

Universals in the Semantics of the Diminutive

Author(s): Dan Jurafsky

Proceedings of the Nineteenth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on Semantic Typology and Semantic Universals (1993), pp. 423-436

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

Universals in the Semantics of the Diminutive

Dan Jurafsky
International Computer Science Institute
Berkeley, California

1 Introduction

The diminutive construction is one of the most universally-attested in language, so it's not surprising that a number of observers have noted such universals about it as its common realization by nasals (Jakobson & Waugh 1979), by reduplication (Moravcsik 1978), and especially by the use of higher tonality (Jespersen 1922; Sapir 1915/1949; Ultan 1978; Ohala 1984; Nichols 1971). Similarly, linguists have frequently observed that universal statements could be made about *semantic* aspects of the diminutive. Haas (1972:148), for example, noted that

the diminutive also usually carries with it a number of affective connotations which range from endearment to tenderness through mild belittlement or deprecation to outright derogation and insult.

Recently, following the lead of Sapir (1915/1949) on Nootka, a number of quite detailed studies have appeared on the semantics of the diminutive in particular languages, including Ojibwa (Rhodes 1990), Ewe (Heine *et al.* 1991), and Cantonese (Jurafsky 1988). It is my hope in this paper to extend Haas' characterization and make some universal statements concerning the semantics of diminutives, drawing on these studies and further data from a number of languages which vary typologically as well as genetically.

I draw three conclusions as a results of the study. First, I argue that there is much more in common among diminutives cross-linguistically than the commonly cited affectionate and pejorative senses, and sketch a *universal radial category* for the diminutive construction which includes the concepts of resemblance, imitation, gender, partitives, approximation, and hedging. Second, I examine the metaphorical extensions that the diminutive exhibits from its source domain of size or childhood to its various target domains, and argue that they are compatible with universal statements about the unidirectionality of semantic change in grammaticalization made by Traugott (1988), Sweetser (1990), Heine *et al.* (1991), and others. Finally, I introduce the concept of an *abstract radial category*, an extension to the theory of radial categories in which the elements of the category may be realized by *distinct* lexical items or constructions.

2 Semantic Categories and Grammaticalization

Many recent studies of semantic change in grammaticalization have relied on the *radial category* model of semantics of Lakoff (1987), which extends the classic model of categories by giving them complex internal structure. This *structured polysemy* model allows us to draw a middle ground between the *abstractionist* approach to representing semantics, in which a class of concepts is represented by some single abstraction which characterizes the whole class, and the *homonymy* approach, in which a class of concepts is represented as semantically atomic and unrelated. A radial category consists of a central prototype together with less-central conceptual extensions, represented by a network of nodes and links. Nodes represent prototypes of senses, while links represent metaphorical extensions, image-schematic transfer, or transfers to different domains. Interpreted as a historical object (for example by Heine *et al.* (1991), Nikiforidou (1991), Pederson (1991)), the radial category represents the process of grammaticalization, where the central sense represents a historically and semantically prior sense, and extensions represents historical expansions of the category by specific extensions to this core sense.

Parallel to this work in semantic category theory has been a tradition of studying the *unidirectionality* of semantic change in grammaticalization. A number of scholars have explained the tendency of meanings to become more *abstract*, i.e., more removed from the domain of the physical world, and more *subjective* or *evaluative*. For example, Traugott (1989) proposes three tendencies in semantic change, in which meanings shift from the external to the internal (evaluative or perceptual) domain, from the external or internal to the textual or metalinguistic domain, and in general toward greater subjectification. Sweetser (1990) shows that semantic changes in modals and certain verbs proceed in a *metaphorical shift in domain* from the real-world to the epistemic and speech-act domains, and described the types of metaphors which accompany this process. Heine *et al.* (1991) also propose a metaphoric interpretation of change, and argue that meaning shift proceeds along the path *PERSON* \Rightarrow *OBJECT* \Rightarrow *SPACE* \Rightarrow *TIME* \Rightarrow *PROCESS* \Rightarrow *QUALITY*.

The radial category for the semantics of the diminutive construction I give below is consistent with many of these versions of unidirectionality. We will see metaphorical extensions from the central physical domain of *size* to the domains of *gender*, *social power*, and *conceptual centrality*, exhibiting meaning shifts from the physical world to the social domain, and from the physical world to the conceptual or category domain.

Figure 1 shows the proposed universal structure for the semantics of the diminutive. Again, nodes represent senses, and links represent metaphorical extensions or domain transfers. Claiming that this structure is universal means, as Pederson (1991) has discussed, that the category in any individual language will be structured by subsets of this universal category, although we would in addition expect *extensions* to the universal category in specific languages. Jurafsky (1988), for example, shows a number of very specific extensions to the diminutive in Cantonese, such as

the concept *food*.

