipp+otto, vipp+etto*; we found more than 40 such DIM variations, e.g., derived from *week-end, hacker* (Dressler et al. 2019). b) German and Danish expressive intensifying adjective compounds (characterized by two main stresses) have no mutual blocking either, e.g., in G. *stóck+dúmm, blítz+dúmm, stróh+dúmm, sáu+dúmm* 'intensely stupid, lit. stupid like a stick+/lightning/straw/sow' and

sáu+kált / wóhl/ schnéll / téuer / billig / gút / géil / schlécht / schwér / kómisch / stark / cóol (= neologism!) 'intensely, lit. sow+cold / well / fast / expensive / cheap / good / good (in juvenile colloquial speech) / bad / difficult / comical / strong' etc. (Korecky-Kröll & Dressler 2022). A paper by Dressler, Basbøll & Christensen on comparing German and similar Danish expressive intensifying adjective compounds is forthcoming**.**

My fourth example are weak morphological blind alley developments of young children, which have never been described nor explained: blind alley developments are young children's self-organized processes, which are ephemerous, because constantly contradicted by their input. Weak blind alley developments are based on their input but develop against these input structures.

One case is the conspiracy developed by three Viennese children to have an *-e-* shwa at the boundary of the two constituents of German nominal compounds. The two input bases are a) interfixation of *-n-* after a final *-e-* shwa of the first constituent, as in *Garage-n+eigentümer* 'garage owner'; b) interfixation of *-er-* or *-en-* after the first constituent, as in *Kind-er+garten*. Now the conspiracy of this blind alley development consists in both not inserting *-n-*, as in *Platte+spieler* 'disk recorder' and replacing an *-er-* or *-en-* with an *-e-* interfix, as in *Kinn-e+garten* (more in Korecky-Kröll et al. 2017).

My other case (selected among several) concerns a before never observed phenomenon in simultaneous bilingual acquisition of young children, as extensively described and explained in Čamber & Dressler (2023) four Viennese children with Croatian migration background developed a blind-alley development in their simultaneous bilingual development of noun plural formation. The two most essential properties of the two plural formation systems are:

1. all Croatian nouns ending in *-a*, either feminine (in majority) or masculine replace this *-a* with *-e* in the plural, all other masculine plurals end in *-i* (with possible morphological obstruent palatalisation before *-i*) or *-e/ovi*, all neuter plurals in *-a*; zero plurals do not exist. This must sound very familiar to those among you who are familiar with other Slavic languages and partially familiar to those among you who are familiar with (Late) Latin.
2. German plural formation is much more complex and less transparent and regular. The other most important differences are: *-e* plurals are productive with masculine and neuter nouns with or without umlaut, as in *Bus* → *Buss+e* 'buses' vs. *Kuss* → *Küss+e* 'kisses', unproductive with feminines (incl. umlaut, if the root vowel is umlautable, as in *Braut* →

Bräut+e ‘brides’; there are productive zero plurals; plural suffixes may consist of, or end in, a consonant: *-s, -en, -er*.

Let us concentrate on the impact of German on Croatian plurals: as in German, mostly the *-e* plurals, which are the only plural suffixes that occur in both languages, are overgeneralized, in Croatian due to German influence also of masculine nouns (e.g., often masc. *krevet+e* ‘beds’, *vlak+e* ‘trains’), seldom of neutral nouns (only *djec+e* ‘children’, *sel+e* ‘villages’), again an additional influence of German, where masculine *-e* plurals are more productive than neutral *-e* plurals. Moreover, due to the influence of the frequent German zero plurals, which do not exist in Croatian, in tests Croatian singulars, such as *zec* ‘hare’, *tigar* ‘tiger’ (the correct form would be *tigr+ovi*). Finally due to mutual influence morphological palatalisations are partially avoided in Croatian, similar to umlaut in German.

These developments represent an overlay of the input structures of the two languages, which can be modelled in terms of a superposition, a concept loaned from quantum physics and adapted to linguistics by Mattiello & Dressler (2022, cf. Dressler et al. 2023 in print).

