

## Antonymy in Language Structure and Use

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### 1. Introduction

The learning of a language involves, among other things, the acquisition of words and their meanings. Lexical meanings form, as has been known for a long time in structuralist semantics, networks of senses, which are related through relations such as synonymy, hyponymy, meronymy, and antonymy. Antonymy, or oppositeness of meaning, is an especially interesting sense relation that manifests itself on various levels of linguistic organization and function, some of which we explore in this chapter.

Ordinary speakers are aware of the concept of oppositeness and can readily name antonyms of a word. Lexicographers cite the antonym(s) of a word in order to define its meaning(s), and language teachers exploit antonymy as a means to enlarge their students' vocabulary, especially in foreign language classes.

Antonymy might be the most salient sense relation. Word association tests have shown that the word most frequently associated with a given stimulus word is one with an opposite meaning. An illustrative example is an experiment conducted by Postman & Keppel (1970), whose results are tabulated in Table 1 (source: Clark & Clark 1977: 478).

Table 1. Some examples for word associations (adapted from Clark & Clark 1977)

Stimulus	Five most frequent word associations to stimulus words <i>man, boy, long, yellow</i> Number of subjects tested: 1,008					
1. <i>man</i>	<b>woman</b> 767	boy 65	girl 31	dog 18	lady 17	OTHERS 119
2. <i>boy</i>	<b>girl</b> 768	man 41	scout 37	dog 10	friend 8	OTHERS 144
3. <i>long</i>	<b>short</b> 758	fellow 11	narrow 10	John 9	time 9	OTHERS 211
4. <i>yellow</i>	<b>blue</b> 156	red 115	color 106	green 89	black 73	OTHERS 469

Clark & Clark (1977: 477) point out that there is usually some kind of semantic relation that links the stimulus word with the elicited words, such as hyponymy (*blue – color*) or syntagmatic cooccurrence/collocation (*long time*), but, as can be

seen from Table 1, there is an overwhelming preference for antonyms as responses to given stimulus lexemes.

The first row in Table 1 shows that the most frequently elicited words, given the stimulus *man*, is *woman*, followed by *boy* and *girl*, all of which can be considered antonyms of *man*.<sup>1</sup> *Woman* is a binary antonym of *man*, which contrasts with the latter in terms of SEX/GENDER. Intuitively, *woman* feels like a “better” opposite of *man* than *boy*. The reason may be that the contrast between ADULT and NON-ADULT is not as clear-cut as that between MALE and FEMALE. The development from non-adulthood to adulthood seems gradual rather than abrupt, as in the case of the crossing of a boundary. Furthermore, there is variation regarding the transition from non-adulthood to adulthood, due to sociocultural, religious, and legal traditions. The contrast between *man* and *girl* is of yet a different nature. Under one interpretation, *girl* is only an indirect antonym of *man*, because, apart from the opposition between MALE (*man*) and FEMALE (*girl*), there is also an opposition between ADULT (*man*) and NON-ADULT (*girl*).

The most frequently chosen word in response to *boy* (row 2 of Table 1) is its binary antonym *girl*, again distinguished by the attributes MALE vs. FEMALE. Less frequent is the selection of the antonym *man*, which, as a mentioned above, might be an effect of the gradual transition from childhood and adolescence to adulthood. Other far less frequent options chosen by subjects, such as *scout*, *dog*, and *friend* are not antonymic.

The word most frequently associated with *long* (see row 3) is, as the reader might suspect by now, *short*, a polar antonym of the stimulus word. Trailing far behind are collocationally based associations such as *fellow* and *time* (which is metaphorically associated with *long*).

Row 4 represents a less clear picture than the other rows, but it can still be regarded as supporting the overall hypothesis that words are closely associated with their antonyms. The color adjective *yellow* most frequently (although not overwhelmingly) evokes the word denoting the complementary color *blue*. The remaining responses to the stimulus *yellow* are other color words, i.e. cohyponyms such as *red*, *green*, *black*, and the noun *color*, which is a hyperonym of the specific color terms.

To conclude this brief introduction, it is intuitively plausible and has been supported by experimental evidence that words spontaneously evoke their opposites, and one might hypothesize that the tendency to associate words with their antonyms is to some extent reflected in linguistic structure and use. The aim of this chapter is to make a case for this thesis. We show that antonymy is found on both the *paradigmatic* and the *syntagmatic* axes of language and language use. Table 2 lists the antonymic phenomena that we discuss in this chapter.

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<sup>1</sup> *Girl* is ambivalent between the sense ‘non-adult human female’ and ‘young adult human female’.

Table 2. Paradigmatic and syntagmatic phenomena involving oppositeness of meaning

	Lexicogrammatical and/or conceptual-pragmatic phenomenon	
<b>Paradigmatic axis</b>	Auto-antonymy in the lexicon	Irony, sarcasm
<b>Syntagmatic axis</b>	Antonymous words in constructions	Oxymora
	Clashes between lexical meaning and construction meaning (“grammatical oxymora”)	Performative paradoxes

The focus of our chapter is on the meaning, and especially, the pragmatic function of antonymy on various levels of linguistic organization. In Section 2 we briefly characterize the notion of antonymy and various types of oppositeness in “textbook” terms, i.e. without any aspiration to provide sophisticated conceptual distinctions (see e.g. Croft & Cruse 2004: Ch. 7 for a more refined treatment of antonymy). In Section 3.1 we discuss words that (allegedly or actually) exhibit two intrinsically opposite meanings. We provide reasons why we believe that lexemes that are intrinsically antonymous are relatively rare. Section 3.2 briefly touches on the exploitation of oppositeness in irony and sarcasm. Section 4 discusses the semantic and pragmatic properties of one grammatical construction that involves antonymy, the *X and Y alike* construction, in some detail. Section 5 touches briefly, and only by way of example, on antonymic clashes between lexical meaning and construction meaning, the pragmatic function of oxymora, and performative paradoxes (and their possible resolutions). Section 6 formulates some conclusions of our explorative study.

## 2. The notion of oppositeness (antonymy)

The observation that words frequently evoke words that denote their opposite meaning can be accounted for by the notion of *conceptual frame* or *domain*. In order to understand the meaning of a word it is helpful or even necessary (though certainly not sufficient) to know what its antonym is. Lexicographers and language teachers alike have had this insight for a long time and have applied it in the compilation of dictionaries and integrated it into language teaching. One may thus conclude that an important feature of conceptual frames is that they contain, apart from an account of the meaning “proper” of the lexical item in question, information about opposite concepts.

