Communication with diminutives to young children vs. pets in German, Italian, Lithuanian, Russian, and English

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Samenvatting

Dit artikel gaat over het gebruik van verkleinwoorden en koosnamen (hypocoristics) in twee taalregisters: taal gericht tot kinderen (child-directed speech, CDS) en taal gericht tot huisdieren (pet-directed speech, PDS). De semantiek van verkleinwoorden blijkt een minder grote rol te spelen dan de pragmatiek: de emotionele nabijheid van kinderen en huisdieren. De studie, waarin vijf talen worden vergeleken, verkent ook de typologie: de morfologische rijkdom van verkleinwoorden in een taal beïnvloedt de productie. Daarnaast speelt de semantische transparantie van verkleinwoorden crosslinguïstisch een rol. In CDS en PDS worden meer transparante verkleinwoorden gebruikt.

Abstract

This contribution is dedicated to Steven Gillis with whom we have collaborated since the nineties within the "Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition" on both child speech (CS) and child-directed speech (CDS) and also about the development of diminutives (DIMs). We investigate parallels in the use of DIMs and of hypocoristics (HYPs) between CDS and pet-directed speech (PDS), whereas CS is only marginally dealt with. When relevant, also adult-directed speech (ADS), written or oral (especially from electronic corpora, wherever available) will be compared. The presuppositions of this investigation will be stated at the beginning of the Introduction (§ 1).

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This involves several innovations (beyond descriptions of new data), when compared with existing literature, relevant to theoretical and typological problem areas.

We will show that also in DIMs and HYPs used in CDS and PDS semantics only plays a partial or even marginal role when using more DIMs to communicate with young children and young and/or small pets, because it is more relevant that both younger and smaller pets are emotionally closer to us, which is again a pragmatic factor.

In regard to language typology, we will apply our concepts of morphological richness and productivity, as argued for and supported in our previous publications, to CDS and PDS and show that richer and more productive patterns of DIM formation of a language also have a typological impact on more frequent and more productive use both in CDS and PDS.

We will also apply our concepts of grading morphosemantic transparency/opacity, as argued for and supported in our previous publications, and we start to show, as already shown for CS, that also in CDS towards young children (and similarly in PDS) more morphosemantically transparent DIMs are used than in ADS. This is also connected to their predominantly pragmatic meanings in CDS and PDS (obviously not exclusively pragmatic as in early CS).

The languages and authors were selected according to who among the participants in the Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition had CDS and PDS available, plus Elisa Mattiello who has collected English and Italian PDS data.

INTRODUCTION

The presuppositions of our enterprise of comparing the use of diminutives (DIMs) and of hypocoristics (HYPs) formed with DIM suffixes in child-directed speech (CDS), pet-directed speech (PDS), also child speech (CS), are that

a) PDS has been extended diachronically from early child-centred speech, especially CDS, similarly to lover-centred speech, i.e., when lovers speak to or about each other, as in G. mein Lieb+i 'my love/beloved+DIM',

b) PDS represents a nearly totally asymmetric communication (in the sense of Watzlawick et al. 2011), whereas CDS considers the expectations of hearers much more (incl. non-addressees),

c) there is a predominance of pragmatics over semantics, especially in CS, where DIMs whose meanings are ascertained are at first only pragmatically used. This includes the impact of gender differences of speakers and addressed children vs. pets and the only exceptional relevance of semantics in the use of HYPs, which are two other pragmatic factors.

Moreover d) We also compare the impact (especially on CDS, CS and PDS) of the amount

of morphological richness of language-specific DIM formation.

e) Finally, we study the impact of morphosemantic and morphotactic transparency on DIM usage in child-directed speech and pet-directed speech vs. adult-directed speech.

The data on CDS come from the collection of spontaneous interaction between children and their relevant caretakers within the Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition and related language-specific projects, such as the Austrian INPUT Project. English data come from the Manchester corpus in the CHILDES database, collected by Theakston et al. (2001).

The PDS data come first of all from interviews on Italian, German, English and Russian performed for previous publications. The data were collected via questionnaires. The Lithuanian data were collected via questionnaires for the purposes of this study.