My final example (which might be considered to belong to the following section 5) is the case of postdiction of how the Late Latin first plural indicative and subjunctive developed in all Italian dialect regions (Spina & Dressler 2011). We postdicted not only which developments, among all morphology-induced conceivable ones, occurred vs. did not occur, but also which ones are more natural than others and therefore occur in more dialects. It is doubtful whether another theory can muster the same explanatory factors.

4. Fourth level of importance of evidence

I attribute to this highest level of importance of evidence the analysis of new phenomena which Natural Linguistics can explain, but other (acquisition) theories cannot, unless they introduce important changes. i.e., strong blind alley developments in morphology (Dressler et al. 2020, 2023) and syntax: they have no base in the input, which would be necessary for usage-based approaches (incl. constructional morphology); and in generative nativist approaches no parameters are foreseen for them in Universal Grammar. My examples are:

(a) Several young Russian children have used total or partial morphological reduplication for expressing iconically iterativity of action, durative aktionsart or imperfective aspect, as in onomatopoetic *bax* when reporting that an object has fallen down vs. *bax+bax*, while knocking on various objects around the child. Another of several examples is *tuk+tuk*, 'I'm hammering' (adult *stuč+u*) from imperfective *stuč+at'* and quasi-synonymous perfective *stuk+nut'*.

Such reduplications have often been dealt with within NatMorph among the preferences for iconicity of NatLing.

(b) A young Greek boy has used diminutive suffix repetition, as in the call *mam-ák-aka!* 'mum-DIM-DIM!', which does not exist in Standard Greek (only in the dialect in one remote island, to which he had never been exposed). Diminutive suffix repetition as an iconic means of semantic or pragmatic intensification exists in many languages.

(c) The most impressive cases of strong BADs have been created by the brother of the above-mentioned Greek boy in producing two strong BADs in a row for expressing the subjunctive which is very frequent in Modern Greek, because it has no infinitive. An example of the unmarked indicative in the target language and in the boy's input is *kán+i* '(s)he makes' vs. the marked subjunctive *na kán+i*. For two weeks the boy eliminated the unstressed particle *na* and produced the subj. *ká:n+i* with internal root vowel lengthening. Then he gave up this blind alley for a few days, but afterwards he used for several weeks morphological reduplication as a very frequent technique productively applied to many verbs: *ka+káni*. Since Modern Greek has neither long vowels or non-emphatic vowel lengthening nor morphological reduplication, both strategies cannot be explained by usage-based or nativist approaches. But they are easily explained by the model of NatMorph as two iconic processes, and notably the more iconic and thus more natural BAD of reduplication has replaced the less iconic BAD of internal modification via root vowel lengthening. This represents, as expected, an advance in naturalness. Moreover, internal modification via root vowel lengthening is positionally less salient than word-initial reduplication.

Paradoxically Ancient Greek (like several other archaic Indo-European languages) has used both the process of vowel lengthening and of morphological reduplication, albeit under different conditions: a) Ind. *paideú+o+men* 'we teach' vs. Subj. *paideú+o:+men* 'let us teach!', b) perfect *pe+paideú+ka+men*.

(d) As to Natural Syntax, Alona Kononenko whose PhD thesis on a very different topic, was supervised by Katarzyna Dziubalska-Kołaczyk and by me, has observed, together with befriended mothers, the following strong BAD of young children acquiring Polish, Ukrainian or Russian: these children put the unstressed proclitic negation in clauses, such as *ne čekam* 'I don't wait' in clause-final position and stressed it. This can be easily be explained by NatLing: negative sentences are marked in contrast to unmarked positive sentences and therefore also later acquired; the marked negation is put into final position, which in young children is the positionally most salient one due to the recency effect of young children; and being stressed represents more prosodic salience. Several papers are planned to be written by Alona Kononenko jointly with me, and hopefully in the future with our long-term coauthors and project participants from other Slavic countries. When studying children who acquire simultaneously German and Croatian as first languages, we expect to find another case of overlay (superposition) of German and Croatian target structures, because the German correspondence of 'I don't wait' *Ich warte nicht* has the stressed negation in final position.