The term *antonymy* is used in a broad and a narrow sense. The narrow sense restricts antonymy to binary opposites (contradictories) such as *same – different*,

*single – married, dead – alive, pass – fail* (a test), and polar opposites (contraries), typically exemplified by gradable adjective pairs like *young – old, good – bad, wide – narrow*. Binary antonyms have specific logical properties: they are neither both true nor both false of a thing (of the right category). For example, animate beings cannot be both dead and alive, nor can they be neither dead nor alive. Polar antonyms cannot both be true of the same thing, but they may both be false. Thus, although a person cannot be both young and old, s/he can be neither young nor old. In other words, polar antonyms involve scales with intermediate values.

In this chapter, we understand *antonymy* in the broad sense. Apart from binary and polar opposites<sup>2</sup>, we include multiple incompatibilities (e.g. *spring – summer – fall – winter*), converse opposites (e.g. *buy – sell, parent – child*), and reverse opposites (e.g. *push – pull*) in the category of antonyms. Given the notion of frame, this is a natural consequence. For example, as is well known, in order to understand what *buy* means, the opposite (converse) notion of selling is crucial and must be incorporated into the COMMERCIAL EXCHANGE frame.

We can now characterize “ideal” antonymy as follows:

- (1) Two lexical items are antonyms if
  - a. they correspond to one of the types of antonymy mentioned above, and
  - b. they are formally substitutable for each other in a construction without resulting in ungrammaticality.

Criterion (1a)—the existence of word pairs that stand in a relation of opposition—is (obviously) often fulfilled. It is more difficult to find word pairs that satisfy criterion (1b) since the substitution of a lexical item by its antonym may entail changes in argument structure, or, at least, in the way that arguments are coded (by NPs, varying PPs, etc.). Ideal antonymy is therefore relatively rare. In what follows we assume a somewhat looser conception of antonymy that fulfills criterion (1a) given above, neglecting the formal criterion (1b).

### 3. Antonymy on the paradigmatic axis

In this section we discuss two types of paradigmatic antonymy—one concerns the existence of opposite meanings in *one* lexical item, a special case of polysemy; and the other type, which we touch upon only very briefly, is the use of

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<sup>2</sup> Cruse (1986) distinguishes between various subtypes of what we generically call ‘polar antonyms’: *polar antonymy* in the narrow sense (e.g. *heavy – light, fast – slow*), overlapping antonymy (e.g. *good – bad, polite – rude*), and equipollent antonymy (e.g. *hot – cold, nice – nasty*). See also Kearns (2000: 7–10) for a brief description of these subtypes.

paradigmatic antonymy for rhetorical, or more generally, communicative purposes, viz. irony and sarcasm.

### 3.1 Auto-antonymy

In November 1994 a query was posted on the Linguist List titled “Words that are their own opposites”. The wording of this query is somewhat misleading because the query was not about “words that *are* their own opposites” but about a special type of *polysemy*: words that are supposed to have two conceptually incompatible (antonymous) senses. Many Linguist List readers responded to this query, mostly by suggesting new examples, and a summary of these responses was posted on January 19 and January 25, 1995. In what follows, we refer to the phenomenon of one word having two opposite meanings by the term suggested by the subscriber (E. Eulenberg), who posted the query, as *auto-antonymy*.

Given that for most people lexemes quite naturally evoke other lexemes with opposite meanings (see Table 1), one could expect antonymy also to occur “within” one lexeme. However, a closer look at the words suggested by the various respondents to the query has led us to the conclusion that, at least synchronically, cases of antonymy within a lexical item are rare. Diachronically, there exist some words that have developed opposite senses, but usually with a concomitant backgrounding or loss of the original sense. In what follows, we analyze in more detail some of the words that respondents to the query considered as cases of intrinsic antonymy.

Let us start with the often-cited verb *let* with the two meanings ‘allow’ and ‘prevent’.<sup>3</sup> Historically, *let* is not one verb but an amalgamation of two distinct lexemes: *let*<sub>1</sub> ‘allow’ is etymologically derived from Old English (OE) *lātan*, whereas *let*<sub>2</sub> ‘prevent, hinder’ goes back to the OE verb *lettan* (related to German *verletzen* ‘hurt, injure’). Although the two OE verbs might ultimately have had a common origin, they were phonologically differentiated in Old English, and the fact that later they became homophones is not necessarily evidence that speakers felt them to exhibit *one* lexical item with *two* opposing senses. The Oxford English Dictionary (OED) is therefore justified in listing them as two separate lexical entries.

A better example (also cited in the query) is the verb *resent*, which, among other senses, is listed in the OED as meaning (i) ‘[t]o feel oneself injured or insulted by (some act or conduct on the part of another)’ and (ii) ‘[t]o take favourably, to approve of’ or ‘[t]o appreciate, to be sensible of, to feel grateful for(a kindness, favour, etc.); to remember with gratitude’. Furthermore, the verb is

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<sup>3</sup> *Let* also has other senses such as ‘put out to hire, rent’, which are not relevant here.

not the result of homonymy, but can be traced back to Old French *resentir* (nowadays *ressentir*). Examples of the two senses from the 17<sup>th</sup> century are (OED):

- (2) 1667 Milton *P.L.* ix. 300 Thou thy self with scorne And anger wouldst resent the offerid wrong.
- (3) a1677 Barrow Serm. (1683) II. xxvi. 373 Should we not be monstrously ingratefull if we did not deeply resent such kindness?

The meaning ‘appreciate’ in (3) attested in 1677 is obsolete, but the two opposing senses seem to have existed side by side for some time in the history of English.

The above examples raise the question of how auto-antonymy, as far as it exists, comes about. It is not sufficient to refer to psychological experiments of the sort cited in Section 1, which show that words are closely associated with their lexical antonyms. In the case of *resent*, one possible solution to the puzzle of auto-antonymy may be found by looking at the complement of *resent*. In (2) the direct object *the offerid wrong* has a *negative* implication, i.e. refers to an event that is *undesirable*, whereas *such kindness* in (3) denotes behavior that is evaluated as *desirable*. The use of *resent* with a positively evaluated referent (here an event) might have contributed to shifting the meaning of *resent* ‘feel injured, insulted’ to its opposite meaning ‘appreciate, feel grateful’.