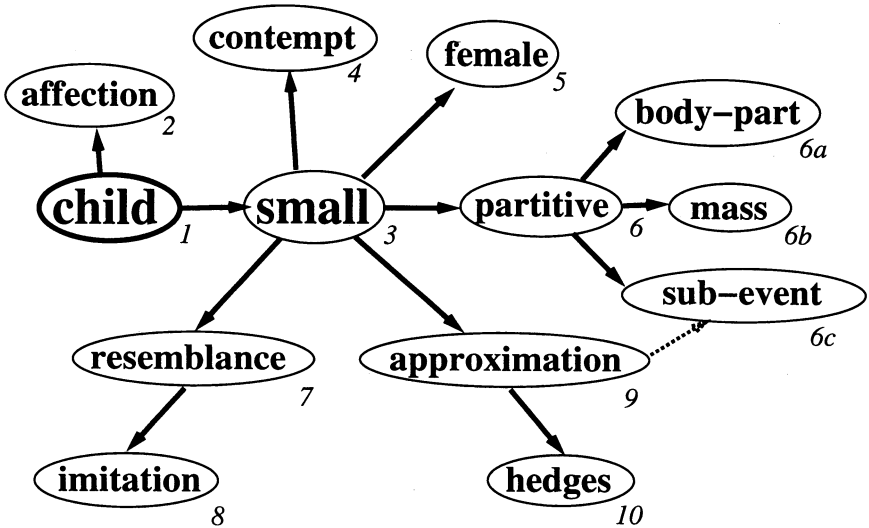


Figure 1: Proposed Universal Structure for the Semantics of the Diminutive

3 Core Senses - Child, Affection, Small

What is the historically prior and semantically central sense of the diminutive construction? Heine *et al.* (1991) show that for Ewe the earliest and central sense is the meaning *child*. Jurafsky (1988) shows that for Cantonese it is the meaning *son*; this is also true in each of the other dialects of Chinese, even in clearly non-cognate cases. Similar child-based central senses exist in the Bantu and Muskogean families. But in other languages and families, including Lakhota, Ojibwa, and throughout Indo-European, there is no historical evidence that the diminutive arose from a morpheme meaning “child”. Yet it is still quite plausible that the diminutive affix in these languages has a historically prior *sense* “child”. For example the pragmatic use of the diminutive to mark that a discourse participant or verbal argument is a child argues for a child-centered category; this usage is very common in North America (Munro (1988) gives examples from the Siouan, Muskogean, and Yuman families), as well as in Greek (Sifianou 1992) and Polish (Wierzbicka 1984).

For these reasons I propose that in fact the sense *child* is the historically and semantically prior sense of the diminutive, but that most of the extensions of the category follow the early extension to the sense *small*. Figure 1 shows the sense *child* as the root node in the partial ordering which defines the category; this use of diminutives to mark children or offspring seems universal. Besides the pragmatic

uses of the diminutive noted above, many languages lexically mark the young of animals with the diminutive:

| <u>OFFSPRING</u> | Unmarked Form | | Diminutive | |
|-------------------|-----------------|-----------|-------------------|-------------|
| English | <i>duck</i> | | <i>duckling</i> | |
| Ewe | <i>koklô</i> | 'chicken' | <i>koklô-ví</i> | 'chick' |
| Ojibwa | <i>mkwa</i> | 'bear' | <i>mkoons</i> | 'bear cub' |
| Halkomelem | <i>təlóqsəl</i> | 'duck' | <i>təlíləqsəl</i> | 'ducklings' |

The use of the diminutive to mark *affection* or *hypocorism*, presumably an early extension of the use to mark children, has been extensively discussed in the literature. This sense is very common with both names and kinship terms, as the table below shows. We also see this affectionate sense on common nouns.

| <u>AFFECTION</u> | Names | | Kinship Terms | |
|--------------------|-------------------------|--|-------------------|-----------------------------------|
| English | <i>Marty</i> | | Cantonese | <i>nui₂</i> 'daughter' |
| Ojibwa | <i>mBiliins</i> | | Russian | <i>sistrítsa</i> 'sister (aff)' |
| Cantonese | <i>wong₂</i> | | Halkomelem | <i>sísəla</i> 'granny' |
| Mid. Breton | <i>Alanic</i> | | | |