Strong BADs ae the most radical examples of children's self-organisation and therefore occur rarely. Such radical self-organisation (autopoiesis) is inherently exposed to the epistemological scandal of Paul Feyerabend's 'anything goes'. However, NatLing avoids this danger by dramatically reducing the conceivable number of BADs, in fact I'm certain that we have already found most of the potential types of BADs.

5. Conclusions and outlook

With the preceding text I hope to have shown, among les important points, that our methodology is superior to that other grammar models (§1). I have introduced a before never used four-step gradation of importance of arguments for the superiority of a model and argued that strong blind alley developments can be explained only by Natural Linguistics nowadays.

And with this I've arrived at a brief outlook on ongoing and future work in Natural Linguistics: how much is going on in NatMorph has been already amply presented by Dressler (2023) in my contribution to the festschrift for Bernhard Hurch. Much more already achieved and ongoing work in NatLing from phonetically based phonology to extragrammatical and toponomastic morphology

and to Natural text linguistics and pragmatics will be presented in the forthcoming *Cambridge Handbook of Natural Linguistics* edited by K. Dziubalska-Kołaczyk, P. Donegan & W.U. Dressler and published by Cambridge University Press. In nearly all discussed areas and subareas of linguistics work is going on with innovations within our theoretical framework.

Bibliography

Biscetti, Stefania & Wolfgang U. Dressler. 2002. Funzioni testuali degli alterativi [Textual functions of altratives]. In R. Bauer & H. Goebl (eds.), *Parallela* 9. Wilhelmsfeld: Egert. 53–68.

Čamber, Marina & Wolfgang U. Dressler. 2023. Simultan-bilingualer Pluralerwerb von Deutsch und Kroatisch. *Zagreber Germanistische Studien* 31. 5–30.

Chanpira, Erik I. 1966. Ob okkazional'nom slove i okkazional'nom slovoobrazovanii [On occasional word and occasional word formation]. In E.A. Zemskaja & D.N. Šmelev (eds.), *Razvitie slovoobrazovanija sovremennogo russkogo jazyka*. Moskva: Nauka. 153–166.

Dressler, Wolfgang U. 1981. General principles of poetic license in word formation. In H. Weydt (ed.), *Logos semantikos: Studia linguistica in honorem Eugenio Coseriu*. Berlin: de Gruyter / Madrid: Gredos. 423–431.

Dressler, Wolfgang U. 1982. Aspects of text typology and attribution. In S. Allén (ed.), *Text Processing. Proceedings of the Nobel Symposium* 51. Stockholm: Almqvist. 637–647.

Dressler, Wolfgang U. 2023. Zum Stand der Forschungen in der Natürlichen Linguistik am Beispiel der Natürlichen Morphologie. In J. Brunner, P. Hödl, V. Mattes & T. Schwaiger (eds.), *Grazer Linguistische Studien* 94. 87–120.

Dressler, Wolfgang U. & Ursula Doleschal. 1991. La presenza italiana nella linguistica internazionale. Un'indagine esplorativa. *La linguistica italiana oggi, Società di Linguistica Italiana* 21. Roma: Bulzoni. 67–86.

Dressler, Wolfgang U., Vanessa Hannesschläger, Dietmar Kunisch, Elisa Mattiello & Barbara Tumfart. 2023. A comparison of occasionalistic compounds of Joseph von Eichendorff, Johann Nepomuk Nestroy, Peter Handke and James Joyce. Submitted to *LiLi*.

Dressler, Wolfgang U., Basilio Calderone, Sabine Sommer-Lolei & Katharina Korecky-Kröll (eds.). 2021. *Experimental, acquisitional and corpus linguistic approaches to the study of morphonotactics.* Vienna: Austrian Academy of Sciences Press.

Dressler, Wolfgang U. & Katarzyna Dziubalska-Kołaczyk. 2006. Proposing morphonotactics. *Italian Journal of Linguistics* 18. 249–266.

Dressler, Wolfgang U., Miroslava Hliničanová, Matej Ďurčo, Karlheinz Mörth, Katharina Korecky-Kröll. 2015. Phonotactic vs. morphonotactic obstruent clusters in Slovak and German. *Italian Journal of Linguistics* 27. 45–60.