Another lexical item that is often cited as an example of auto-antonymy is *cleave*, which is ambiguous between the two senses ‘cut apart’ (*cleave*<sub>1</sub>) and ‘stick, bring together’ (*cleave*<sub>2</sub>). Examples from the American Corpus of Contemporary English (COCA) are given in (4):

- (4) a. [...] improvement was possible, and she would seize Cook's great carbon-steel knife and cleave her handiwork into two diagonal halves (COCA, 1994, FIC, SewaneeRev)
- b. Did the night sky cleave open above East 43rd Street? (COCA, 1995, FIC, VirginiaQRev)
- c. He prays for faith and tries to cleave to his father's example. (COCA, 1992, FIC, AntiochRev)

If it is assumed that ideal antonymy is a paradigmatic relation, then, according to the criteria given in (1), the members of an antonymic pair should be freely substitutable for each other without any effect on their grammaticality and syntactic properties. However, the two verbs *cleave*<sub>1</sub> and *cleave*<sub>2</sub> cannot be substituted for each other since *cleave*<sub>1</sub> is transitive in (4a) or used as middle verb in (4b), whereas *cleave*<sub>2</sub> in (4c) is typically intransitive and followed usually by the

preposition *to* (sometimes *unto*). Strictly speaking, *cleave* is therefore not a case of auto-antonymy.

Another frequently mentioned candidate for auto-antonymy is the verb *splice* with the senses ‘join ends of two pieces of rope, film, etc.’ and ‘split’. The latter sense is however obsolete, according to the OED, and a cursory check of the COCA of approximately 100 examples provides only one hit that could be interpreted as involving the concept of ‘splitting’ or ‘cutting off’:

- (5) Scientists at Monsanto managed to splice the genes from the bacteria into the potato, so that potato is now poisonous. (COCA, 1995, SPOK, NPR\_Morning)

Notice however that sentence (5) is also, and perhaps mainly, concerned with genetically modified potatoes resulting from inserting the genes in question into the vegetable. The sense of joining is thus much more frequent than that of splitting. This numerical imbalance does thus not support the claim that *splice* is an instance of auto-antonymy.

The verb *sanction* in the sense of ‘impose a penalty on’ vs. ‘give permission or approval’ has also been adduced as an example of auto-antonymy. We argue that again there is no real auto-antonymy here for *conceptual* reasons. The opposite concept of ‘impose a penalty, punish’ is ‘reward’—not ‘give permission or approval’. And the antonym of ‘give permission’ is ‘prohibit’—not ‘impose a penalty’. Consequently, the two senses of the verb belong to related, but nevertheless distinct conceptual frames.

As a final example that was suggested by respondents to the above-mentioned query we mention the French verb *défendre*, which means ‘protect, defend’ and ‘prohibit’. We claim that it has to be discarded from the list of auto-antonymous words like most of the other examples—again for conceptual (and partially also for syntactic reasons). Figure 1 diagrams the two senses:

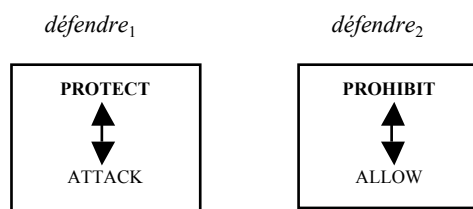


Figure 1. Antonyms of the two senses of French *défendre* ‘protect, prohibit’

First, the two senses of the verb, PROTECT and PROHIBIT, belong to different conceptual frames. The antonym of ‘prohibit’ is ‘allow, permit’; the antonym of ‘protect, defend’ is something like ‘combat, attack’. Furthermore, although some ambiguity could occasionally arise in sentences such as *La religion défend le meurtre* (*Petit Robert*. s.v. *défendre*), which normally means ‘Religion prohibits murder’ but could also mean ‘Religion protects murder’, *défendre*<sub>1</sub> ‘protect’ and *défendre*<sub>2</sub> ‘forbid, prohibit’ are used in distinct syntactic frames and have different collocations:

- (6) a. *défendre*<sub>1</sub> NP<sub>HUM</sub> (contre NP), e.g. *défendre un allié contre l’envahisseur* ‘protect/defend an ally against the invader’  
 b. *défendre*<sub>2</sub> à NP<sub>HUM</sub> de InfCl, e.g. *Son père lui défend de sortir* ‘His father forbids him to go out’

The conclusion we draw from the above discussion is that genuine lexical auto-antonymy is probably quite rare. Why should this be so? Imagine for a moment that auto-antonymy were frequent, e.g. that 50% of the vocabulary of a language exhibited auto-antonymy. Efficient communication would probably be hampered severely in a speech community using such a language because of the massive creation of ambiguous utterances with contrary or even contradictory meanings. It would be extremely hard to recognize intended senses unless the context provided clear clues. It is therefore likely that, for the sake of communicative clarity, speech communities would avoid creating words with inherent opposite senses unless the intended meaning could be identified easily in the linguistic or communicative context. We can thus tentatively formulate the following principle:

- (7) *Principle of Avoidance of Conventionalized Auto-antonymy*  
 Given that speakers normally want their utterances to be understood in the intended sense, it is unlikely that languages develop entrenched antonymous polysemy because such a situation would impede the communicative ideal of *clarity* and *non-ambiguity*.

Words can no doubt acquire meanings over time that are the opposite of their original meanings, but one of the meanings will become dominant and eventually eclipse the opposite meaning.

### 3.2 Antonymy for rhetorical purposes

In Section 3.1 we have claimed that entrenched auto-antonymy is rare. However, in language use it happens not infrequently that words are used by



speakers in a sense opposed to their conventional meaning, in order to achieve certain rhetorical effects. Typical examples are utterances like the following:

- (8) a. Boy, this food is *terrific!* (Akmajian et al. 2001: 378; italics ours)  
 b. That argument is a real *winner*. (Akmajian et al. 2001: 378; italics ours)

In (8a,b) the meanings of *terrific* and *winner* are, via conversational implicature, turned into their antonyms, viz. ‘terrible’ and ‘loser’, respectively. Sometimes, such ironic speech acts become completely conventionalized:

- (9) a. You are a *fine* friend. → ‘You are a bad friend’<sup>4</sup>  
 b. We are in a *nice* mess. → ‘We are in a bad situation’

In other cases, the auto-antonymous senses belong to different *registers*. In particular, in certain subcultural contexts, lexemes might be used with a meaning diametrically opposed to their sense in the standard language. Voßhagen (1999) investigates such uses and proposes treating them as metonymies. Often-cited examples are *bad* ‘good’, *wicked* ‘excellent’, *pretty* in e.g. *pretty ear* ‘deformed ear, cauliflower ear’.

