

The Grammar of Polarity

Pragmatics, Sensitivity,
and the Logic of Scales

Michael Israel

THE GRAMMAR OF POLARITY

PRAGMATICS, SENSITIVITY, AND
THE LOGIC OF SCALES

MICHAEL ISRAEL

University of Maryland, College Park



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The Grammar of Polarity

The more that I philosophize
The more and more I realize
That little things which I despise,
Like peanut shells and grains of sand,
Are very hard, hard to understand.

Delmer Israel, *To Harry F. Harlow*

Acknowledgments

This book began with an epiphany in a stairwell by the sea near San Diego. The idea that two rhetorical tropes, exaggeration (emphasis) and understatement (attenuation), might explain the entire grammar of polarity sensitivity (NPIs and PPIs), seemed in an instant so neat, obvious, and simple, I was sure it must be obviously wrong or else already widely assumed, or perhaps both. Now I think the idea was both less obvious and more correct than I first suspected. That idea became the basis for a qualifying paper in 1994, a paper in *Linguistics and Philosophy* in 1996, and a dissertation in 1998, as well as a handful of shorter works (Israel 1997, 1999, 2001, 2006), and now, finally, for this book. Even now I wonder if I have done justice to this one little idea, but I know that what justice I have done, I could never have done alone. While I am entirely responsible for the inadequacies which remain in this work, I am deeply in the debt of others for what virtues I have managed to include.

Probably I never could have had the idea at all were it not for the extraordinary scholars and teachers who inspired me on my way. It was Chuck Fillmore who first introduced me to polarity items and Eve Sweetser who first taught me to see the rhetoric in lexical semantics, and neither seems ever to have tired of encouraging me since. Adele Goldberg, Suzanne Kemmer, and George Lakoff, each in their different ways, taught me to seek the connections between grammar and meaning, and to appreciate the importance of doing so. Ron Langacker was always generous to me with his thoughts and patient and kind as he encouraged me to develop my own. I am deeply grateful for the thoughtful advice and meticulous readings he has given to me and this work over the years. Gilles Fauconnier, whose old ideas are at the heart of this work, was unstinting in his willingness to revisit old issues here and to help me as I worked through them again. And special thanks are due to Larry Horn, who has been generously reading and responding to drafts of this work almost from the beginning. His unflagging enthusiasm has sustained me throughout and his insights have greatly improved the final product.

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Abbreviations

ACC	Accusative
ADJ	Adjective
API	Affective polarity item
BNC	British National Corpus
CN	Common Noun
DAT	Dative
DE	Downward entailing
DEC	Declarative
DET	Determiner
DISJ	Disjunctive
ERG	Ergative
FC	Free choice
FP	Focus particle
FUT	Future
IC	Implication Constraint
IMPF	Imperfective
INDEF	Indefinite
INF	Infinitive
LF	Logical form
LM	Landmark
MOD	Modal
N	Noun
NEG	Negative
NOM	Nominal (i.e. N', the complement of a determiner in an NP)
NP	Noun Phrase
NPI	Negative polarity item
<i>OED</i>	<i>Oxford English Dictionary</i>
P	Preposition/particle
PFV	Perfective
PL	Plural

PPI	Positive polarity item
PRO	Pronoun
PS	Polarity sensitive
S	Finite clause
SG	Singular
SUBJ	Subjunctive
UE	Upward entailing
TR	Trajector
V	Verb
VP	Verb Phrase
WSJ	<i>Wall Street Journal</i>

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1 *Trivium pursuits*

But the truth is, they be not the highest instances that give the securest information, as may be well expressed in the tale so common of the philosopher that while he gazed upwards into the stars fell into the water; for if he had looked down he might have seen the stars in the water, but looking aloft he could not see the water in the stars. So it cometh often to pass that mean and small things discover great, better than great can discover the small. Bacon, *The Advancement of Learning*, Book II, 1.v. (1605)

1.1 As above, so below

Bacon's philosopher might be forgiven for looking too much upwards and not enough down. We look "up" not just to the stars and the sky, but to those we admire and to our highest ideals. We look "down," as often as not, on things we despise, things beneath us, which are low, mean, and base. Familiarity breeds contempt, and it is easy to forget that what lies beneath may also run deep.

Figuratively speaking, up is where it's at. *Up* is above, on top of, superior to, beyond; it is higher than, taller than, farther than, and more. It can be a location or a direction. It is defined within a larger frame, the vertical scale, which it shares with *down* – normally, the physical dimension parallel to an upright person standing erect on an even surface. The basic experience of bodily uprightness motivates the common metaphorical associations of being "up" with wakefulness, alertness, strength, reason, and virtue, and being "down" with sleep, weakness, folly, and vice. This massive alignment of evaluative metaphors along a vertical scale is not just some whim of imaginative fancy, nor is it unique to English. Indeed, it is a normal way for conceptual contents to be imaginatively structured across semantic domains – a reflection in grammar of the workings of the mind.