Dressler, Wolfgang U. & Ferenc Kiefer. 1990. Austro-Hungarian morphopragmatics. In W.U. Dressler et al. (eds.), *Contemporary morphology*. Berlin: de Gruyter. 69–77.

Dressler, Wolfgang U. & Alona Kononenko 2020. Main differences between German and Russian (mor)phonotactics: a corpus-based study. In A. Kiełkiewicz-Janowiak, M. Wrembel & P. Gąsiorowski (eds.), *Approaches to the study of sound structure and speech. Interdisciplinary work in honour of Katarzyna Dziubalska-Kołaczyk*. New York: Routledge. 145–158.

Dressler, Wolfgang U., Alona Kononenko, Sabine Sommer-Lolei, Katharina Korecky-Kröll, Paulina Zydorowicz & Laura Kamandulytė-Merfeldienė. 2019. Morphological richness, transparency and the evolution of morphonotactic patterns. *Folia Linguistica* 53.

Dressler, Wolfgang U., Veronika Mattes & Laila Kjærbæk. 2021. Introduction. In: V. Mattes, S. Sommer-Lolei, K. Korecky-Kröll & W.U. Dressler (eds.), *Acquisition of derivation*. Amsterdam: Benjamins. 1–19.

Dressler, Wolfgang U., Elisa Mattiello & Veronika Ritt-Benmimoun. 2023. Morphological richness, diminutives, and priority of morphopragmatics over morphosemantics: With data from Arabic, English, German, and Italian. In S. Manova, K. Korecky-Kröll & L. Grestenberger (eds.), *Dissecting morphological theory: Diminutivization*. Berlin: de Gruyter.

Dressler, Wolfgang U. & Lavinia Merlini Barbaresi 1987. Elements of morphopragmatics. *L.A.U.D*. 1987. 1–29

Dressler, Wolfgang U. & Lavinia Merlini Barbaresi 1991a. Elements of morphopragmatics. In J. Verschueren (ed.), *Levels of linguistic adaptation*. Amsterdam: Benjamins. 33–51.

Dressler, Wolfgang U. & Lavinia Merlini Barbaresi. 1991b. Interradical interfixes: contact and contrast. In V. Ivir & D. Kalogjera (eds.), *Languages in contact and contrast*. Berlin: Mouton de Gruyter. 133–145.

Dressler, Wolfgang U. & Lavinia Merlini Barbaresi. 1994. *Morphopragmatics*. Berlin: Mouton de Gruyter.

Dressler, Wolfgang U. & Lavinia Merlini Barbaresi. 2010. Why is a violon-c-ello bigger than a viola. In R. de Cillia, H. Gruber & M. Krzyżanowski (eds.), *Politik Diskurs Identität*. Tübingen: Stauffenburg Verlag. 45–50.

Dressler, Wolfgang U., Lavinia Merlini Barbaresi, Sonja Schwaiger, Jutta Ransmayr, Sabine Sommer-Lolei & Katharina Korecky-Kröll. 2019. Rivalry and lack of blocking among italian and German diminutives in adult and child language. In F. Rainer, F. Gardani, W.U. Dressler & H.C. Luschützky (eds.), *Competition in inflection and word-formation*. Cham: Springer Nature Switzerland. 123–143.

Dressler, Wolfgang U. & Karlheinz Mörth. 2012. Vom Einfluss der Pragmatik auf die Grammatik, insbesondere in der Entwicklung der Pluralbildung. Eine corpusbasierte Untersuchung. In P. Ernst (ed.), *Historische Pragmatik. Jahrbuch für Germanistische Sprachgeschichte* 3. 75–93.

Dressler, Wolfgang U., Sonja Schwaiger & Jutta Ransmayr 2020. The role of word-formation families and subfamilies in the organisation of German diminutive compounds. In L. Körtvelyessy, S. Valera & P. Stekauer (eds.), *Complex words: Advances in morphology*. Cambridge: Cambridge University Press. 293–310.