Entrenched irony or sarcasm or the deliberate use of words in an auto-antonymic sense in subcultures that, in this way, distance themselves from the mainstream culture, do not constitute real counterexamples to our claim that entrenched auto-antonymy is relatively rare.<sup>5</sup> Such auto-antonymic uses occur usually in contexts in which the Principle of Avoidance of Conventionalized Auto-antonymy is not applicable, i.e. contexts in which it is absolutely clear what the intended sense of the utterance in question is.

#### 4. Antonymy on the syntagmatic axis

We have seen that there is more to antonymy than just being a lexical relation among other relations such as hyponymy, meronymy, etc.<sup>6</sup> In the following sections, we substantiate this claim, demonstrating that antonymy plays an

<sup>4</sup> We use ‘→’ for pragmatic inferences (including implicatures and metonymic reasoning).

<sup>5</sup> Speakers can of course be familiar with different registers: they might use *bad* as ‘good’ in the context of a rap concert, but use *bad* in its standard sense in the workplace.

<sup>6</sup> In fact, there is also more to hyponymy than meets the eye, In Panther & Thornburg (2009) it is shown what the role of (pragmatically construed) hyponymy is in the reinterpretation of coordinate constructions of the type *nice and Adj* (e.g. *nice and cozy*).

important role on the syntagmatic axis—both in the linguistic system and in actual language use.

#### 4.1 Antonymous lexemes in constructions

So far we have analyzed the functioning of antonymy from a paradigmatic (lexicosemantic and pragmatic) perspective. Antonymy is however also made use of on the syntagmatic level. Murphy (2006) assumes that lexically antonymous pairs form “paradigmatic antonymy constructions” and she suggests that they blend with syntagmatic patterns (constructions). Such antonymic constructions and their use in discourse have recently gained the attention of scholars and been investigated in some detail (see e.g. Jones 2002, 2006; Jones et al. 2008; Murphy 2006; Murphy et al. 2008). Such antonymic constructions are exemplified by the following examples:

- (10) a. *X and Y*: rich and poor  
 b. *both X and Y*: both Republicans and Democrats  
 c. *X and Y alike*: young and old alike  
 d. *whether X or Y*: whether single or married  
 e. *X as well as Y*: buyers as well as sellers  
 f. *X but not Y*: men but not women

We leave open the question whether it makes sense to call antonymic pairs in the lexicon “constructions”, but it is clear that antonymy can be made use of on the syntagmatic level.

Our focus in this section is on the *X and Y alike* construction, which has been investigated by Murphy (2006), but we hope to offer some additional insights, especially we want to uncover subtle differences regarding the pragmatic inferences that (various subtypes of) this construction trigger.

The *X and Y alike* construction is used productively in English. A search in the Corpus of Contemporary American English (COCA) reveals that the one hundred most frequent *X and Y alike* patterns overwhelmingly contain pairs of *Xs* and *Ys* that are conceptually opposed to each other, i.e. semantic textbook examples of antonymy. Frequent examples are: *men – women*, *young – old*, *conservatives – liberals*, *students – faculty*, *friends – foes*, *black – white*, *adults – children*, and *soldiers – civilians*. The twenty most frequent pairs are diagrammed in Figure 2 (the numbers on top of the columns refer to absolute frequencies).

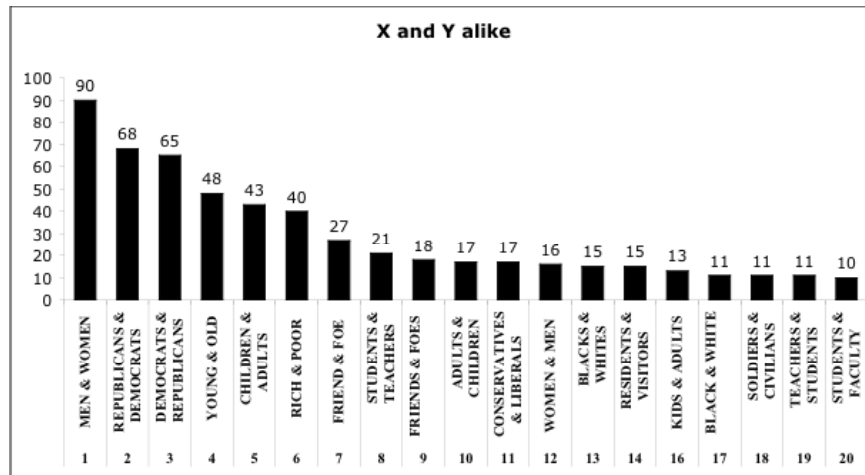


Figure 2. Some *X and Y alike* tokens ranked according to frequency (COCA) (raw frequencies)

That oppositeness must play a crucial role in the construction also becomes evident when semantic relations other than antonymy between *X* and *Y* are tested in the *X* and *Y* slot, respectively. Thus the following non-antonymically related *X*s and *Y*s are avoided in the *X and Y alike* construction:

- (11) a. ?sparrows and birds alike (hyponym – hyperonym)  
 b. ?birds and sparrows alike (hyperonym – hyponym)  
 c. ?noses and faces alike (meronymy)  
 d. \*buyers and purchasers alike (synonymy)  
 e. \*boys and boys alike (repetition)

Another interesting and, at first blush, surprising feature of the *X and Y alike* construction, in need of explanation, is that opposite *quantifiers* cannot occupy the *X* and *Y* slots:

- (12) a. \*all and none alike  
 b. \*some and none alike  
 c. \*everybody and nobody alike  
 d. \*few and many alike

With these restrictions in mind, as a first approximation, the meaning of the *X and Y alike* construction might, informally, be characterized as follows (see also Murphy 2006):

- (13) a. *X* and *Y* are in an antonymic relation (in the broad sense).
- b. The construction *neutralizes* the contrast between *X* and *Y*.
- c. Some *predicate* applies equally to *X* and *Y*.