The remainder of the senses of the diminutive are based on an extension from the sense *child* to the sense *small*. Obviously this sense of the diminutive is very common; the table below presents a few examples.

| <u>SMALL</u> | Unmarked Form | | Diminutive | |
|----------------|---------------|------------|-------------------|-------------------|
| Ojibwa | <i>mkizin</i> | 'shoe' | <i>mkiznens</i> | 'little shoe' |
| Yiddish | <i>di mil</i> | 'the mill' | <i>dos miləxl</i> | 'the little mill' |
| Ewe | <i>kpé</i> | 'stone' | <i>kpé-ví</i> | 'small stone' |

4 Gender and Contempt

The *unimportance/contempt* and *female gender* senses of the diminutive are quite interrelated in many languages. The *contempt* sense is linked to the central sense *small* by a metaphor from the source domain *size* to the target domain of *social importance or power*, which might be characterized as follows:

POWER AND IMPORTANCE IS SIZE

The WEAKNESS table below shows some more literal examples of this metaphor, in which the diminutive represents weakness in the physical world.

| <u>WEAKNESS</u> | Unmarked Form | | Diminutive | |
|-----------------|-----------------|------------|------------------|-------------------------|
| Ewe | <i>dɔ</i> | 'disease' | <i>dɔ-ví</i> | 'minor suffering, cold' |
| Yiddish | <i>der vint</i> | 'the wind' | <i>dos vintl</i> | 'the breeze' |

The CONTEMPT table lists examples where this sense of "small" or "weak" has extended from the physical to the social world. Note the common use of the diminutive to mark foreigners and marginalized women, viewing them as socially weaker or of smaller status.

| <u>CONTEMPT</u> | Unmarked Form | | Diminutive | |
|-----------------|------------------------|-----------------|--|-----------------------|
| English | <i>star</i> | | <i>starlet</i> | |
| Cantonese | <i>nui₅</i> | 'woman' | <i>sau₁ nui₂</i> | 'nun' |
| Cantonese | <i>nui₅</i> | 'woman' | <i>mo₅ nui₂</i> | 'dance hostess' |
| Cantonese | <i>nui₅</i> | 'woman' | <i>sek₆ nui₂</i> | 'frigid woman' |
| Nez Perce | <i>ʔiskí:cuʔmix</i> | 'Coeur d'Alene' | <i>ʔickí:cuʔmix</i> | 'Coeur d'Alene (der)' |
| Fuzhou | | | <i>huan-ŋian</i> | 'foreigner' |
| English | | | <i>limey</i> | 'Englishman (der)' |

Besides the power metaphor, the *contempt* sense exhibits a metaphor which reappears in most of the other extensions, particularly in the *gender*, *imitation*, and *approximation* senses. This is the metaphor which links the diminutive with *marginality* or *marginalization*.

CATEGORY CENTRALITY IS SIZE (or MARGINAL IS SMALL)

Through this metaphor relating category centrality to size, the diminutive marks marginal or less-central members of various categories. Thus foreigners are viewed as marginal members of the category of people, and dance hostesses as marginal members of the category of women. Stating the metaphor at the domain of the category and not just marginality makes a more general prediction that the augmentative might be used conversely to mark category centrality or exactness.

In addition to the use of the diminutive to mark marginalized women, many languages draw an even tighter relation between the diminutive and *female gender*, exhibiting the metaphor

GENDER IS SIZE

This GENDER IS SIZE metaphor would be quite closely linked with the POWER IS SIZE and CATEGORY CENTRALITY IS SIZE metaphors in cultures which mark women as marginal members of society or as socially or physically weak. In addition to the Cantonese data discussed above, a number of languages,

which seem to be mostly Indo-European and Semitic, (Fodor (1959) also notes some related examples from Afro-Asiatic) employ the same morpheme for diminutives and as a feminine marker. We can distinguish these from what might be called “switch-gender” – that is, cases of the sort common diachronically in Romance or which exist in Hottentot, where a change of lexical gender is used to mark an exceptional or unusually large or small object. Unlike those symmetrical cases, in the examples here it is solely the feminine that patterns with the diminutive.

| <u>GENDER</u> | Feminine | | | Diminutive | | |
|----------------|-----------------|----------|------------------|-------------------|---------------|----------------|
| English | <i>major</i> | | <i>majorette</i> | | <i>diner</i> | <i>dinette</i> |
| Hebrew | <i>axyan</i> | ‘nephew’ | <i>axyanit</i> | | <i>mapa</i> | ‘tablecloth’ |
| Hindi | | | ‘niece’ | | <i>ghantā</i> | ‘bell’ |
| | | | | | <i>mapit</i> | ‘napkin’ |
| | | | | | <i>ghanti</i> | ‘small bell’ |