Dressler, Wolfgang U., Miroslava Hliničanová, Matej Ďurčo, Karlheinz Mörth & Katharina Korecky-Kröll. 2015. Phonotactic vs. morphonotactic obstruent clusters in Slovak and German. *Italian Journal of Linguistics* 27. 45–60.

Dziubalska-Kołaczyk, Katarzyna. 2014. Explaining phonotactics using NAD. *Language Sciences* 46. 6–17.

Dziubalska-Kołaczyk, Katarzyna. 2015. Are frequent, early and easy clusters also unmarked? *Italian Journal of Linguistics* 27(1). 29–44.

Dziubalska-Kołaczyk, Katarzyna, Paulina Zydorowicz and Michał Jankowski. 2013. English morphonotactics: A corpus study. *The Phonetician. A Publication of International Society of Phonetic Sciences* 107–108. 53–67.

Hliničanová, Miroslava, Matej Ďurčo, Karlheinz Mörth & Wolfgang U. Dressler. 2017. Phonotaktische versus morphonotaktische Konsonantengruppen im Slowakischen und Deutschen: Eine kontrastive korpuslinguistische Untersuchung. In: C. Resch & W.U. Dressler (eds.), *Digitale Methoden der Korpusforschung in Österreich*. Wien: Verlag der Österreichischen Akademie der Wissenschaften. 159–177.

Kelić, Maja & Wolfgang U. Dressler 2019. The development of morphonotactic and phonotactic word-initial consonant clusters in Croatian first-language acquisition. *Suvremena Lingvistika* 45. 179–200.

Korecky-Kröll, Katharina & Wolfgang U. Dressler. 2022. Expressive German adjective compounds in hate speech. In N. Knoblock (ed.), *Grammar of hate: Morphosyntactic features of hateful, aggressive, and dehumanizing discourse*. Cambridge: Cambridge University Press. 197–221.

Korecky-Kröll, Katharina, Gary Libben, Nicole Stempfer, Julia Wiesinger, Eva Reinisch, Johannes Bertl & Wolfgang U. Dressler. 2012. Helping a crocodile to learn German plurals: children's online judgment of actual, potential and illegal plural forms. *Morphology* 22. 35–65.

Korecky-Kröll, Katharina, Sabine Sommer-Lolei & Wolfgang U. Dressler. 2017. Emergence and early development of German compounds in Dressler. In W.U. Dressler, F.N. Ketrez & M. Kilani-Schoch (eds.), *Nominal compound acquisition*. Amsterdam: Benjamins. 19–37.

Laaha, Sabine & Wolfgang U. Dressler 2012. Suffix predictability and stem transparency in the acquisition of German noun plurals. In F. Kiefer, M. Ladányi & P. Siptár (eds.), *Current Issues in Morphological Theory. (Ir)regularity, analogy and frequency*. Amsterdam: Benjamins. 217–235.

Laaha, Sabine, Laila Kjaerbaek, Hans Basbøll & Wolfgang U. Dressler. 2011. The impact of sound structure on morphology: An experimental study on children's acquisition of German and Danish noun plurals focusing on stem change. *Acta Linguistica Hafniensia* 43. 106–126

MacWhinney, Brian. 2000. *The CHILDES Project: Tools for Analyzing Talk*. Mahwah, NJ: Lawrence Erlbaum.

Mattiello, Elisa & Wolfgang U. Dressler 2019. The morphosemantic transparency/opacity of novel English analogical compounds and compound families. *Studia Anglica Posnaniensia* 53. 67–114.

Mattiello, Elisa & Wolfgang U. Dressler. 2022. Dualism and superposition in the analysis of English synthetic compounds ending in *-er*. *Linguistics Online* 2022. https://doi.org/10.1515/ling-2021-0235.

Merlini Barbaresi, Lavinia & Wolfgang U. Dressler. 2020. Pragmatic explanations in morphology. In V. Pirrelli, I. Plag & W.U. Dressler (eds.), *Word knowledge and*

word usage: A cross-disciplinary guide to the mental lexicon. Berlin: de Gruyter, 405–451.

