Negation and Negative Polarity
1259 words

Negation is a linguistic, cognitive, and intellectual phenomenon. Ubiquitous and richly diverse in its manifestations, it is fundamentally important to all human thought. As Horn and Kato 2000 put it:

> "Negative utterances are a core feature of every system of human communication and of no system of animal communication. Negation and its correlates – truth-values, false messages, contradiction, and irony – can thus be seen as defining characteristics of the human species." (p.1)

Cognitively (*COGNITIVE LINGUISTICS*), negation is elementary offline thinking; it involves some comparison between a 'real' situation lacking some particular element and an 'imaginal' situation that does not lack it. The particular element in focus anchors and contextualizes the negative element (which, being constrained by grammar, frequently doesn't provide enough information for a listener to determine what its focus is intended to be). There are many different conversational (*STORY AND DISCOURSE*) and written (*WRITING AND READING*) strategies for indicating and interpreting focus elements, and even more for modulating them.

Formally (*LOGIC AND LANGUAGE*), a functor called by logicians 'Negation' is the only significant monadic functor; its behavior is described by the most basic axiom of logic, the Law of Contradiction ($\neg\ (p \wedge \neg p)$, *NKpNp*, aka 'The Law of Non-Contradiction'), which asserts that No Proposition is both True And Not True. Pragmatically (*PRAGMATICS*), negation provides, among many other concepts, the basic 'cancellation test' for presupposition, as well as the fundamental observations that underlie theories of politeness and ironic bonding.

In natural language, negation functions as an 'operator', along with quantifiers (*QUANTIFICATION*) and modals (*MODALITY*); operators are more basic and have more properties than ordinary predicates or functors. In particular, operators have a 'scope'; that is, there is always some other element – either assumed or verbally present in the discourse – to which a negative, modal, or quantifier refers. That linked element is said to be 'the focus' or to be 'in the scope' of the negative (or modal; quantifiers are said to 'bind' rather than 'focus on' another element).

Negation produces significant complexities and occasional ambiguities when it interacts with other scope operators, because the scopes can get twisted about. *Every boy <u>didn't</u> leave* is ambiguous, depending on the relative scopes of the negative *<u>didn't</u>* and the quantifier *every* (rather like *Every boy read some book*, where two different quantifiers produce ambiguity). Negation combines in idiosyncratic ways with modals; e.g, in *You <u>may not</u> go, and that's final!* the 'deontic' *<u>may not</u>* means "not possible" but in *This <u>may not</u> be the place*, the 'epistemic' *<u>may not</u>* means "possibly not".

Every language develops its own idiomatic sets of negative elements, and its own rules for using them. English negative phenomena are by far the best-studied; examples include syntactic constructions (*This is it, isn't it? Not any big ones, he didn't*), variation (*so didn't I; ain't got none*), morphology (*-n't, -free, un-*), (morpho)phonology (*do/don't*), intonations (*'Riight'*), and lexemes sporting negation overt (*never*), incorporated (*doubt, lack*), calculated (*few*), entailed (*prohibit*), or presupposed (*only*).

Included also is a large, complex, and diverse system of **Negative Polarity Items** ('NPIs' – like *<u>ever</u>* in *He didn't <u>ever</u> see it*), which felicitously occur **only** in the scope of some negative element (**He <u>ever</u> saw it*). The details of what 'scope' actually is, and of how and which and why NPIs can occur within it, vary among specific negative and NPI elements.

Negative polarity is a variety of 'negative concord' (e.g French *Je <u>ne</u> regrette <u>rien</u>*, lit.'I do<u>n't</u> regret <u>nothing</u>'; Yiddish *Ix hob <u>nit</u> <u>kin</u> gelt*, lit. 'I do<u>n't</u> have <u>no</u> money'), but instead of negative concord , which uses negative elements in the focus of another negative, negative polarity uses other, non-negative elements, which can sometimes pick up 'negativity by association' and occur without overt negative (*could care less < couldn't care less*). An interesting typological question is whether languages like English lacking significant negative concord develop more negative polarity phenomena to compensate.

'NPI' is a term applied to lexical items, fixed phrases, or syntactic construction types that demonstrate unusual behavior around negation. NPIs might be words or phrases that occur only in negative-polarity contexts (*fathom, in weeks*) or have an idiomatic sense in such contexts (*not too bright, drink a drop*); or they might have a lexical affordance that only functions in such contexts (*need/dare (not) reply*); or a specific syntactic rule might be sensitive to negation, like Subject-Verb Inversion with Adverb Fronting in *Never/*Ever/*Frequently have I seen such a thing*.

The grammatical occurrence of NPIs in an utterance is prima facie evidence that it contains some sort of negation, and this allows NPIs to function as 'indicators' for various types of semantic opposition and syntactic structure. This has turned out to be a sensitive tool in other research areas of linguistics, and linguists using NPIs have discovered many covert negative phenomena; for instance, NPIs can also occur in questions (*Have you <u>ever</u> been there?*), hypothetical clauses (*Tell me if he <u>ever</u> arrives*), and comparatives (*He's better than we <u>ever</u> expected*).

Besides NPIs, English also has 'Positive-Polarity items' (*would rather, sorta*), which **don't** occur in negative-polarity contexts; 'Possible-Polarity items' (*tell time*), which can occur only within the scope of a *Possible*-type modal; and combinations, like the 'Impossible-Polarity item' *fathom*, which requires both negative scope **and** a modal.

Works Cited and Suggestions for Further Reading
(in chronological order, annotated)

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–   John M. Lawler, University of Michigan
                            & Western Washington University
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[Items in *ITALICIZED SMALL CAPS* are cross-references to other articles
    in the *Cambridge Encyclopedia of the Language Sciences*.]

o This article is available on the web:
        http://www.umich.edu/~jlawler/CELS-Negation.pdf
o More on Negative Polarity:
        http://www.umich.edu/~jlawler/aue/npi.html
o Latest list of English Negatives and Negative Polarity Items:
        http://www.umich.edu/~jlawler/NPIs.pdf
o Negative Polarity Items and Ross Constraints
        http://www.umich.edu/~jlawler/aue/npislands.html