Zubin (p.c.) has pointed out examples like those in the Gender II table, where there is an asymmetry in the vocabulary for young people, in which the word for “girl” incorporates a diminutive form (as the English does, from the Germanic “-l” diminutive), but the word for “boy” does not.

| <u>GENDER II</u> | Unmarked Form | | Diminutive | |
|------------------|-------------------------|-------|------------------------|------------|
| German | <i>Junge</i> | ‘boy’ | <i>Mädchen</i> | ‘girl’ |
| Cantonese | <i>dzai₂</i> | ‘son’ | <i>nui₂</i> | ‘daughter’ |
| English | <i>boy</i> | | <i>girl</i> | |

5 Partitives

A number of languages use the diminutive to denote something like *a salient part of a whole*. Following Rhodes (1990), I call these *partitive* diminutives. Common uses of the partitive diminutive include body-part partitives, derivation of count from mass nouns, and derivation of verbal sub-events. The body-part partitive is used to derive smaller body-parts from enclosing body-parts (the last example is from Heine *et al.* (1991)).

| <u>BODY-PART</u> | Unmarked Form | | Diminutive | |
|------------------|----------------------|-------------|-------------------|----------|
| Ojibwa | <i>zid</i> | ‘foot’ | <i>zidens</i> | ‘toe’ |
| Ewe | <i>afɔ</i> | ‘foot, leg’ | <i>afɔ-vi</i> | ‘toe’ |
| Baule | <i>sa</i> | ‘hand’ | <i>sa-mma</i> | ‘finger’ |

A number of languages extend the partitive diminutive to derive something like *count* nouns from *mass* nouns – here the *salient part* is a delineated part of a larger amount. The table below shows a number of such cases; in some cases, such as Cantonese, the language does not grammaticalize the count/mass distinction, but the diminutive may still be used to form nouns which are delineated parts of the

mass quantity expressed by the base nouns.

| <u>MASS</u> | Unmarked Form | | Diminutive | |
|------------------|-------------------------|---------|-------------------------|------------------|
| Yiddish | <i>der zamd</i> | 'sand' | <i>dos zemdl</i> | 'grain of sand' |
| Ojibwa | <i>goon</i> | 'snow' | <i>goonens</i> | 'snowflake' |
| Ewe | <i>sukli</i> | 'sugar' | <i>sukli-ví</i> | 'piece of sugar' |
| Cantonese | <i>tong₄</i> | 'sugar' | <i>tong₂</i> | 'piece of candy' |

Finally, a number of languages use a diminutive form on the partitive marker itself, as shown below. Each of these forms is used to denote subamounts of mass nouns, and subevents of durative verbs.

| | | |
|--------------------|-----------------|---------------------|
| Lev. Arabic | <i>šwayye</i> | 'a little (bit of)' |
| Mandarin | <i>yi dianr</i> | 'a little (bit of)' |
| English | <i>a little</i> | |

6 Resemblance, Imitation, and Approximation

This section discusses a chain of senses of the diminutive construction which extend the core sense to the concept *resemblance* and from that to the concept *imitation*. In the *resemblance* sense the diminutive marks an object which *resembles* the source object in its form or function, but is smaller. Rhodes (1990) has called these *classificatory* diminutives, because the diminutive object is a small object which is classified in the same ontological hierarchy as the larger object. The table below gives some examples.

| <u>RESEMBLANCE</u> | Unmarked Form | | Diminutive | |
|--------------------|------------------------|---------------|------------------------|--------------|
| Cantonese | <i>toi₄</i> | 'stage' | <i>toi₂</i> | 'table' |
| Ojibwa | <i>waasgonechgan</i> | 'lamp' | <i>waasgonechgaans</i> | 'flashlight' |
| Hebrew | <i>mapa</i> | 'tablecloth' | <i>mapit</i> | 'napkin' |
| Hebrew | <i>pax</i> | 'garbage can' | <i>paxit</i> | 'can' |
| Nez Perce | <i>?ini-t</i> | 'house' | <i>?ili-t</i> | 'doll house' |
| French | <i>ciboule</i> | 'onion' | <i>ciboulette</i> | 'scallion' |
| Ewe | <i>hẽ</i> | 'knife' | <i>hẽ-ví</i> | 'razor' |

Note that these are not just cases where a language marks two objects as being identical expect for variation in size. In each case, the language distinguishes between a smaller version of an object, marked with an adjective meaning 'small', and the diminutive, which marks a separate concept; I give below a clear example

of this from Heine *et al.*'s (1991) analysis of Ewe.