We investigate parallels in the use of diminutives (DIMs) between child-directed speech (CDS) and pet-directed speech (PDS). This involves several innovations when compared with existing literature, relevant to theoretical and typological problem areas.

A presupposition of this enterprise is (beyond the above-mentioned evaluation of PDS) that there is a predominance of pragmatics over semantics, especially in CS, where DIMs whose meanings are ascertained are first only pragmatically used. Moreover, the priority of pragmatics is evidenced by the favouring role of emotion, familiarity, and empathy and by DIMs being used more towards pets than about pets. It is dubious whether much irony or even sarcasm occurs in PDS and CDS (in contrast to humour).

The relevance of semantics is contradicted by PDS examples such as German:

'So ein großes Hauf+i/+erl hast du gemacht!'
'You produced such a big shit+DIM!'

In PDS, at least in part similar to CDS, semantics plays only a partial or even marginal role when using more DIMs to communicate with young children and young and/or small pets, because it is more relevant that both younger and smaller pets are emotionally closer to us, which is again a pragmatic factor. Also the interviewed native speakers of Russian and Lithuanian showed an analogous sensitivity, expressed in the major use of DIMs in relation to young and sick pets, as they reported in their response to the questionnaire.

As to language typology, the richer, more frequent and more productive DIM patterns are, the more DIMs are used both in CDS and PDS: Italian DIM formation is the richest and most productive, with the suffix -ino being the most frequent and productive suffix, also in CDS and PDS. Lithuanian comes next in its productive formation of DIMs from any noun via one or several competing suffixes. The suffixes (also used by the participants) are masc. *-elis/-ėlis, -(i)ukas, -utis, -ytis, -aitis*, fem. *-elė/-ėlė, -(i)ukė, -utė, -ytė, -aitė*.

Then comes the Russian language, whose number of DIM suffixes exceeds 30 (including allomorphs). The most frequent and productive among them in asymmetric communication are *-k, -ik, -očk, -ulj, -uš* as well as *-ok/ek* and *-en'k* in female PDS.

Then comes Viennese Austrian Standard German, where there is more preponderance of (Austrian) *-erl* over (common German) *-chen* in PDS than in CDS.

English DIM formation is the least rich, frequent in usage and productivity, both in CDS and PDS.

Finally, we will compare the impact of morphosemantic and morphotactic transparency on DIM usage in CDS and PDS, also referring to gender differences of the speakers and addressees.

History of Research

Our view on pragmatics is stated (with discussion of other views) in Dressler & Merlini Barbaresi (1994) and Merlini Barbaresi & Dressler (2020), who have supported in many publications on morphopragmatics their view that DIMs have primarily a pragmatic and not a semantic meaning, i.e., determined by speech situation and/or speech act. That this is even more the case in CS has been shown in many of our publications from Savickienė & Dressler (2007) up to Dressler et al. (2019).

Research on CDS, pioneered by Ferguson (1977), Snow (1977), Newport et al. (1977), has been done for a long time and the most relevant studies are cited in our publications Savickienė & Dressler (2007) and Dressler, Ketrez & Kilani-Schoch (2017). All these studies show that CS development is very much influenced by CDS, because children do not acquire adult target languages as they are represented by grammars, dictionaries and adult electronic corpora, but as they are realized in CDS. In their recent interdisciplinary literature review, Schick et al. (2022) compare research on CDS to communication of great apes and other vocally learning animals.

All chapters of Savickienė & Dressler (2007) show that the first ascertainable meanings of DIMs in CS are pragmatic, whereas semantic meanings of smallness (in its polysemy) are expressed via adjectives meaning SMALL. This is apparently also preponderantly the case for CDS. But this has not yet been systematically investigated. The most systematic research on DIMs in CDS is represented by Savickienė & Dressler (2007), Dressler & Korecky-Kröll (2015).

HYPs are mostly used for pragmatic reasons, but nearly never referring only to young age, and thus for the whole life-time of a person, a truly semantic meaning is exceptional. The same holds for PDS (see Mattiello et al. 2021).

