[REVIEW]

The Expression of Negation

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1. Introduction

The year 2010 has seen the publication of two outstanding books of collected papers on negation: Horn (2010)—reviewed in this article—, and Kato, Yoshimura, and Imani (2010). These books share the common feature of dealing with the single topic of negation from quite different perspectives. Horn's *The Expression of Negation* (EON hereafter) sheds light on the nature of negation from a variety of angles including typology, acquisition, diachrony, polarity sensitivity, and metaphor. Kato et al.'s book contains twenty papers that examine the nature of negation from syntactic, semantic, and pragmatic perspectives.¹

Due to its rich and far-reaching contents, even specialists in negation will no doubt find interesting facts and novel ideas in EON. For non-specialists, the book will most likely demonstrate that natural language negation is a far more complex phenomenon than one might suspect from its treatment in logic as an operator that simply alters truth values. The following sections present a summary of each chapter in the main body of EON, as well as some comments and evaluations.

* I would like to thank two anonymous *EL* reviewers for their very helpful comments. Thanks are also due to Norman Fewell and Christopher Davis who have proof-read this paper. All remaining errors are my own.

¹ To the list of books on negation that appeared in 2010, we can add de Swart (2010), which investigates negation in the framework of Optimality Theory.

2. Summary and Comments

Following the first introductory chapter by Laurence Horn, Östen Dahl presents a survey of research on the typology of negation, the study of which began with Dahl (1979) and Payne (1985). Dahl first discusses the notion of “standard negation” and summarizes how negation constructions have been classified in the literature. He shows that the notion of “standard negation,” introduced by Payne (1985), is used in somewhat different ways by different scholars. Dahl is not explicit about the definition of this term that he employs, but the reader later finds out that he uses it to mean “negation constructions used in main verbal declarative clauses” (p. 26). Various types of “negators” and negation constructions are examined in the following order: morphological (affixal) negation, negative particles, negation verbs, and non-negative auxiliaries in negation constructions. I will mention here just one interesting example of morphological negation discussed by Dahl. Old Kanarese expresses negation by dropping the tense marker (Master (1946)). Thus, we find *kēl-v-en* ‘I hear’ vs. *kēl-en* ‘I do not hear’ in Old Kanarese, which, according to Dahl, offers a counterexample to the generalization that morphological negation is always affixal. This assertion by Dahl is of course correct if the term “affixal” only refers to overt affixes, but if “affixal” also includes covert affixes, it might be premature to reach this conclusion; it remains to be seen whether an analysis employing covert negative affix is not viable for this example. Dahl next discusses the correlation between word order and the position of the negator in standard negation constructions. Although some issues remain open, Dahl concludes that “there is a ‘canonical’ position for syntactic negators immediately before the verb which is relatively independent of Greenbergian basic word order” (p. 24).

Dahl then discusses the typology of “non-standard negation”: negative imperatives, negation in sentences with non-verbal predicates, negation in existential sentences, and negation in embedded clausal structures. To elaborate on just one of them, it is shown that negation is often expressed in special ways in sentences where the predicate is not a lexical verb. For example, in Indonesian sentences with nominal predicates, *bukan* replaces the standard negator *tidak*. Dahl’s next section discusses typological studies of negation with respect to quantification, polarity-sensitivity, and focus. Dahl makes an interesting observation about polarity sensitivity: the case systems of e.g. the Slavic and Fenno-Ugric languages exhibit polarity-sensitivity in which the genitive or the partitive are often used in negative sentences instead of

the accusative or (less often) the nominative. Given the nature of polarity-sensitivity envisaged in such recent works as Israel (2011), it is unlikely that the case systems mentioned by Dahl should fall under the phenomenon of “standard” polarity-sensitivity, although it would be interesting to investigate why such sensitivity to polarity exists in those case systems. The final topics addressed in this chapter are the diachronic sources for negators and negative constructions, and the grammaticalization of negation. Dahl identifies three such sources, and suggests a plausible trigger for the grammaticalization of negation, which eventually leads to Jespersen’s Cycle in some instances.