| | | |
|----------------|----------------|------------------------------|
| bare form | <i>hɛ</i> | 'knife' |
| diminutive | <i>hɛ-ví</i> | 'razor' |
| with adjective | <i>hɛ sue'</i> | 'shorter-than-average knife' |

Sense 8, *imitation*, maintains the notion of resemblance from sense 7, but the category differs in two ways. First, the nouns in this category are viewed as imitations or copies of natural objects, often body parts. The verbs, similarly, mark an imitation or pretence of an action (The verbal examples are from from Moravcsik (1978)). Second, recall that the *resemblance* sense, while emphasizing formal or functional resemblance, still required that the target object be smaller than the source object. In this new imitation sense, the diminutive form does not necessarily mark a smaller object. The diminutivized forms may in fact denote larger objects, as is the case with the Mandarin and Spanish examples below.

| <u>IMITATION</u> | <u>Unmarked Form</u> | | <u>Diminutive</u> |
|---------------------|----------------------|-----------|--|
| Dom. Spanish | <i>boca</i> | 'mouth' | <i>boquete</i> 'hole' |
| Dom. Spanish | <i>caballo</i> | 'horse' | <i>caballete</i> 'trestle' |
| Mandarin | <i>zhu</i> | 'pearl' | <i>fo zhur</i> 'monk's beads' |
| Russian | <i>noga</i> | 'leg' | <i>nožka</i> 'chair leg' |
| English | <i>leather</i> | | <i>leatherette</i> |
| Hebrew | <i>yad</i> | 'hand' | <i>yadit</i> 'handle' |
| Pacoh | <i>bíq</i> | 'sleep' | <i>táq qâmbíq bíq</i> 'pretend to sleep' |
| Sundanese | <i>wani</i> | 'to dare' | <i>wawanian</i> 'pretend to be brave' |

Note that by this sense of the diminutive, we have completely left the original source domain, size. This chain SMALL \Rightarrow RESEMBLANCE \Rightarrow IMITATION shows a clear example of the shift in domain from the real-world to the domain of categories. An imitation marks an object which is a very non-central member of a category, applying the MARGINALITY IS SMALL metaphor discussed earlier.

The ninth sense of the diminutive is the use to mark *approximation*. Here the diminutive marks cases where some predicate is *weakened*, or *less applicable* to its arguments. Once again the concept *small* is extended from the real-world domain of size to the linguistic domain of "strength of predication". By using an approximation we are saying that the concept is weaker or less applicable to some argument. In extending smallness or weakness in the world to smallness or weakness of predicates, the concept has even lost the aspect of real-world formal resemblance that characterizes the *resemblance* and *imitation* senses. Once again, because an *approximate* concept is a marginal one, we see the MARGINALITY IS SMALL metaphor.

One use of the diminutive for approximation marks lexical items whose meaning

is “approximation”. I give a few examples from Cantonese:

Cantonese *jo₂ gan₂* ‘more or less’ *dai₆ koi₂* ‘about, approximately’

In a very common use of the diminutive, adjectives or verbs are marked with the diminutive to indicate an approximation or weakening of verbal force. Note in the last case here, the English diminutive “-ish” applies both to a weakening of adjectival force as well as to numerical approximation. Some of these languages associate some pejorative meaning with these approximatives – note English diminutive “childish”, with pejorative overtones, versus “childlike”. These evaluative senses of the diminutive tend to occur here and there among the other senses.

| <u>APPROXIMATION</u> | Unmarked Form | | Diminutive | |
|----------------------|-------------------------|-------------|--|---------------------|
| Cantonese | <i>hong₄</i> | ‘red’ | <i>hong₄ hong₂</i> | ‘reddish’ |
| Mid. Breton | <i>moel</i> | ‘bald’ | <i>moelic</i> | ‘rather bald’ |
| Dom. Spanish | <i>cansado</i> | ‘tired’ | <i>cansadillo</i> | ‘rather tired’ |
| English | <i>red</i> | | <i>reddish</i> | |
| Halkomelem | <i>sxwáxwθ’</i> | ‘be insane’ | <i>sxwixwáxwθ</i> | ‘be a little crazy’ |
| English | <i>three</i> | | <i>threeish</i> | |

7 Hedges

The use of the diminutive to indicate a pragmatic *hedge*, softening or weakening the illocutionary force of the utterance, occurs in Japanese (Matsumoto 1985), Tzeltal (Brown & Levinson 1978), Cantonese (Jurafsky 1988), and Greek (Sifianou 1992). In these cases, the diminutive is used in asking for permission, for softening a command or a refusal, or merely to mark friendly or close relations among interlocutors. Brown & Levinson (1978:177) note that in a number of languages, including Tamil and Malagasy, this use of diminutives for politeness is even more grammaticalized, and the word for ‘a little’ functions generally like English *please*.