Systematic research on PDS is so far limited to Mattiello et al. (2021). In Russian linguistics, especially dealing with the problems of colloquial speech, there is a tradition of studying PDS, cf. Ermakova (1988, 1998), Sirotinina (1999), Kitajgorodskaya & Rozanova (1999), Bajkulova (2008) and Ermolova (2015). In particular, the abundance of DIMs in PDS is noted in a study based on modern corpus data of oral speech (Ermolova 2015: 61). DIMs are found both in appeals to pets and in etiquette formulas addressed to them, as well as in the names of surrounding objects. Such DIMs are considered by Baikulova (2008: 15) to be lexical means of heightened emotionality in communication with animals. DIMs are included in the "range of endearments" in conversations with pets (Ermakova 1988: 245), on the one hand, and in "the passive vocabulary of dogs", i.e. in the comprehension of pets (Ermakova 1998: 96), on the other.

HYPs with and without DIM suffixes have been most systematically described by Merlini

Barbaresi (2001) for English. The use of HYPs has been shown to depend nearly always on pragmatic variables, and very rarely also on semantics.

The concept of morphological richness has been worked on since Dressler (1999), and its importance for language acquisition has been investigated most systematically in Xanthos et al. (2011), Xanthos & Gillis (2010) and Dressler et al. (2019): greater richness of a morphological system (in our case of DIM formation) facilitates acquisition.

Our view on morphosemantic transparency/opacity has been developed from Dressler (1985), to Dressler et al. (2016), Ransmayr et al. (2016) and Mattiello & Dressler (2019), cf. Talamo et al. (2016), resulting in models of grading morphosemantic transparency/opacity in various degrees of fineness.

Data

As to CDS, the Austrian German, Italian, Lithuanian and Russian electronic data stem from corpora in spontaneous interaction with young children collected for Savickienė & Dressler (2007), for German also in Dressler & Korecky-Kröll (2015), based on the Viennese INPUT project and its successors. The English data have been collected from native speakers as well as from previous research on the -y/ie suffix (mainly Merlini Barbaresi 2001). Additional Italian data on DIMs and HYPs come from a collection of examples provided by interviewed native speakers, compared with studies on Italian HYPs (e.g., Thornton 2004). As to Lithuanian and Russian, additional data were collected within the Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition.

For PDS, the German, Italian and English data were collected by written and oral interviews for our publication Mattiello et al. (2021). In addition, we analyzed PDS data of eight German-speaking parents from the INPUT project in comparison to their CDS and ADS.

Lithuanian data were collected via questionnaires from 73 native Lithuanian speakers (65 female, 8 male). The participants were nearly all present or previous pet owners, mostly dogs and cats, some of them had parrots, fish, rabbits. Only four of the participants reported that they do not use DIMs towards or about pets.

Russian data (516 DIMs and HYPs) have been obtained from semi-formal oral or written interviews with 130 native speakers (102 females, 28 males, aged 14 to 69 years) in accordance with the questionnaire developed by Mattiello et al. (2021). The age groups were balanced in number, except for those in their twenties. The participants were all pet owners, mostly of cats (49%) and dogs (23%). 15% had both cats and dogs. The percentage of those having birds (mostly parrots, but also peacocks), cats and birds as well as cats, dogs and birds, is from 1% to 2% for each group. The owners of other pets (such as fishes, hamsters, polecats, turtles, rabbits, chinchillas, flying foxes and rats) were rare, less than 1% in each group. They were asked about their pets' names, nicknames and HYPs that they used when addressing the pets or speaking about them with either other family members or relatives and friends. Questions were also related to the use of DIMs for the pets' body parts, foods and drinks, objects and toys, the place where they sleep or eat, their excrements or vomits and activities. The first results were presented in Vienna in February 2022 at the annual

meeting of the Crosslinguistic Project on Pre- and Protomorphology in Language Acquisition and are partially published in Kazakovskaya (2022).