In the next chapter entitled “The Acquisition of Negation,” Christine Dimroth surveys research on first and second language acquisition of negation. In Section 2, *Developmental Patterns in L1*, Dimroth identifies three broad categories in the meaning (or function) of negation that emerge from various studies: (i) rejection/refusal, (ii) disappearance/nonexistence/unfulfilled expectation, and (iii) denial. Up to the one-word stage, these functions of negation are acquired in the order given here. However, Dimroth shows that in multi-word speech, “nonexistence” (e.g. *no pocket*) is acquired first cross-linguistically, followed by “rejection” (e.g. *no dirty soup*) and “denial” (e.g. *no truck*, as a response to an adult’s speech *there’s a truck*). With regard to formal properties of negation in child language, Dimroth summarizes the results of the research on the acquisition of anaphoric vs. sentential negation, and the acquisition of word order and a position for sentential negation. Anaphoric negation refers to negation that relates to the content of an earlier utterance (e.g. *This is red. No, this is orange*). Sentential negation, on the other hand, applies its negative meaning to the utterance in which it occurs (e.g. *This is not red*). It is shown that the results of the research on the acquisition of these two types of negation are mixed on the question of whether there is a universal developmental stage during which children use the anaphoric negative for sentential negation as well. One of the issues discussed in relation to the acquisition of a position for sentential negation is whether there is a developmental stage of external negation (e.g. *no the sun shining*) preceding internal negation (e.g. *I no reach it*). Citing studies that suggest that pre-sentential negation in child English is metalinguistic in most cases, Dimroth conjectures that the role that sentence external negation plays in L1 development varies cross-linguistically and probably also inter-individually, and that the frequency of external negation might have been overestimated because of the difficulty of distinguishing it from anaphoric negation.

Considering the developmental patterns in L2 that are similar to L1, one conclusion Dimroth reaches is that both L1 and L2 learners explicitly express negation before they acquire finiteness. In L1 acquisition, she states that “[d]evelopment goes from pre-verbal negation in non-finite utterances to post-verbal negation with nonthematic verbs, and, in languages where this is grammatical, post-verbal negation with finite thematic verbs” (p. 58). She then shows that similar orders are found in L2 acquisition. In the last part of this chapter, it is shown that the main difference between older L2 learners and young children acquiring negation in their L1 comes from the fact that the functions of negation are available at the outset to the former, but not to the latter.

The following chapter by Johan van der Auwera is entitled “On the diachrony of negation,” which surveys the research on the genesis of negators. He first discusses the diachrony of “standard negation,” paying special attention to the “Jespersen cycles.” The use of the plural noun *cycles* in the latter terminology is intentional: van der Auwera shows that in addition to the standard Jespersen cycle exemplified by the French example in (1), there are various “cycles” that the expression of negation may undergo, as illustrated in (2).

In (2), X refers to a marker (e.g. French *pas*) that will later be interpreted as a negator, becoming NEG2 in the later stages. The multiple cycles represented in (2) are supported by data found in various languages, and van der Auwera notes that even (2) does not exhaust the variation attested. The other issue discussed under the rubric of standard negation is asymmetry: the fact that negative declaratives often differ from their positive counterparts in more than just the absence vs. presence of a negator. Here,

Miestamo's (2005) classification of these asymmetries and his explanations for them are offered. In regard to non-standard negation, van der Auwera discusses three types: (i) prohibitive negation, (ii) non-verbal and existential negation, and (iii) negative pronouns and adverbs. For (i), it is claimed that many special prohibitive negators derive from "indirect prohibitive speech acts." Thus, *toko* in Lewo is analyzed as a prohibitive negative particle that derived from the verb *toko* 'abstain.' For (ii), it is observed that univertation processes yielding both special negative copula constructions and existence possession constructions seem to be commonly found (e.g., the negative copula *nije* in Serbian results from the univertation of a negator and a copula). For (iii), it is shown, citing Haspelmath (1997), that either a Jespersen cycle or "negative absorption" is involved in the diachrony of negative pronouns. For instance, the negative pronoun *ma-had* 'no-one' in Baghdad Arabic is hypothesized to have been derived by absorption of the clausal negator *ma* into the indefinite *had*. In addition, van der Auwera argues that Haspelmath's negative absorption analysis can also be applied to a construction such as *nobody*.