It is now possible to answer the question why opposite quantifiers do not work in the *X and Y alike* construction. It is impossible to neutralize the contrast between e.g. *all* vs. *none* or *few* vs. *many* without a resultant logical contradiction. For example, the same predicate cannot apply equally to *few* and *many* in the following made-up utterance:

- (14) \**Few* and *many* Parisians alike enjoy watching the French Open.

Instantiations of the *X and Y alike* constructions abound. The following examples (15)–(19) are selected authentic examples from various Google sources (italics ours):

*Binary antonyms*

- (15) a. A community of young adults (ages 18 to 33, *single and married alike*) who seek to draw closer to Christ and his Church by prayer, friendship, discussion, ...
- b. The *dead and alive alike* of Brady's Antietam battle pictures visit us as ghosts, whose haunting images are still crisply preserved for our eyes upon these fine reproduction prints.

*Polar antonyms*

- (16) I think a lot of people here, *tall and short alike* [...]

*Multiple incompatibles*

- (17) *Summer and winter alike*, Roman workmen enjoyed freedom during the whole or the greater part of the afternoon [...]

*Converses*

- (18) a. Why Auctions Attract *Buyers and Sellers Alike*.
- b. *Parents and children alike* can have hurt feelings.

*Reverses*

- (19) For bi-directional motors (*pushing and pulling alike*, as with electromotors), the inequality conditions F greater-or-equal, [...]

We are now in a position to consider the inferential properties of the *X and Y alike* construction. Murphy (2006: 69) formulates an important generalization about conjoined antonyms: “[C]oordinated antonyms are used in order to indicate that what is being said is true of both the opposite states and all states in between.” Murphy’s generalization is a good point of departure, but it needs to be qualified and elaborated in various respects in the subsequent sections of this chapter.

#### 4.2 The inferential properties of coordinated binary opposites

Binary antonyms seem to defy Murphy’s generalization cited at the end of Section 4.1. By definition, binary antonyms display no intermediate states between the opposed concepts and, consequently, there can be no inference to such intermediate states. Consider examples (15a,b) again. Utterance (15a) contrasts *single* and *married*; (15b) contrasts *dead* and *alive*. Both word pairs are usually considered as binary antonymy. In the case of (15b), no other states are usually taken into consideration by conceptualizers than those of being either alive *or* being dead (*tertium non datur*). In the default case, there is no inference that the predicate holds of anything else than the states that are explicitly named in the utterance. However, prefiguring our reasoning in Section 4.6, we surmise that antonymy is not merely a *static* sense relation between lexemes, but that it is often *dynamically* construed. Utterance (15a), which looks like a case of binary opposition between *single* and *married*, may actually be construed to include other states, such as ‘engaged’, ‘divorced’, and ‘widowed’. Thus, in some contexts, (15a) may convey an implicature that the predicate ‘seek to draw closer to Christ and his Church by prayer’ applies to young adults of *any* marital status—not merely ‘single’ and ‘married’. Typically, however, the implicature that increases the number of members of a class applies to coordinated *polar* opposites and other non-binary oppositions in the *X and Y alike* construction. Nevertheless, to repeat the crucial point, example (15a) demonstrates that what appears to be binary antonymy can be conceptually reconstrued by language users as a case of multiple incompatibility.

### 4.3 The inferential properties of coordinated polar opposites

The inference conveyed by the *X and Y alike* construction—where *X* and *Y* denote concepts that are in polar opposition to each other—can be illustrated with the following authentic utterance:

(20) There was something for all, *young and old alike*.

This utterance will, in most contexts, convey a generalized implicature to the effect that the property ‘something for all’ applies not only to young and old persons, but also to persons of all ages. There is thus an inference such as (21):

(21) *young and old (alike)* → ‘young, teen-aged, middle-aged, old (alike)’

In more general terms, the pragmatic inference can be represented as in Figure 3.

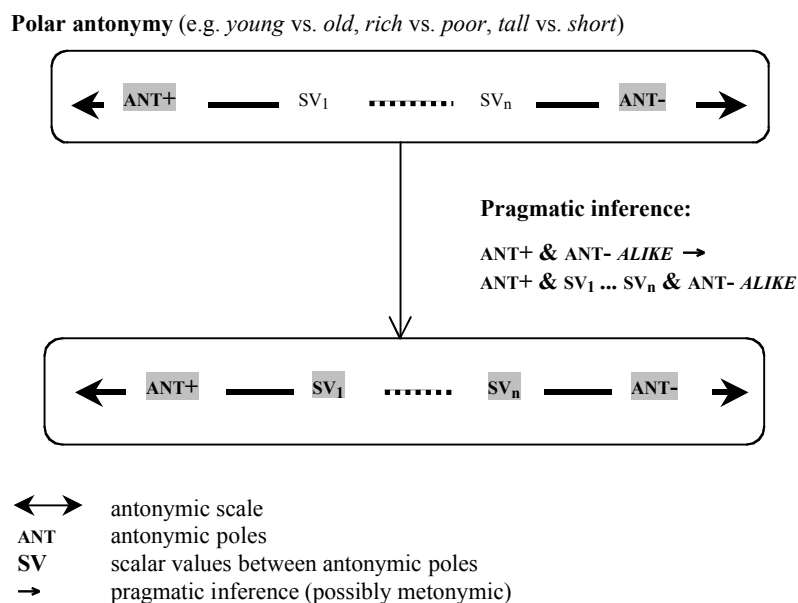


Figure 3. Pragmatic inference from polar antonyms to all values on the scale

In Figure 3, the polar opposites that are explicitly named in the utterance are abbreviated as ANT+ and ANT- and highlighted in grey. The implicature has the

effect of increasing the number of class members from two (polar values) to all (or at least a higher number of) members of the scale. Subsequently, we refer to this inference as the *exhaustive-list inference* or *open-list inference*.

In a different terminology, one might call the inference from two class members to all class members a metonymy: MAXIMALLY CONTRASTED CLASS MEMBERS FOR ALL CLASS MEMBERS. The polar values on the antonymic scale must have a prominent status vis-à-vis the other values on the scale that “entitles” them to stand for all scalar values. Under this interpretation, the implicature we have postulated has a metonymic underpinning.