For ADS, the German data nearly exclusively come from the exhaustive Austrian Media Corpus (AMC). Another source are the parental interviews conducted with the eight parents from the INPUT project. As for Italian, we compared our data with the Italian Web 2020 corpus (itTenTen20), made up of texts collected from the Internet and containing 12.4 billion words (end of December 2020). The data on British English were compared with those included in the much bigger English Web 2020 corpus (enTenTen20). The most recent version of the enTenTen corpus consists of 38 billion words. The texts were downloaded between 2019 and 2021. For Lithuanian ADS, the Corpus of Spoken Lithuanian was used.

Methodology

The Austrian German (cf. also Dressler & Korecky-Kröll 2015), Italian, Lithuanian, Russian and English electronic CDS data were analysed according to the world-wide accepted and used conventions of CLAN (MacWhinney 2000) and following the methodology described in Savickienė & Dressler (2007), which consists in finding verbal and non-verbal contextual evidence for pragmatic vs. semantic meaning of DIMs.

Our PDS data were analyzed according to established methods in interview analyses (cf. Soeffner & Hitzler 1994 and Lenz, Ahlers & Werner 2014). For the methodology of interview interpretation in general, cf. also Alvesson (2010). The main element is a group discussion of how to interpret specific text elements, where members of the group try to falsify in a Popperian way claims of interpretation: the interpretation that survives falsification attempts best, is taken up as the final interpretation. For ADS, the data from the exhaustive Austrian Media Corpus (AMC) have been systematically enriched with the methods of the Austrian Centre for Digital Humanities of the Austrian Academy of Sciences followed also here (cf. Ransmayr et al. 2016, Ransmayr 2018).

The Corpus of Spoken Lithuanian, developed at Vytautas Magnus University, Kaunas (see Dabašinskienė, Kamandulytė 2009, Kamandulytė-Merfeldienė, Balčiūnienė 2016, Kamandulytė-Merfeldienė 2017) has been morphologically annotated for the automatic linguistic analysis using the CHAT (Codes for the Human Analysis of Transcripts) software. For Lithuanian and Russian the methods of the electronic corpora (mentioned in § 4) were used, for Russian systematically enriched with the methods of several leading Institutes of the Russian Academy of Sciences (cf. Natsional'nyj korpus russkogo jazyka [The Russian National Corpus] 2005, Plungian 2009).

Results

Lithuanian is after Dutch the second-richest European language in DIM use. Lithuanian research on CS, CDS, ADS, and PDS confirms this fact. For example, only 4 of 73 participants, who took part in this study, reported that they do not use DIMs speaking towards or about

pets. HYPs and DIMs are mostly used for pragmatic reasons in CS, CDS, and ADS. The same holds for PDS (cf. Mattiello et al. 2021). PDS examples are masc. *katin+ėlis* 'cat-DIM', *angel+ėlis* 'angel-DIM', *auks+iukas* 'gold-DIM', *maž+iukas* 'small-DIM', *Merf+iukas* (Merfis-DIM), fem. *šaunuol+ėlė* 'fine-DIM', *ger+utė* 'good-DIM', *bit+utė* 'bee-DIM', *šun+ytė* 'dog-DIM', *bulv+ytė* 'potato-DIM', *Bel+utė* 'Bela-DIM'. The most frequently used suffixes are: *-(i)ukas, -utė.*

DIM suffixes are used very frequently when talking towards or about pets. Even two main masc. cat names had a DIM suffix: *Snieg+utis* 'snow-DIM' and *Debes+ėlis* 'cloud-DIM'.

As to Lithuanian HYPs with DIM suffixes in PDS, feminine bases end in *-a,* masculine bases in *-as* or *-is*: *Leta → Let+utė, Kapsis → Kaps+iukas, Kaps+ytis,* cf. DIM names in CDS and ADS: *Rūta → Rūt+ytė, Rūt+elė, Saulius → Saul+iukas, Monika → Monik+utė, Elijus → Elij+ukas, Tomas → Tom+ytis, Tom+ukas.*

The following examples of CDS and ADS examples from our other languages are limited to HYPs which are formed with DIM suffixes (as already above for Lithuanian). CDS examples are:

Germani: *Paul → Paul+i, Peter → Peter+l*

English: *Linda → Linn+ie, Minerva, Mary, Marie,* etc. *→ Minn+ie, Cynthia → Cind+y, Floyd → Floyd+ee*