Cantonese *ma₄ ma₂ ha₁ŋ₄*
 slow slow-dim. walk
 Take care, walk safely [*weaken an imperative*]

Tzeltal: *ya niwan šba kaʔy ʔala kurso ta hobel*
 I’m maybe going to take a little course in San Cristóbal [*asking permission*]

Japanese: *Chotto shizuka ni shite kudasai.*
 Please *chotto* be quiet. [*weaken an imperative*]

Greek: *ðoste mu psaraki tote.*
 give me fish-dim. then
 Could you give me some fish then? [*establish friendly context*]

Where the *approximation* sense was a semantic hedge, this category functions

as a pragmatic hedge. Retracing the semantic chain from the core sense, from *small* to *approximation* to *hedging*, shows a semantic shift proceeding from the real-world domain (*x is small*) to the linguistic or textual domain (*weaken the locutionary force of the predicate p*) to the discourse domain (*weaken the illocutionary force of p(x)*). This transition from the real-world to the speech-act domain mirrors the shift in verbal semantics studied by Sweetser (1990) and Traugott (1991).

8 Distributed Radial Categories

In studying the directionality of change in the reflexive construction, Croft *et al.* (1987) and Pederson (1991) note that as the category decays, the most central sense is often lost first, and a new construction arises to take over this sense. We can see a parallel example for the diminutive in modern Cantonese, where as the diminutive tone extended its semantics into the domains of food, gender, kinship, and society, it lost its original core diminutive sense. A new diminutive affix arose which currently only covers the central senses of the category. The result of this sort of process is a state of the language in which multiple diminutive morphemes co-exist, spanning different portions of the conceptual network.

This process complicates our original proposal that the core sense of a radial category model both the semantically and historically prior sense of a morpheme or construction. In order to describe the case where two morphemes both cover the same network, Pederson (1991) proposes that they be modeled with separate radial categories. But what of cases in which the radial category for the diminutive is spanned by a large collection of morphemes, each of which covers only a small portion of the network, but which taken together span the entire category?

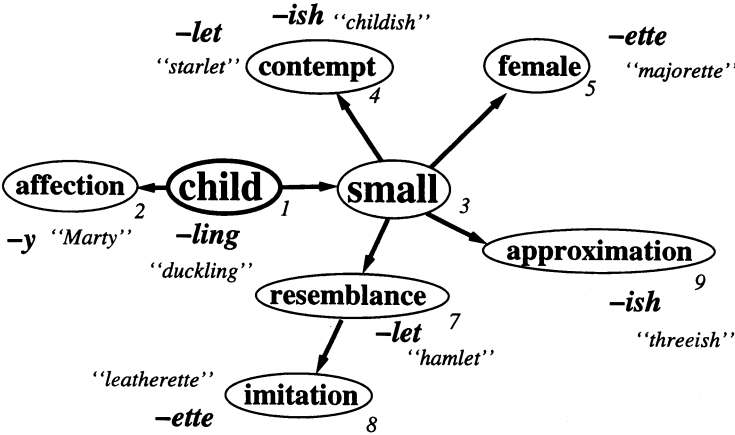


Figure 2: The diminutive category covering distinct morphemes

The current state of the diminutive in English (see Figure 2) may be an example of such a situation, in which distinct morphemes (“-let”, “-y”) cover different parts of the category. The kind of category Figure 2 shows for the English diminutives is not the traditional radial semantic category (Brugman 1981) realized by a single lexeme or construction. This new object, which we might call an *abstract* radial category, acts as an abstract “diminutive” concept in the grammatical competence of the speaker; it links together distinct affixes unrelated by form. Future work will focus on further details of these categories.

9 Lexical Diminutives

Section 7 discussed diminutives in Tzeltal and Japanese which are lexical rather than morphological. These forms, and others like the English construction ‘little’ or ‘a little’, exhibit much of the semantics of the morphological diminutive forms, but often co-exist with them in the grammatical system of a language. It may be useful to view these lexemes as an example of diminutive grammaticalization in progress. Figure 3 gives an example from English, showing the universal radial category from Figure 1 with the relevant subtree spanned by the semantics of ‘little’. Note in particular the distinction between ‘little’, which can occur in any of these senses, and ‘small’, which can occur only in the central sense.