The metonymy MAXIMALLY CONTRASTING CLASS MEMBERS FOR ALL CLASS MEMBERS appears to be guided by the Gricean maxim ‘Say no more than you must’, also called the *Principle of Informativeness* by the neo-Gricean pragmatists Levinson (2000) and Huang (2007). The metonymic inference (alias implicature) is, as might be expected, defeasible. Thus the speaker of (20) could explicitly deny that s/he intended to convey the implicature given in (21).

That the values on an antonymic scale must have a prominent status becomes evident when the following passage from an economic journal is considered:

- (22) Building on foundations laid in the late 1970s [...] a large number of authors, *young and middle-aged alike*, in the past decade have produced an outpouring of research within the Keynesian tradition [...].  
[http://www.jstor.org/pss/2727103]

The metonymic inference MAXIMALLY CONTRASTED CLASS MEMBERS FOR ALL CLASS MEMBERS is not applicable in this case because there is only one polar value (*young*) that is explicitly named in (22); the second adjective *middle-aged* refers to an intermediate value on the age scale and is thus not prominent. The presence of just one prominent member on an antonymic scale is not strong enough to trigger the metonymic inference that the relevant predicate applies to all values on the scale.

#### 4.4 Inferential properties of multiple incompatibles

Our next example is from an Internet advertisement that praises the beauty and hospitality of a mountain spa and hotel in the Alps:

- (23) A car-free family resort offering a warm welcome, *summer and winter alike*

*Summer* and *winter* are part of a taxonomy of terms often referred to as *multiple incompatibles*. The reader of the above lines will normally conclude that the hotel management and personnel in question will not only offer a warm welcome to their guests in the summer and in the winter, but also during the two remaining seasons:

(24) *summer and winter (alike)* → ‘summer, winter, spring, and fall (alike)’

Note that *summer* and *winter* are the “extreme” seasons that maximally contrast in terms of meteorological and vegetational conditions. It is not surprising that they are conceptually prominent and play a different role in inferential reasoning than the less “conspicuous” seasons spring and autumn. The inference from *spring* and *fall* to all seasons seems, at least in our judgment, blocked or at least much weaker than the strong metonymic inference (24). Figure 4 represents the general inferential mechanism involving multiple incompatibles with two prominent cohyponyms.

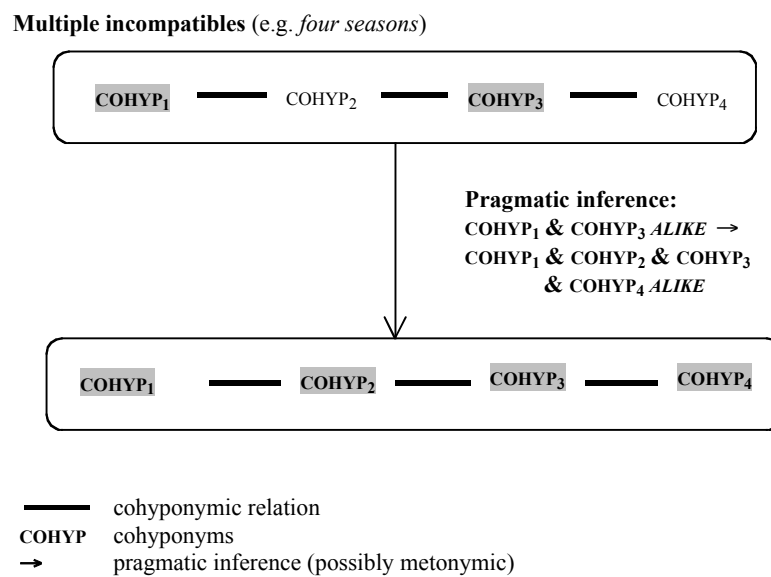


Figure 4. Pragmatic inference from maximally contrasting cohyponyms to all cohyponyms



#### 4.5 Contrasts in prototypicality

Another type of conceptual opposition relevant to the metonymic inference that we have dubbed MAXIMALLY CONTRASTED CLASS MEMBERS FOR ALL CLASS MEMBERS manifests itself in the following online text (Google search) authored by a bird watcher:

- (25) But I'm reasonable [sic] proud of it, because my point is that the fun in watching birds and their behaviour – *sparrows and shoebills alike* – is to discover new things and enjoy nature, rather than the ticking sportive competition.

A shoebill is, if we believe the online encyclopedia *Wikipedia*, “a very large stork-like bird”, “also known as Whalehead”. Its size and shape (huge bill like a shoe) already point to the conceptualization of this bird as a rather atypical bird, in stark contrast to the sparrow, which most Europeans would consider to be a prototypical bird. The intention of the author in naming a prototypical bird and a non-prototypical bird is to evoke all birds, ranging from prototypical to marginal, by naming two maximally contrastive exemplars. The writer wishes to convey that it is fun to watch *all* kinds of birds, not just the two mentioned in the text. The reader is invited to draw an inference from a list with two items to an exhaustive (or, at least, open) list of birds to which the relevant predicates (‘having fun’, ‘watching, discovering new things’, etc.) apply. The general inference pattern can be formulated as follows:

- (26) <PROTOTYPICAL CLASS MEMBER & PERIPHERAL CLASS MEMBER> →  
<ALL CLASS MEMBERS>

As in the case of polar opposites and multiple incompatibles, it is important to constrain the power of the exhaustive-list and open-list inference. Two members of the *X and Y alike* construction must again be maximally contrastive in conceptual terms. This constraint entails that the inference to all category members would be blocked if the two birds named were both *prototypical* exemplars of the category, such as *sparrows* and *robins*, or if they were both *non-prototypical* birds, such as *shoebills* and *ostriches*.