Italian: masc. *Davide → David+ino, Lorenzo → Lorenz+ino, Jacopo → Jacop+ino, Ettore → Ettor+ino, Andrea → Andre+uccio* (above all in Tuscany); fem. *Chiara → Chiar+ina, Carlotta → Ott+ina, Sara → Sar+etta, Cinzia → Cinzi+etta, Viola → Viol+etta.* The suffix *-i* (borrowed from English) occurs in *Tommaso → Tomm+i/+y,* fem. *Michelle* and masc. *Michele → Mich+i/-y, Angelica → Ang+i/+y.*

Russian: masc. *Kirill → Kirj+uša, Slava* (from *Vjačeslav*) *→ Slav+očka / +on'ka / +uška / +ulja , Filipp → Filipp+uša / +ok / +čik, Filja → Fil+en'ka*; fem. *Liza* (from *Elizaveta*) *→ Liz+očka / +on'ka / +ok, Toma* (from *Tamara*)*→ Tom+očka / +usja / +čik.* In suffixation, more than one suffix may be used, as in *Fillip-oč+ek, Slav-ul+ečka, Tom-us+en'ka.*

Female gender is another pragmatic factor for favouring the use of HYPs (with DIM suffixes) of the speaker and/or of the addressee of both CDS and CS favours, since it is not the objective gender, but the identification of being of female gender, which is the decisive factor, see in Savickienė & Dressler (2007) for German (p.212-214) and in Kazakovskaya & Argus (2021: 87) for Russian and Estonian, and in Dabašinskienė (2012) for Lithuanian.

For Russian PDS, the more frequent use of DIMs and HYPs by female respondents of different ages was shown in Kazakovskaya (2022). Women are more likely than men used these words in all the situations mentioned above (§ 4), that is, talking to or about pets, their body parts, their food and drink, objects and toys, and so on (85% DIM and HYP in female PDS vs

15% - in male PDS, in types). However, these groups had different frequency in the speech of the respondents. Female speakers use from 4 to 24 DIM suffixes, whereas males use from 2 to 16. The most numerous and diverse suffixes are used by females when addressing pets, and when not calling them by name or when calling themselves pet-owners, similar to G. *dein Frau+erl / Herr+l* 'your mistress+DIM/master+DIM'.

Lithuanian participants reported that they use DIMs when the pet does something good (e.g., *auks+elis* 'gold-DIM', *ger+utis* 'good-DIM', fem. *maž+iukė* 'small-DIM', but even when the pet does something bad (e.g., *veln+iukas* 'devil-DIM', *blog+iukas* 'bad-DIM', *parš+elis* 'piglet-DIM').

One participant used for the pet *Dora* by assonance to its DIM-suffixed form *Dor+ytė* the neologistically created HYPic *Doryb+ytė* 'virtue, morals-DIM', sometimes with empathy, sometimes ironically.

In contrast to other languages, in Lithuanian PDS, the ironical usage of DIMs and HYPs is frequent, e.g., masc. *durn+elis* 'stupid-DIM', *smirdž+iukas* 'stinky-DIM', *storul+iukas* 'thick-DIM', *cepelin+ukas* 'dish zeppelin-DIM', *pabais+ulis* 'monster-DIM', fem. *vėmal+iuk+ininkė* 'vomit-DIM', *kvail+elė* 'stupid-DIM', *karv+ytė* 'cow-DIM'.

If we compare the CDS, PDS and ADS data of the same eight Austrian parents, we find the highest prevalence of HYPs over DIMs in PDS (77.27 % HYP vs. 22.73 % DIM tokens), followed by CDS (61.48 % HYP vs. 38.52 % DIM), whereas ADS uses clearly more DIMs than HYPs (71.88 % DIM vs. 28.13 % HYP). Thus, the pragmatic priority is also reflected in the high frequencies of HYPs in PDS and CDS. However, it must be noted that the rates of DIM tokens including HYPs among all noun tokens are also very different in the three settings: highest in PDS (22.22 %), followed by CDS (9.24%) and particularly low in ADS (1.70 %).