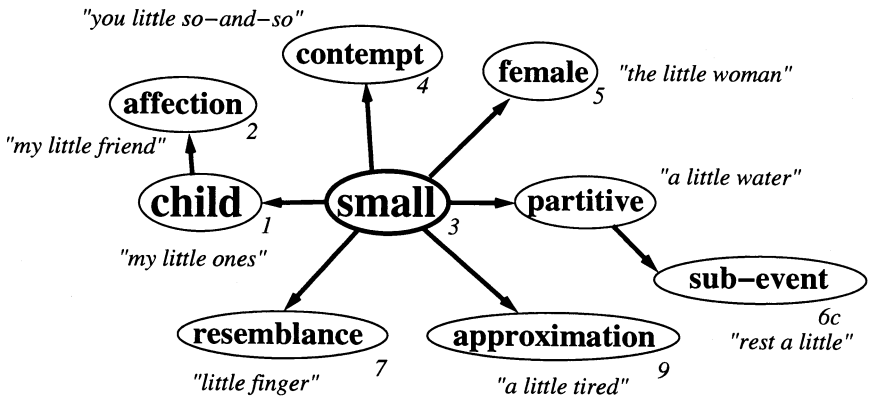


Figure 3: The periphrastic diminutive *little*

10 Conclusions and Future Work

We have always known that there were universals in the semantics of the diminutive, in particular with regard to children, affection, and contempt. I have argued here first that the diminutive as a construction has a surprising amount of semantic coherence crosslinguistically, and that besides affection and contempt we can often expect to

see partitives, resemblance, gender, approximation, and hedging expressed by the diminutive, and that we can capture these relations with a radial category model.

Second, I have shown that the diminutive, in grammaticalizing a clearly real-world property, *size*, into a marker of approximation and hedging, as well as transferring into the social and evaluative domains, is compatible with modern theories of unidirectionality in semantic change. Finally, I have suggested, albeit only briefly, that the theory of radial categories might be extended with *abstract radial categories* which are not linked to a unique lexeme or construction. I hope in future work to address a number of the shortcomings of this study, in particular examining a larger set of languages, and looking at augmentatives, non-stative verbs, and the use of the diminutive to mark *food*, which is common in Cantonese, Russian, Polish, and Greek.

11 Acknowledgements

Many thanks to George Lakoff, Claudia Brugman, Eve Sweetser, Rich Rhodes, Jack Martin, Orin Gensler, Elizabeth Traugott, Charles Fillmore, Yoshiko Matsumoto, David Zubin, Ed Keenan, David Gil, Leanne Hinton, my informants Shirley Chiu (Cantonese), Ramón Cáceres (Dominican Spanish), Terry Regier (Levantine Arabic), Ziv Gigus and Yochai Konig (Hebrew), and Hui Zhang (Mandarin), as well as published data on Nez Perce (Nichols 1971; Aoki 1970), Middle Breton (Hemon 1976), Ewe (Heine *et al.* 1991), Ojibwa (Rhodes 1990), Tzeltal (Brown & Levinson 1978), Yiddish (Birnbaum 1979), Hindi (McGregor 1977), Greek (Sifianou 1992), Polish (Wierzbicka 1984), Japanese (Matsumoto 1985), Fuzhou (Ling 1989), Sundanese (Robins 1959), Spanish (Gooch 1967), Halkomelem (Galloway 1977), Russian (Bratus 1969), and Mandarin (Chao 1968).

References

- AOKI, HARUO. 1970. *Nez Perce grammar*. Number 62 in UCPL. Berkeley: University of California Press.
- BIRNBAUM, SOLOMON A. 1979. *Yiddish: a survey and a grammar*. Toronto: University of Toronto Press.
- BRATUS, B. V. 1969. *The formation and expressive use of diminutives*. Cambridge: Cambridge University Press.
- BROWN, PENELOPE & STEPHEN C. LEVINSON. 1978. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- BRUGMAN, CLAUDIA. 1981. *The story of over*. Linguistics Dept., UC Berkeley. Unpublished Master's Thesis.
- CHAO, YUEN REN. 1968. *A grammar of spoken Chinese*. Berkeley: University of California Press.