#### 4.6 The meaning of the *X and Y alike* construction revisited

The above discussion has not exhausted the inferential subtleties of the *X and Y alike* construction, but it clearly points to the necessity of incorporating licensing

conditions for pragmatic inferences or their inapplicability into the conceptual-functional description of grammatical constructions. In the case of the antonymic construction we have analyzed, another inductive generalization suggests itself: language users are free to construe antonymic relations *ad hoc*. Consider the following excerpt from a speech to the Regent House at Cambridge University in 2007:

- (27) I aspire to a future that still includes strong cohorts of British academics—returning *Argonauts and homebodies alike!*  
[The Distant Fen: Cambridge in the World. Annual Address to the Regent House, 1 October 2007]

In (27), *Argonauts* and *homebodies* are construed as denoting contrasting concepts. They are intended by the speaker to refer to maximally contrastive categories, with the understanding that most academics are probably “in-between” being on the “road” all the time and staying put behind their desk at their home university during their entire academic career. The invited metonymic inference is here to all types of academics, which includes the two extreme types explicitly mentioned in (27). An observation made by Murphy (2006: 23) is again pertinent: “[...] the speaker has two options in using a contrastive construction [such as *X and Y alike*, K-U.P, L.L.T] – to fill it in with a ready-made antonym construction or to assemble a contrastive pair for the purpose at hand”. In order to account for the creation of *nonce* antonymies, we revise our semantic-pragmatic description of the *X and Y construction* in the following way:

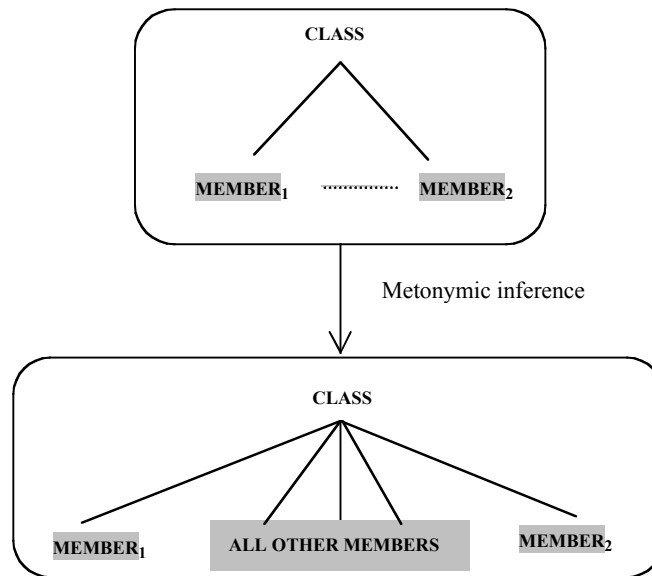
*Meaning and use of the X and Y alike construction*

- (28) a. *X* and *Y* are conceptually construed as *dissimilar* within a conceptual dimension.  
b. *X and Y alike* neutralizes the conceptual contrast between *X* and *Y*.  
c. *X and Y alike* makes *dissimilars* (entrenched or pragmatically construed) *similar* in at least one respect (coded in the *predicate*).

*Inferential potential of the X and Y alike construction*

- (29) a. If *X* and *Y* are *maximally contrasted* (e.g. in terms of polarity, cohyponymy, prototypicality, etc.), an *exhaustive/open-list inference* is triggered from *X* and *Y* to *all* class members, for which the predicate holds.  
b. If *X* and *Y* are not maximally contrastive, the exhaustive/open-list inference is blocked.  
c. If *X* and *Y* are genuine *binary antonyms*, the *X and Y alike* construction does not license an exhaustive/open-list inference.

The general inferential structure of the *X and Y alike* construction can thus be diagrammed as in Figure 5.



**MEMBER<sub>1</sub>** & **MEMBER<sub>2</sub>**: maximally (non-binarily) contrasted members of a class  
 → : metonymic inference (implicature)

Figure 5. Inferential structure of the *X and Y alike* construction

The picture becomes more complicated when the number of terms in the *alike* construction is increased to more than two. For example, what kind of inference does an expression such as *summer, winter, and spring alike* trigger? The expression contains two maximally contrasted terms, *summer* and *winter*, which, according to our hypothesis, would trigger an exhaustive-list inference. However, intuitively, three-term expressions of the form *X, Y, and Z alike* (with *X* and *Y* in maximal conceptual contrast), do not license such an inference. We have therefore to conclude that our generalization (29) holds only for two-term expressions, such as the *X and Y alike* construction. A proper treatment of *X<sub>1</sub>, X<sub>2</sub>, ..., and X<sub>n</sub> alike* constructions must be reserved for another study.

## 5. Lexical and “grammatical” oxymora

The preceding section was concerned with a construction that shows no semantic or pragmatic anomaly of any kind—despite the presence of two opposing concepts *X* and *Y*. In this section we (briefly) survey the problem of how semantic and pragmatic anomalies are resolved that result from antonymic clashes between lexical meanings or the incompatibility of lexical and constructional meaning.

### 5.1 Lexical oxymora

We start our brief discussion of semantic and pragmatic paradoxes with a quote attributed to Hollywood actress Ava Gardner:

- (30) Deep down, I’m pretty superficial.  
([http://thinkexist.com/quotes/ava\\_gardner/](http://thinkexist.com/quotes/ava_gardner/))

This statement is a nice piece of self-deprecating humor whose rhetorical effect relies on the antonymic contrast between *deep (down)* and *superficial*. Nevertheless, it is not a prototypical example of an oxymoron since the sentence is not felt to be contradictory. The expression *deep down* is metaphorical (compare expressions like *my innermost feelings*) and relies on the conceptualization of the human body as a container in which the ego is located (“deep down”). The attribute *superficial* is also metaphorical but belongs to a *different* semantic frame: the frame that contrasts ‘depth of feelings’, ‘seriousness of character, etc., with the alleged ‘shallowness’ of certain Hollywood actresses (and actors).

The informal analysis of the semantics-pragmatics of (30) is not exhaustive and “shallow” in many respects, but it suffices to distinguish this utterance from more prototypical cases of oxymora that involve genuine clashes between antonymic meanings within *one* conceptual frame. Some constructional patterns that contain genuine oxymora are:

- (31) a. *N–N*: love-hate relationship  
b. *Adj–Adj*: bittersweet love  
c. *Adj–N*: happy agony  
d. *NP is/will be NP*: Freedom is Slavery  
Boys will be girls’ (TV show)  
e. *the N of NP*: the sounds of silence

We advance the hypothesis that oxymora are like tautologies in one respect: they often allude to stereotypes (see Gibbs 1994: 345–351 on colloquial

tautologies). Perhaps more importantly, oxymora often have an experiential basis. They are appropriate linguistic devices to express conflicting feelings and emotions.

By way of example, consider (31c), which is part of a (translated) quote attributed to the French philosopher Sartre and used, among others, by the British actor Alec Guinness:

(32) Acting is happy agony.

The quote is, of course, not just about acting but metonymically narrowed down to “good” acting—acting as a creative activity. The components of the ACTING frame relevant for the interpretation of (32) are diagrammed in Figure 6.