In Russian PDS, the proportion of DIMs is slightly higher than that of HYPs (44.6% HYP vs. 55.4% DIM), while in CDS DIMs significantly predominate (5.2% HYP vs. 94.8% DIM).

Typological results on the impact of morphological richness of diminutive formation

Richness of productive morphological patterns refers to the amount of productivity of morphological patterns, only secondarily to their frequency (cf. also Bauer's 2001 notion of profitability), because the frequent use of a morphological pattern may be only a fossilized residue of earlier productivity (see Dressler 1999, 2003).

In Dressler (1999, 2003), the author has also stressed the importance for language acquisition, insofar as greater morphological richness results in faster speed of acquisition of morphological patterns, as proved for inflection (Xanthos et al. 2011), for compounding (Dressler, Ketrez & Kilani-Schoch 2017), and probably for DIMs (as shown here below) by a reanalysis of the results in Savickienė & Dressler (2007) and of our other publications. Here we can refer, for example, to Dressler et al. (2021) for massive supporting data in the internet and child language and to Sommer-Lolei et al. (2021) for psycholinguistic experiments. One

important consequence of morphological richness is the productivity of a pattern. This can be ascertained most easily in the applications to recently borrowed words.

For Italian we have established this (Dressler et al. 2019) for DIMs by finding on the internet thousands or at least hundreds of tokens of recent English loan-words, such as *week-end+ino / +etto / +uccio* and 30 similar sets of DIMs, whereas for German we found only two examples: *Computer+l / +chen, Roboter+l / +chen.* The wealth and productivity of Italian DIM formation is increased by interfixation (Dressler & Merlini Barbaresi 1992) in DIM formation of recent English borrowings, such as of *-er-* (e.g., *flopp+er+ello*), of *-ar-* (*scoop+ar+ello*) and by allomorphic insertion of *-c-*, as in *padron-c+ino* vs. *padron+ello*.

Lithuanian examples are *biudžet+ėlis, biudžet+ukas, reform+ėlė, pinkod+ukas, smail +iukas, fail+iukas, ok+iukas* 'OK-DIM', *hamburger+iukas, remiks+iukas, procent +ėlis / +ukas* 'percent-DIM' (thus, presumably borrowed earlier from G. Prozent).

In Russian ADS, DIMs from recent borrowings show the high productivity for the following suffixes: *-ik* as in *smajl+ik, prajs+ik, fail+ik, kompjut+ik* 'computer-DIM', *nout+ik* 'notebook-DIM', *mejl+ik, futb+ik* 'football-DIM', *koronavirus+ik, kovid+ik, kuar+ik* 'QR-DIM', *-ušk* in *kovid+uška, koron+uška* 'corona-DIM', *menj+uška* 'menu-DIM', *ferrar'+ka* 'ferrari-DIM', *-čik* in *ajfon+čik* 'I-phone-DIM', *miniven+čik* 'minivan-DIM', *-ok / ek* in *xot-dož+ek* 'hot-+dog-DIM', as well as *-očk* in *koronar+očka* 'corona-DIM', *-išk* in *juesb+iška* 'USB-DIM'.

For English this criterion is not applicable, because there are too few recent borrowings from other languages. Moreover, we doubt that DIMs could be derived from relatively recent German borrowings such as Weltanschauung, Blitzkrieg.

In German CDS the suffixes *-i* (most frequent, e.g., *Mam+i* 'mummy'), *-erl, -chen, -li*, unproductive *-lein* (Korecky-Kröll & Dressler 2007) occur, e.g., in *Herz+i* 'heart-DIM', *Eng+erl* 'angel-DIM', *Schwester+chen* 'sister-DIM', *Ohr+li* 'ear-DIM', *Maus+i+lein* 'mousie'.

The Italian suffixes are in order of frequency of use *-ino > -etto > -ett+ino, -otto, -ello, -ol-ino*, plus feminines in *-a*, as in *can+ino* 'dog-DIM', *capr+etta* 'goat-DIM', *ors+ett+ino* 'bear-DIM-DIM', *bambol+otto* 'doll-DIM', *asin+ello* 'donkey-DIM', *conigli+ol+ino* 'rabbit-DIM-DIM'.