The basic opposition between 'up' and 'down,' and the many metaphorical oppositions it engenders, are themselves symptoms of a much more general tendency for human concepts to be structured in terms of contraries. All languages, it seems, have metaphors in which abstract notions like 'truth' and

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'goodness' are fleshed out in terms of more basic bodily experiences, and one of the most basic experiences featured in such metaphors is the sense of opposition one may feel between contrary concepts like 'up' and 'down,' 'light' and 'dark,' or 'hot' and 'cold.' Contrariety itself is a quintessentially abstract concept, but it is immanent in our most down-to-earth experiences. The human mind thrives on the logic of contraries, and this is everywhere reflected in the structure of language, from the most basic phonemic oppositions and antonymic lexical pairings to the elementary rules for predicate affirmation and denial.

Keeping with Bacon's advice, this book looks mainly down at little things in order to glimpse therein the image of something great. The little things of concern here are matters of grammar – ordinary constructions of everyday talk and their attendant bits of form and meaning. The greater things to be discovered are the elements and principles of thought itself: the commonsense imaginative abilities which allow us, the speaking ape, to entertain concepts and to share them with one another.

1.2 A quirk of grammar or a trick of thought?

This book is concerned with a single, intricate, and easily overlooked grammatical phenomenon going by the awkward name of *polarity sensitivity*. Many, and perhaps all, human languages include a class of constructions which are somehow sensitive to the expression of polarity – forms whose acceptability in a sentence can depend on whether that sentence is grammatically negative or affirmative. Such *polarity items* arise in many semantic domains and come in many morphosyntactic flavors; but, since polarity itself is a binary relation, all polarity items divide into two basic classes: positive polarity items (PPIs), which are unacceptable in the scope of negation, and negative polarity items (NPIs), which are unacceptable in simple affirmative contexts.

Both NPIs and PPIs can be found side by side in semantic domains they share with semantically similar but grammatically insensitive (or *neutral*) constructions. The data in (1–4), for example, reveal four sets of sensitivity triplets – items with similar semantics but different sensitivities – taken from four basic semantic domains: (1) agentive effort, (2) epistemic possibility, (3) propositional conjunction, and (4) event frequency. For each domain, the examples in (i) illustrate neutral items, those in (ii) illustrate PPIs, and those in (iii) illustrate NPIs. The unacceptable sentences in (ii–iiib) give some impression of what happens when a polarity item occurs in the wrong sort of context.

- (1) EFFORT: (i) *make an effort to V*, (ii) *take a stab at V-ing*, and (iii) *even bother to V*.
- i) a. He *made an effort to* solve the puzzle.
 - b. He didn't *make an effort to* solve the puzzle.
 - ii) a. He *took a stab at* solving the puzzle.
 - b. *He didn't *take a stab at* solving the puzzle.
 - iii) a. *He *even bothered to* solve the puzzle.
 - b. He didn't *even bother to* solve the puzzle.
- (2) POSSIBILITY: (i) *be likely to V*, (ii) *could well V*, and (iii) *can possibly V*.
- i) a. She *is likely to* win the race.
 - b. She *is not likely to* win the race.
 - ii) a. She *could well* win the race.
 - b. *She *couldn't well* win the race.
 - iii) a. *She *can possibly* win the race.
 - b. She *can't possibly* win the race.
- (3) CONJUNCTION: (i) *and*, (ii) *as well as*, and (iii) *let alone*.
- i) a. Chris has read the Aeniad *and* the Georgics.
 - b. Chris hasn't read the Aeniad *and* the Georgics.
 - ii) a. Sally has read the Aeniad *as well as* the Georgics.
 - b. *Sally hasn't read the Aeniad *as well as* the Georgics.
 - iii) a. *Glynda has read the Aeniad, *let alone* the Georgics.
 - b. Glynda hasn't read the Aeniad, *let alone* the Georgics.
- (4) FREQUENCY: (i) *to V X a lot*, (ii) *be always V-ing X*, (iii) *to V X much*.
- i) a. Ann listens to the Grateful Dead *a lot*.
 - b. Ann doesn't listen to the Grateful Dead *a lot*.
 - ii) a. Hugh *is always* listening to the Grateful Dead.
 - b. *Hugh *isn't always* listening to the Grateful Dead.
 - iii) a. *Jeff listens to the Grateful Dead *much*.
 - b. Jeff doesn't listen to the Grateful Dead *much*.

The proper way to account for this little phenomenon has been a subject of long-standing and at times rather intense controversy in theoretical linguistics. These are not the sorts of facts one is likely to notice about a language, but they are remarkable nonetheless. One would expect that anything one could affirm, one could also deny, and that anything one could deny, one could also affirm. But polarity items are subject to special constraints, the violation of which results in unexpectedly unacceptable sentences. These constraints are more complicated than the examples here suggest since NPIs can be licensed, and PPIs blocked, in a variety of contexts beside clausal negation – among others, in questions, and in conditional (*if*) and comparative (*than*) clauses (see below §2.3.2). Still, the fundamentally striking observation here is that a simple switch in polarity can make an otherwise unobjectionable sentence