- CROFT, WILLIAM, HAVA BAT-ZEEV SHYLDKROT, & SUZANNE KEMMER. 1987. Diachronic semantic processes in the middle voice. In *Papers from the 7th International Conference on Historical Linguistics*, 179–192, Amsterdam. Benjamins.
- FODOR, ISTVÁN. 1959. The origin of grammatical gender II. *Lingua*, 8(2):186–214.
- GALLOWAY, BRENT DOUGLAS, 1977. *A grammar of Chilliwack Halkomelem*. University of California, Berkeley dissertation.
- GOOCH, ANTHONY. 1967. *Diminutive, augmentative, and pejorative suffixes in modern Spanish*. Oxford: Pergamon Press.
- HAAS, MARY R. 1972. The expression of the diminutive. In *Studies in linguistics in honor of G. L. Trager*, ed. by M. E. Smith, *Janua linguarum, Series maior* 52, 148–152. The Hague: Mouton.
- HEINE, BERND, ULRIKE CLAUDI, & FRIEDERIKE HUNNEMEYER. 1991. *Grammaticalization*. Chicago: University of Chicago Press.
- HEMON, R. 1976. Diminutive suffixes in Breton. *Celtica*, 11:85–93.
- JAKOBSON, ROMAN & LINDA R. WAUGH. 1979. *The sound shape of language*. Bloomington, IN: Indiana University Press.
- JESPERSEN, OTTO. 1922. *Language*. London: Allen & Unwin.
- JURAFSKY, DANIEL. 1988. On the semantics of the Cantonese changed tone. In *Proceedings of BLS 14*, 304–318, Berkeley, CA.
- LAKOFF, GEORGE. 1987. *Women, fire, and dangerous things*. Chicago: University of Chicago Press.
- LING, YU ZHANG. 1989. Fuzhou fangyan de *kiang* zi (The “kiang” affix in the Fuzhou dialect). *Fangyan*, (3):213–215.
- MATSUMOTO, YOSHIKO. 1985. A sort of speech act qualification in Japanese: *chotto*. *UCLA Journal of Asian Culture*, IX:143–159.
- MCGREGOR, R. S. 1977. *Outline of Hindi grammar*. Delhi: Oxford University Press.
- MORAVCSIK, EDITH A. 1978. Reduplicative constructions. In *Universals of human language III: Word structure*, ed. by Joseph H. Greenberg, 297–334. Stanford University Press.
- MUNRO, PAMELA. 1988. Diminutive syntax. In *In honor of Mary Haas*, ed. by William Shipley, 539–555. Mouton.
- NICHOLS, JOHANNA. 1971. Diminutive consonant symbolism in western North America. *Language*, 47(4):826–848.
- NIKIFORIDOU, KIKI. 1991. The meanings of the genitive: A case study in semantic structure and semantic change. *Cognitive Linguistics*, 2(2):149–206.
- OHALA, JOHN J. 1984. An ethological perspective on common cross-language utilization of F₀ of voice. *Phonetica*, 41:1–16.
- PEDERSON, ERIC WILLIAM, 1991. *Subtle semantics: universals in the polysemy of reflexive and causitive constructions*. University of California, Berkeley dissertation.

- RHODES, RICHARD A. 1990. Lexical hierarchies and Ojibwa noun derivation. In *Meanings and prototypes*, ed. by S. L. Tsohatzidis, 151–158. London: Routledge.
- ROBINS, R. H. 1959. Nominal and verbal derivation in Sundanese. *Lingua*, 8(4):337–369.
- SAPIR, EDWARD. 1915/1949. Abnormal types of speech in Nootka. In *Selected writings*, edited by D. G. Mandelbaum, 179–196. Berkeley: University of California Press.
- SIFIANOU, MARIA. 1992. The use of diminutives in expressing politeness: Modern Greek versus English. *Journal of Pragmatics*, 17:155–173.
- SWEETSER, EVE E. 1990. *From etymology to pragmatics*. Cambridge: Cambridge University Press.
- TRAUGOTT, ELIZABETH CLOSS. 1988. Pragmatic strengthening and grammaticalization. In *Proceedings of BLS 14*, 406–416, Berkeley, CA.
- TRAUGOTT, ELIZABETH CLOSS. 1989. On the rise of epistemic meanings in English: An example of subjectification in semantic change. *Language*, 65(1):31–55.
- TRAUGOTT, ELIZABETH CLOSS. 1991. English speech act verbs: A historical perspective. In *New vistas in grammar: Invariance and variation*, ed. by Linda R. Waugh & Stephen Rudy, 387–406. Amsterdam: John Benjamins.
- ULTAN, RUSSELL. 1978. Size-sound symbolism. In *Universals of human language II: Phonology*, ed. by Joseph H. Greenberg, 525–568. Stanford University Press.
- WIERZBICKA, ANNA. 1984. Diminutives and depreciatives: Semantic representation for derivational categories. *Quaderni Di Semantica*, V(1):123–130.