The most productive Lithuanian suffixes are masc. *-elis* (*nam+elis* 'house-DIM'), *-ukas* (*nam+ukas* 'house-DIM') and fem. *-elė* (*saul-elė* 'sun-DIM'), *-ytė* (*saul-ytė* 'sun-DIM').

The most frequent Russian suffixes are *-k* (*golov+ka* 'head-DIM', *obezjan+ka* 'monkey-DIM), -ik* (*samoljot+ik* 'airplane-DIM', *šar+ik* 'ball-DIM'), *-ok/ek* (*čaj+ok* 'tea-DIM', *oreš+ek* 'nut-DIM').

In ADS, English examples are limited to a single suffix: *hubb+y* 'husband', *siss+y* 'sister', *shopp+ie* 'shop-assistant, *best+ie* 'best friend'. For our other languages, see the DIM suffixes listed above.

The mass of Lithuanian PDS examples and the relatively frequent ironic use of DIMs and of HYPs is another evidence for Lithuanian being, after Dutch, the DIM-richest European language in forms (langue) and uses (parole).

Results on morphosemantic transparency vs. opacity

Dressler et al. (2019) have found, as expected in the framework of Natural Morphology, that DIMs in CS are more often morphosemantically transparent derivations than in ADS. Presumably also CDS DIMs are more often transparently derived than ADS DIMs. But this has not yet been investigated empirically.

In Schwaiger et al. (2019), we investigated this question with respect to the more transparent colloquial *-erl* vs. the less transparent, often umlauted Standard German *-chen* DIMs. However, as speaking Standard German to their children seems to be more important for Viennese parents than talking in a (morphologically) transparent way, they use more opaque *-chen* DIMs (including German ones as spoken in Germany) in CDS than more transparent *-erl* DIMs. Nevertheless, in Schwaiger et al. (2019) we did not take into account the most transparent *-i* DIMs which have been shown to have high type frequencies and particularly high token frequencies in parents' speech to very young children (see Korecky-Kröll & Dressler 2007 and Korecky-Kröll 2011: 342-346) and which are particularly used to and by young children.

In the data of the eight Austrian parents, we find 100 % of transparent DIMs in PDS, 93.75 % of transparent DIMs in ADS and 92.01 % of transparent DIMs in CDS, which shows again that the use of Standard DIMs is more important than the use of exclusively transparent DIMs, at least in CDS with older kindergarten children aged 3 to 5 years. This is also true for Russian CDS and CS vs. ADS. In general, Russian DIMs are transparent due to the transparency of their DIM suffixes (although there are a number of alternations when a suffix is attached to a root). A problem arises with the suffix *-k* in case of loss of DIM meaning in many noun-derived DIMs, such as *kolen+ka* 'knee', *kartoš+ka* 'potato' or *seljod-ka* 'herring'. Russian grammar (e.g., Švedova 1980/2005) refers to them not as DIMs, but as stylistic-colloquial modifications of nouns. However, sometimes such words are considered as DIMs by relevant publications.

For PDS, Mattiello et al. (2021) have found that nearly all DIM derivations are morphosemantically transparent and pragmatically used, e.g. It. empathetically used *nas+ino* 'nose+DIM', *cod+ina* 'tail+DIM', *zamp+ina* 'paw+DIM'.

The same holds for DIMs in Russian PDS, as in *moloč+ko* 'milk-DIM', *kolbas+ka* 'sausage-DIM', *krovat+ka* 'bed-DIM'; *kljuv+ik* 'beak-DIM', *us+iki* (Plural) 'mustashe-DIM', *dom+ik* 'house-DIM', *pled+ik* 'plaide-DIM'; *jazyč+ok* 'tongue-DIM', *syn+ok* 'son-DIM'.

The default suffixes for DIM formation in Standard Lithuanian are masc. *-elis* and fem. *-elė* (Ambrazas 1997). They cover a wide range of pragmatic functions, but also encompass the meaning of smallness.