Ransmayr, Jutta, Sonja Schwaiger & Wolfgang U. Dressler. 2022. Semantische Untersuchungen zu österreichischen Diminutiven und Diminutivkomposita. *Zeitschrift für Dialektologie und Linguistik* 89. 82–98.

Mörth, Karlheinz & Wolfgang U. Dressler. 2014. German plural doublets with and without meaning differentiation. In F. Rainer, W.U. Dressler, F. Gardani & H.C. Luschützky (eds.), *Morphology and meaning*. Amsterdam: Benjamins. 249–258.

Ransmayr, Jutta, Sonja Schwaiger, Matej Durco, Hannes Pirker & Wolfgang U. Dressler. 2016. Graduierung der Transparenz von Diminutiven auf *-chen*: Eine korpuslinguistische Untersuchung. *Deutsche Sprache* 44. 261–286.

Ritt, Nikolaus. 2009. Exploring Middle English (mor-)phonotactics: the case of word final /nd/. *Selim* 16. 65–89.

Ronneberger-Sibold, Elke. 1996. Preferred sound shapes of new roots: on some phonotactic and prosodic properties of shortenings in German and French. In B. Hurch & R. Rhodes (eds.), *Natural Phonology: The state of the art*. Berlin: Mouton de Gruyter. 261–292.

Ronneberger-Sibold, Elke. 2015. Word-creation. In P.O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-formation. An international handbook of the languages of Europe*. Vol. 1. Berlin: De Gruyter. 485–500.

Ronneberger. Elke & Wolfgang U. Dressler. 2023. Extragrammatical, marginal morphology and poetic creativity. In K. Dziubalska-Kołaczyk, P. Donegan & W.U. Dressler (eds.), *Cambridge Handbook of Natural Linguistics*. Cambridge: Cambridge University Press. Submitted and accepted.

Schrödl, Christina, Katharina Korecky-Kröll & Wolfgang U. Dressler. 2015. Pluralmorphologie im österreichischen Deutsch: Dialekt und Erstspracherwerb. In A.N. Lenz, T. Ahlers & M.M. Glauninger (eds.), *Dimensionen des Deutschen in Österreich*. *Variation und Varietäten im sozialen Kontext*. Frankfurt am Main: Lang. 165–188.

Schwaiger, Sonja, Adrien Barbaresi, Katharina Korecky-Kröll, Jutta Ransmayr & Wolfgang Dressler. 2019. Diminutivvariation in österreichischen elektronischen Corpora. In L. Bülow, A.K. Fischer & K. Herbert (eds.), *Dimensionen des sprachlchen Raums: Variation – Mehrsprachigkeit – Konzeptualisierung*. Wien: Peter Lang, 14–162.

Schwaiger, S., J. Ransmayr, K. Korecky-Kröll, S. Sommer-Lolei & W. Dressler 2017. Scaling morphosemantic transparency/opacity. A corpus-linguistic and acquisitionist study of German diminutives. *Yearbook of the Poznań Linguistics Meeting* 3. 141–153.

Soeffner, Hans-Georg & Ronald Hitzler. 1994. Hermeneutik als Haltung und Handlung, in N. Schröer (ed.), *Interpretative Sozialforschung*. Opladen: Westdeutscher Verlag, 28–55.

Spina, Rossella & Wolfgang U. Dressler. 2011. How far can diachronic change be predicted: the case of Italo-Romance first person plural present indicative. *Diachronica* 28. 499–544.

Werner, Martina, Wolfgang U. Dressler & Karlheinz Mörth. 2017. Pluraldubletten diachron und synchron: Eine korpusbasierte Untersuchung zu den Spuren der Diachronie im Gegenwartsdeutschen. In C. Resch & W.U. Dressler (eds.), *Digitale*

Methoden der Korpusforschung in Österreich. Wien: Verlag der Österreichischen Akademie der Wissenschaften. 139–157.
Zydorowicz, Paulina. 2019. *Polish (mor)phonotactics in first language acquisition, connected speech and cluster processing*. Poznań: Wydawnictwo Naukowe UAM.