Laurence R. Horn's chapter "Multiple negation in English and other languages" deals with fascinating facts about multiple negation in natural languages. Section 1 discusses what Horn calls the DNA (*Duplex negatio affirmat*) phenomena, in which two negatives are logically equivalent to an affirmative. Citing numerous authors and discussing various ideas with many example sentences, Horn concludes that "what the *duplex negatio* affirms is not simply the content of the corresponding affirmative" (p. 120). Instead, the use of double negatives in DNA contexts "tends to signal that speaker was not in a position to have employed the briefer expression" (p. 117). Horn argues that the reason for not being in such a position varies, and offers his taxonomy of motives for using double negation. Section 2 discusses the DNN (*Duplex negatio negat*) phenomena, in which two negatives serve to signify a single negation semantically. Negative concord (NC) is the most familiar type of DNN, but the emphasis of this section is given to pleonastic negation (PN) of various genera. Again, with a wealth of examples, Horn demonstrates that PN is found in a variety of constructions, including what Jespersen (1917) called paratactic negation (e.g. *First he **denied** you had in him **no** right* (Shakespeare, *Com. Errors*)) and resumptive negation (e.g. ***Not** a creature was stirring, **not** even a mouse*). Particularly interesting among the points that Horn makes is the fact that there is a parallelism between the contexts in which PNs occur in colloquial English and those in which pleonastic *ne* is formally required

or preferred in French. Subsection 2.4 addresses the question of why PN exists. Horn claims that PN is not always semantically and pragmatically inert, although it is by definition irrelevant to truth conditions: it has been proposed in the literature that PN has semantic/pragmatic functions such as emphasis and introduction of presuppositions. He concludes that “the specific conditions on the use of PN are subtle and hard to pin down,” and that this is not surprising, given that we must invoke Gricean conventional implicature in order to account for conventional but non-truth-conditional components of speaker meaning. Also included in section 2 is a discussion of the triple negation construction, regional variations of hypernegation, and lexical hypernegation. In section 3, Horn introduces the phenomenon of “hyponegation,” in which there are more negatives available for interpretation than are actually expressed (e.g. *unpacked* (= ‘not yet unpacked’) and *could care less*). Mentioning that hyponegation as well as hypernegation can be found in sentences containing proximative adverbs (e.g. English *almost* and *barely*) in various languages, Horn offers an explanation for this fact in terms of the existence of “inverse readings” of those adverbs, which in turn supports Horn’s claim that the “polar” component of the meaning of *almost VP* is “assertorically inert.”²

The next chapter by Gunnel Tottie and Anja Neukom-Hermann is entitled “Quantifier-negation interaction in English: A corpus linguistic study of *all...not* constructions.” They begin their chapter by presenting a bibliographical survey on corpus linguistic studies on negation, noting that in this field the interaction between quantifiers and negation has not received much attention. Their study fills this gap, presenting a large-scale corpus study of “*all...not* constructions” using the British National Corpus (BNC). In section 2, it is shown that *all...not* constructions can have three different interpretations, as pointed out by various authors. For example, *All the bills don’t amount to \$50* has three readings that can be paraphrased as (i) “Not all the bills amount to \$50” (NEG-Q), (ii) “All the bills ‘not-amount’ to \$50” (NEG-V), and (iii) “All the bills taken together do not amount to \$50” (COLL[ective]). Section 3 presents the aims and limitations, methodology, and the overall results of their study. Out of a total of 452 relevant

² In line 7 of the second paragraph on page 138, the word *former* should read *later*. Otherwise, what is assertorically inert would be the “proximative” component of the meaning of *almost*. That this is not what Horn intended can be confirmed by reading Horn (2002).