However, the CDS data do not conform with this pattern, as other suffixes, more often associated with the meaning of "small" and "young", *-ukas* (masc., 60%) and *-ytė* (fem., 50%) show the highest frequency (Savickienė 2007). The results of PDS support this tendency: the same suffixes are reported to be used more commonly when addressing or talking about the pet.

Moreover, DIM suffixes are more often morphosemantically transparent in CDS and PDS than in ADS, and, as expected, used for pragmatic functions. PDS examples are masc. *šun*

+(i)ukas 'dog-DIM', *nos+(i)ukas* 'nose-DIM'; fem. *dešr+ytė* 'sausage-DIM', *mės+ytė* 'meat-DIM', *galv+ytė* 'head-DIM'.

Conclusions and outlook

Our previous claims on the priority of pragmatics over semantics in evaluative morphology have been supported by the nearly exclusive pragmatic use of DIMs in PDS and by the much more frequent pragmatic than semantic motivation of the use of HYPs with DIM suffixes beyond the mostly conventional use of such HYPs for children in CDS.

The impact of the morphological richness of DIM formation on the productive use of DIMs in ADS and CDS has been supported in more languages than in our previous publications. We have made progress in various aspects of the comparative study of CDS

We have obtained some data which show differences in PDS according to the age of the speakers.

How profitable our investigations are, shows also in the following outlook on which lacunae still have to be filled: In a future paper planned to partially overlap with the topics of this paper, we will use formal semantic results of Flaig's (2022) forthcoming MA thesis (supervised by the first author in Vienna) for differentiating semantic and pragmatic meanings of DIMs, incl. the relations between CDS and CS, and for the scaling of semantic transparency/opacity of German and Italian DIMs.

In addition, we plan a systematic investigation showing that also in CDS the first ascertainable meanings of DIMs are preponderantly pragmatic, whereas semantic meanings of smallness (in its polysemy) are mainly expressed via adjectives meaning SMALL, albeit to a lesser extent than in CS, and whether the chronological development shows some fine-tuning. An analogous lacuna should be filled for morphosemantically transparent vs. opaque DIM derivations (see § 8). In general, systematic investigation of the development of CDS and CS is needed for searching evidence of fine-tuning in the domain of DIMs and HYPs.

What also needs a systematic investigation is whether many of the Italian HYPs with the suffix -[i] used in CDS vs. PDS vs. CS vs. ADS are simply borrowed from English or are formed in Italian with the borrowed suffix -y. A further lacuna is which patterns of the formation of HYPs via DIM suffixations are still productive.

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Appendix

Questionnaire for the pet study:

(M) or (F) AGE NATIONALITY

1) Do you have a pet animal?
If you don't, please enumerate other pets that come to your mind (cats, dogs, parrots or other birds, rabbits, guinea pigs, etc.)

2) If you do, how is it called? Do you also have a nickname or a hypocoristic name for it?

3) Do you use special diminutive forms when you address it? Please specify.

4) And when you speak about it (with friends, within the family)? e.g.
My pet is sick; or It has given birth to babies. Please specify if you use diminutive -y/ie forms.

5) Do you use special diminutive forms when you refer to its body parts?
a) in addressing the animal: Does anything hurt you, e.g. your mouth, your nose, snout, ear, belly, wings, paws, tail? Please specify.
b) in speaking about the animal: e.g.
My pet has broken its leg.
Its face is so sweet.
Please specify.

6) Do you use special diminutive forms when you refer to foods and drinks (animal feed, seeds, milk, water)? Please specify.

7) Do you use special diminutive forms when you refer to your pet's objects/toys (bed, ball, dog leash, cover, etc.)? Please specify.
Or when you refer to the place where it sleeps, eats (doghouse, kennel, litter, cage, stall, paddock, henhouse, fish tank, etc.)? Please specify.

8) Do you use special diminutive forms when you refer to your pet's excrements or vomit? Please specify.

9) Do you refer to yourself in your function as the pet's master or mistress? (Just for dogs): e.g., Your mistress/mommy is sad that you are sick. When returning after a long absence: Your mistress/mommy is finally again with you.

10) Can you refer to the pet's activities with a diminutive? Or can you form a phrase where a noun is put into a diminutive?