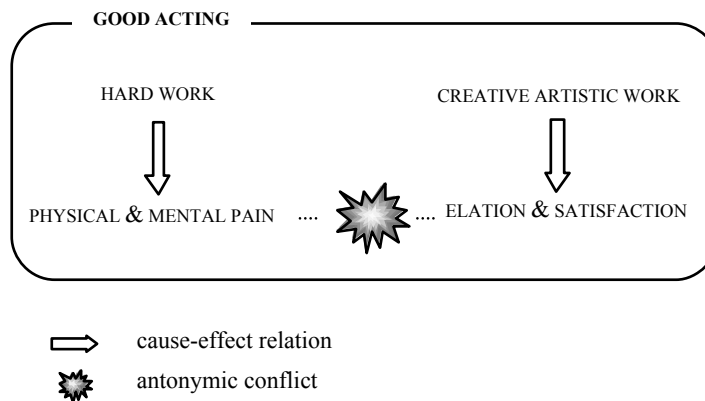


Figure 6. The stereotype of GOOD ACTING

As mentioned above, oxymora often invoke stereotypes—in this case, what might be called the stereotype of the SUFFERING ARTIST. This cultural model is not restricted to acting, of course, but quite commonly applied to any kind of activity considered to be creative. In our day and age, artists are seen as very special people (not just skilled craftsmen), who endure physical, mental, and emotional hardship during the process of artistic creation, the result of which is however the attainment of a state of sublime elation and satisfaction.

## 5.2 Clashes between constructional and lexical meaning

A special kind of oxymoron can be found on the speech act level. In this type the illocutionary force of the speech act clashes with the meaning of a word that is part of the illocutionary act. Well-known examples are orders or requests that cannot be complied with. The very moment a person reads the instruction on the signpost depicted in Figure 7, she cannot satisfy the propositional content condition ‘Reader will ignore this sign’.

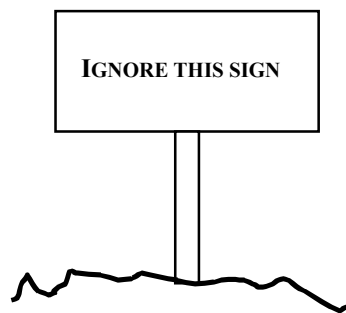


Figure 7. A performative paradox: orders that cannot be complied with

Communicative paradoxes like the one depicted in Figure 7 are, however, relatively rare. Usually, language users discover a pragmatic escape-hatch from an interpretive deadlock. Consider, for example, utterances (33a,b):

- (33) a. How to be spontaneous.  
 b. Be spontaneous at the right time ...

At first blush, (33a,b) might seem as nonsensical and paradoxical as the instruction *Ignore this sign*. Both (33a) and (33b) are variants of what we call *action* constructions (see e.g. Panther & Thornburg 1999, 2000). There is a conceptual (antonymic) clash between the construction meaning, which conveys the future performance of a *deliberate* and *controlled* action, and the adjective *spontaneous*, which, according to the OED, has the meaning ‘arising or proceeding entirely from natural impulse, without any external stimulus or constraint [...]’. This interpretation is diagrammed in Figure 8. It would be possible for the language user (e.g. a reader) to leave it at this conceptual clash; and in fact, many people believe that it is impossible to “learn” spontaneous behavior in a deliberate

and controlled way. For such people, utterance (33b) (and analogously (33a)) would simply express a meaningless (because not satisfiable) proposition.

**‘S asks H to act in a spontaneous manner at the right time’**

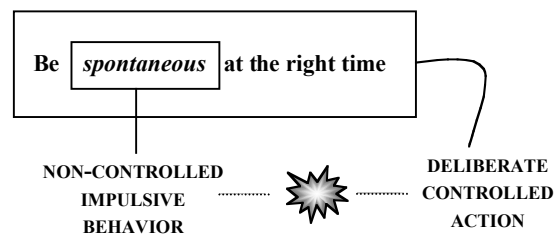


Figure 8. Conceptual clash between lexical meaning and construction meaning in a directive speech act

However, the language user who wants to make sense of imperatives like (33b), will find in bookstores self-help books on display that propagate the learnability of spontaneity. Thus, there is a second interpretation of (33b), viz. that (apparently) spontaneous behavior may *result* from deliberate and controlled *action*. Utterance (33b) thus receives a coherent interpretation through the operation of the RESULT FOR ACTION metonymy, which is induced (coerced) by the meaning component HEARER WILL DO ACTION of the scenario for directive speech acts. The resolution of the imperative paradox (33b) is diagrammed in Figure 9.

'S asks H to act in a spontaneous manner at the right time'

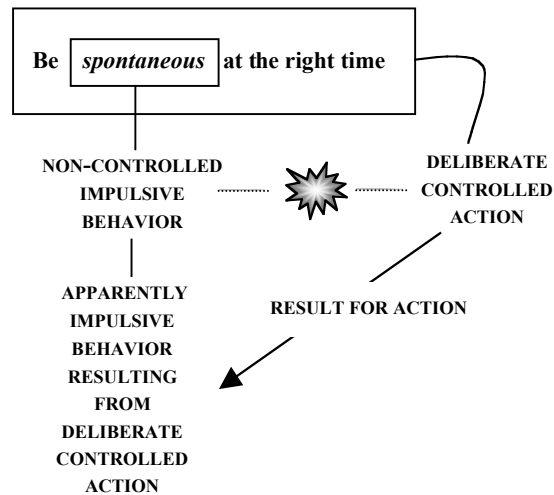


Figure 9. Resolution of conceptual clash between lexical and grammatical meaning by means of the metonymy RESULT FOR ACTION

To summarize, there is often, though not always, an interpretive strategy available to language users that helps them discover even in the “wildest” lexical-grammatical oxymoron a reasonably coherent sense.

## 6. Conclusion

Our brief explorative study has shown that antonymy is not just an entrenched semantic relation between lexical items, but a relation dynamically construed by speakers that operates on various lexicogrammatical and pragmatic levels. As we have seen, lexical items standing in an antonymic relation may coexist side by side, such as in the *X and Y alike* construction, but their cooccurrence may also lead to serious semantic and pragmatic conflicts that language users have to resolve. We have suggested in this chapter that what is needed for a proper treatment of antonymic phenomena is a rich theory of pragmatic (including metonymic) reasoning, which should be consequently an integral part of cognitive-linguistic theories.



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