examples in BNC, of which 93% were written examples, the authors found the following frequencies for each reading: NEG-Q=54%, NEG-V=18%, COLL=28%. Section 4 compares the use of the *all...not* constructions in speech and writing. The authors found that the NEG-V reading in speech had a higher proportion than in writing (39% vs. 17%), although this result should be taken with caution, given that the speech samples comprised only 7% of all the examples. In section 5, several factors that influence the reading of *all...not* constructions are discussed. Relevant findings include the following: “bare *all*” sentences (where *all* is the head and sole constituent of NP) tend to have a NEG-Q reading; Formulaic expressions such as *all is not lost* are always NEG-Q, and there are no instances of formulaic NEG-V *all...not* constructions in the BNC; A NEG-V reading is forced by coordinated subjects or predicates, as already noted by Taglicht (1985), as well as by a non-restrictive parenthetical insertion; NEG-Q and COLL sentences tend to be used as emphatic denials of previous utterances, but NEG-V sentences do not; The NEG-Q instances could be argued to be cases of metalinguistic negation in Horn’s (1989) sense. Section 6 raises the question of why ambiguous *all...not* constructions are used when the NEG-Q reading can be clearly expressed by *not all*, and NEG-V reading by *no/none*. To answer the question, the authors consider (i) structural and stylistic factors, (ii) discourse factors, and (iii) historical factors.

The chapter by Jack Hoeksema is entitled “Negative and positive polarity items: An investigation of the interplay of lexical meaning and global conditions on expression.” His main claim is that “the distribution of negative polarity items results from the interplay of lexical meaning with global conditions on the proper use of these items.” He cautions the reader that this interplay is not the only explanatory factor, mentioning that the interference of alternative ways of expressing a message quite often causes items to have odd ‘holes’ in their distribution. In section 2, global constraints on negative polarity items (NPIs) are explored.³ First, Jackson’s (1995) view about the constraints on *ever* and *any* is introduced: these items must appear in “general statements,” which are statements that are easy to falsify. For example, the statement *Jones does not have any apples* is a general statement, since a single counterexample suffices to falsify it. Jackson’s account is argued to be superior to Kadmon and Landman’s (1993) in that the for-

³ There are errors in section numbering: the section following section 2.2 is numbered 3.3 (p. 203), and the following sections are also misnumbered.

mer can explain intervention effects while the latter cannot. Consider the pair “*No student gave a teacher any apples*” and “?*No student gave every teacher any apple*,” where the latter is degraded and exhibits an intervention effect. The former is a general statement in Jackson’s sense, but the latter is not, leading to the acceptability difference between them. Jackson’s account is also argued to be superior to Zwarts’s (1995) in that the former makes a principled distinction between triggering by *few* and *less/fewer than 5* and triggering by *not all* or *not everybody*. Hoeksema presents corpus evidence that his corpus study supports making such a distinction between the two types of triggering. On the modal NPI *need* and its counterparts in Dutch and German, Hoeksema conjectures that their global condition is that they be used in the expression of a “weak requirement”: In the sentence *You need do very little*, the requirement is weak in the sense that you are required to do little. Hoeksema argues that this condition explains why *need* and the likes often appear in the context of restrictive adverbs such as *only*. In the section on polarity-sensitive animal names that refer to humans, Dutch expressions *geen hond* ‘no dog,’ *geen kip* ‘no chicken,’ and *geen muis* ‘no mouse’ are shown not to be interchangeable, and are used in different contexts. Hoeksema observes that the English expression *the likes of which* has not yet fully grammaticalized into an NPI, but that its core use is polarity-sensitive, and its general characterization is that “a maximal degree is indicated indirectly through *nonexistence* of an equal.” Hoeksema also discusses litotes constructions, which are a well-known source of NPIs. For instance, in the Dutch litotes construction *niet onverdienselijk* ‘not without merit,’ the word *onverdienselijk* ‘without merit’ only appears in narrowly negative contexts (excluding questions, conditionals, etc.). Hoeksema claims that this fact follows from the global requirement on the use of *onverdienselijk* that it should state something mildly positive; in order to express something mildly positive, it must be in the context of negation.

On adverbs of degree that are positive polarity items (PPI), Hoeksema claims that there seem to be some general semantic reasons for their being PPIs. For example, his explanation for the PPI status of *rather* is as follows: the expression *not rather smart* boils down to *not smart*, in the absence of metalinguistic negation; since the former is equivalent to the latter in its essence, the latter is preferred because it is shorter; hence, the former is actually never used, leading to *rather*’s status as a PPI. Finally, Hoeksema compares PPIs that resemble NPIs and shows that some of them have different global conditions that are arbitrary and conventional, while

others have the same global requirement despite their difference in polarity sensitivity. Overall, Hoeksema's view on polarity items agrees with the current trend in this field that lexical semantics and pragmatic factors play crucial roles in the licensing of polarity items (cf. Israel (2011)).

The chapter entitled "Negation as a metaphor-inducing operator" by Rachel Giora, Ofer Fein, Nili Metuki, and Pnina Stern is a psycholinguistic study on the processing of negation. Their study focuses on an asymmetry between negatives and affirmatives. While affirmative utterances of the form "X is Y" mostly give rise to non-metaphoric interpretations, the negative utterances of the form "X is not Y" mostly induce metaphoric interpretations. For example, the affirmative utterance *You are my maid* is mostly interpreted literally ('You are the person who cleans my place for a living'), whereas the negative utterance *You are not my maid* is mostly interpreted metaphorically ('Don't serve me'). By presenting the results of three experiments run in Hebrew, Giora et al. show that negation functions as a metaphor-inducing operator that enhances the figurative interpretation of the concept it rejects. In Experiment 1, participants were asked to decide whether a statement was intended either literally or metaphorically. The results confirmed their prediction: comprehenders opted for the metaphoric interpretation when they were judging the negative items, but significantly less so when they were judging the affirmative items. In Experiment 2, participants were asked to rate the interpretation of the targets on a 7 point scale ranging between two specific (literal or metaphoric) interpretations; they were also allowed to come up with their own interpretation. Again, their prediction was confirmed: negative statements were rated as more metaphoric than their affirmative counterparts. In Experiment 3, only highly novel negative statements and their equally novel affirmatives were used, and the participants were asked to do the same task as in Experiment 2. The results indicate that novel negative statements were rated as more metaphoric than their affirmative counterparts. Giora et al. corroborate their findings from these experiments with corpus-based studies conducted in English, German, and Russian. On the basis of the context of each utterance in their corpora, 2 judges decided whether an utterance was used figuratively or literally. The results demonstrated again that the negative versions were more metaphoric than their affirmative counterparts. Their overall conclusion is that "negation may enhance information within its scope, which in turn, may effect metaphoricity."

In the chapter entitled "Negation in Classical Japanese," Yasuhiko Kato investigates negation in Japanese during the Heian period, especially in the

prose of the tenth and eleventh centuries. He first discusses the following facets of negation in Classical Japanese (CJ): (i) negative forms, (ii) sentence negation, (iii) negative imperatives, (iv) double negation, (v) negative polarity items, and (vi) metalinguistic negation. With respect to (i), Kato mentions that at least four negative forms are identified in CJ: *zu*, *nasi*, *mazi*, and *zi*. For (ii), alternative forms of sentence negation are discussed, one in which only one negative element is used, and the other in which a pair of discontinuous elements *e ... zu/nu* is used. For (iii), it is shown that the form *na ... so* 'NEG ... IMP' is employed in CJ to express negative imperatives; what appears in between *na* and *so* is a verb, and possibly an adverbial modifying the verb (e.g. *na-ariki-so* [NEG-walk-IMP] 'don't walk,' *na tuneni notamafi-so* [NEG always tell-IMP] 'do not always tell ...'). As for (iv), it is shown that the use of double negation is not rare in CJ, and it may have a semantic effect of weakening or strengthening. For (v), three types of NPIs in CJ are identified: indeterminate-*mo* (e.g. *mono-mo* 'a word'), adverbial-*mo* (e.g. *mata-mo* 'again'), and other adverbials (e.g. *tuyu-bakari* 'at all'). As for (vi), Kato mentions that according to his brief survey, the metalinguistic use of negation is not prominent in CJ prose. Section 3 discusses syntactic aspects of sentence negation, focusing on how the sentences containing the discontinuous negative elements *e ... zu* are derived. Depending on where an argument or adjunct XP appears in the *e ... zu* construction, Kato classifies his data into two basic patterns, one in which XP appears to the left of *e* ("external position"), and the other in which XP appears in between *e* and *zu* ("internal position"). For example, in (3), the underlined subject is in the external position, whereas in (4), the underlined subject is in the internal position.

- (3) *fafagimi-mo* *tomini e mono-mo notamafa-zu*
 mother-also right now *e* a word say-NEG
 'Mother, too, couldn't say a word right now.'
- (4) *usiro-no fosomiti-wo e-fito-mo tofora-zu*
 behind narrow path-through *e* a person pass through-NEG
 'Nobody passes through the narrow path behind.'

Kato's claim is that the "external" occurrence of XP (e.g. subject in (3)) is a result of movement from its original "internal position," as schematically illustrated in (5).

- (5) [XP [*e*- [[_{VP} (XP) V] *zu*]]]
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He supports his claim with two reconstruction effects found in the data: (i) an adverbial XP in the external position may be interpreted as negated,

and (ii) negative polarity items can appear in the external position. These facts follow straightforwardly from the analysis in (5). In section 4, Kato proposes that the “internal position” is a focus-related position, and offers a generalization that at most one element may appear in this position. In section 5, the constituent order of the left periphery of CJ negative sentences is examined, and the following skeletal hierarchy is offered: Topic > Focus > XP-*wo*/Ø > (*Wh*-)Focus > IP.

3. Concluding Remarks

It is indeed a rare opportunity to find a book in which leading scholars from various sub-disciplines including typology, historical linguistics, and psycholinguistics collaborate in the discussion of negation. In this sense, EON has opened up a new genre in edited volumes on negation. In addition, the bibliography in EON entitled “Negation and polarity in the new millennium” nicely supplements the previous bibliographies compiled by Horn (1989, 2001).

Naturally, there are more areas to cover in our exploration of the cognitive category of negation, and some of the views expressed in this volume will no doubt be challenged. Nevertheless, EON represents the present state-of-the-art understanding of many aspects of natural language negation, and will surely be an invaluable resource for many years to come for anyone interested in this intriguing topic.⁴

REFERENCES

- Dahl, Östen (1979) “Typology of Sentence Negation,” *Linguistics* 17, 79–106.
 de Swart, Henriëtte (2010) *Expression and Interpretation of Negation: An OT Typology*, Springer, Dordrecht.
 Haspelmath, Martin (1997) *Indefinite Pronoun*, Oxford University Press, Oxford.
 Horn, Laurence R. (1989) *A Natural History of Negation*, University of Chicago Press, Chicago.
 Horn, Laurence R. (2001) *A Natural History of Negation* [orig. published by University of Chicago Press (1989)], reissued with new introductory material, Center for the Study of Language and Information, Stanford.

⁴ A LINGUIST List review of EON by Pierre Larrivée can be found at the following URL: <http://linguistlist.org/pubs/reviews/get-review.cfm?SubID=3795056>

- Horn, Laurence R. (2002) "Assertoric Inertia and NPI Licensing," *CLS* 38, Part 2, 55–82.
- Israel, Michael (2011) *The Grammar of Polarity: Pragmatics, Sensitivity, and the Logic of Scales*, Cambridge University Press, Cambridge.
- Jackson, Eric (1995) "Weak and Strong Negative Polarity Items," *Linguistic Analysis* 25, 181–208.
- Jespersen, Otto (1917) *Negation in English and Other Languages*, Høst, Copenhagen.
- Kadmon, Nirit and Fred Landman (1993) "Any," *Linguistics and Philosophy* 16, 353–422.
- Kato, Yasuhiko, Akiko Yoshimura and Ikumi Imani, eds. (2010) *Hitei to Gengoriron* (Negation and Linguistic Theory), Kaitakusha, Tokyo.
- Master, Alfred (1946) "The Zero Negative in Dravidian," *Transactions of the Philological Society* 1946, 136–155.
- Miestamo, Matti (2005) *Standard Negation: The Negation of Declarative Verbal Main Clauses in a Typological Perspective*, Mouton de Gruyter, Berlin.
- Payne, John R. (1985) "Negation," *Language Typology and Syntactic Description* 1, 197–242.
- Taglicht, Josef (1985) "Some Uses of All or: The King's Horses and Other Curiosities or: All is Not Well in Our Grammar," ms., The Hebrew University of Jerusalem.
- Zwarts, Frans (1995) "Nonveridical Contexts," *Linguistic Analysis* 25 (3/4), 286–312.

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