

Lasersohn's pragmatic halos¹

Chris Potts, Ling 236: Seminar in Lexical & Constructional Pragmatics, Fall 2009

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1 Basics

The extension of *Mary arrived at 3:00:00* is false if Mary arrived at 3:00:15. But the sentence is generally considered felicitous in this situation — we are allowed to speak a little loosely. Lasersohn achieves this by assigning to every expression α a context-dependent set of alternatives to α , usually along with an ordering on that set. The definition of truth remains the same, but a sentence is regarded as ‘close enough to true’ iff its halo contains at least one nonempty (or true) denotation.

2 Dimensionality

Lasersohn strives to keep the two dimensions separate. Regular denotations operate on regular denotations, and halos operate on halos. The two kinds of meaning do not interact in the compositional semantics. Slack regulators strain this division, because they seem to operate on regular denotations. To achieve this, Lasersohn appeals to the fact that, by definition, the regular denotation occupies a fixed place in any halo (it is the minimal element). See page 529.

3 Halos

3.1 Defined

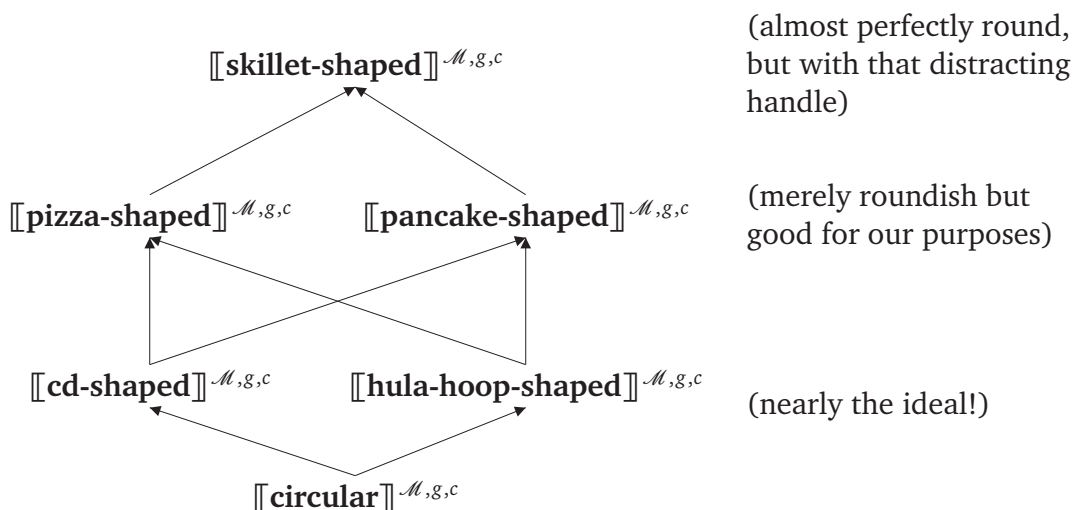
For any expression α ,

- i. $H_c(\llbracket \alpha \rrbracket^{\mathcal{M},g,c})$, the halo for α in c , is the pair $\langle A, \leq_{\llbracket \alpha \rrbracket^{\mathcal{M},g,c}} \rangle$, where
 - a. A is the set of objects in the same domain as $\llbracket \alpha \rrbracket^{\mathcal{M},g,c}$ that differ from $\llbracket \alpha \rrbracket^{\mathcal{M},g,c}$ only in ways that are pragmatically ignorable in c
 - b. the relation $\leq_{\llbracket \alpha \rrbracket^{\mathcal{M},g,c}}$, which orders A according to similarity to $\llbracket \alpha \rrbracket^{\mathcal{M},g,c}$ in c
- ii. $\llbracket \alpha \rrbracket^{\mathcal{M},g,c}$ is the unique member of A such that for all $d \in A$, it holds that $\llbracket \alpha \rrbracket^{\mathcal{M},g,c} \leq_{\llbracket \alpha \rrbracket^{\mathcal{M},g,c}} d$.

¹Lasersohn, Peter. 1999. Pragmatic halos. *Language* 75(3):522–551.

3.2 Example halo

Suppose we are trying to teach someone what *circular* means. Ideally, we would transport ourselves to the Platonic realm to show this person a perfect circle. If that proves impossible, we must find an object to illustrate. We want to present or mention something and say *This is circular*.



If we were trying to trace a circle on a piece of paper, then **[[skillet]]** might be closer to **[[pizza]]** and **[[pancake]]** in the ordering for this context.

4 Composition rule

4.1 Defined

- i. Let $A = \langle f, \{f, g, h\} \rangle$
- ii. Let $a = \langle a, \{a, b, c\} \rangle$
- iii. Then $A(a) = \langle f(a), \left\{ \begin{matrix} f(a), & f(b), & f(c), \\ g(a), & g(b), & g(c), \\ h(a), & h(b), & h(c) \end{matrix} \right\} \rangle$
- iv. Ordering is preserved by composition. Thus, if a is more likely than b , then $f(a)$ is more likely than $f(b)$ for any f .
- v. “We will count a sentence as ‘close enough to true for a context C ’ iff its halo relative to C contains at least one nonempty element.” (p. 528)

4.2 Sample composition

(1) The pitas are circular.

$$(2) \quad H_c \left(\llbracket \text{circular} \rrbracket^{\mathcal{M},g,c} \right) = \begin{array}{c} \llbracket \text{pizza-shaped} \rrbracket^{\mathcal{M},g,c} \\ \uparrow \\ \llbracket \text{cd-shaped} \rrbracket^{\mathcal{M},g,c} \\ \uparrow \\ \llbracket \text{circular} \rrbracket^{\mathcal{M},g,c} \end{array}$$

$$(3) \quad H_c \left(\llbracket \text{the(pitas)} \rrbracket^{\mathcal{M},g,c} \right) = \begin{array}{ccc} & \llbracket \text{the(unnibbled-pitas)} \rrbracket^{\mathcal{M},g,c} & \llbracket \text{the(unsliced-pitas)} \rrbracket^{\mathcal{M},g,c} \\ & \swarrow & \searrow \\ & \llbracket \text{the(pitas)} \rrbracket^{\mathcal{M},g,c} & \end{array}$$

$$(4) \quad H_c \left(\llbracket \text{circular(the(pitas))} \rrbracket^{\mathcal{M},g,c} \right) = \begin{array}{ccccc} & & & & \llbracket \text{pizza-shaped(the(unnibbled))} \rrbracket^{\mathcal{M},g,c} \\ & & & & \uparrow \\ & & \llbracket \text{pizza-shaped(the(pitas))} \rrbracket^{\mathcal{M},g,c} & & \uparrow \\ & & \uparrow & & \uparrow \\ \llbracket \text{pizza-shaped(the(unsliced))} \rrbracket^{\mathcal{M},g,c} & & \llbracket \text{circular(the(pitas))} \rrbracket^{\mathcal{M},g,c} & & \llbracket \text{circular(the(unnibbled))} \rrbracket^{\mathcal{M},g,c} \\ \uparrow & \leftarrow & \uparrow & \rightarrow & \uparrow \\ \llbracket \text{circular(the(unsliced))} \rrbracket^{\mathcal{M},g,c} & & \llbracket \text{circular(the(pitas))} \rrbracket^{\mathcal{M},g,c} & & \llbracket \text{circular(the(unnibbled))} \rrbracket^{\mathcal{M},g,c} \\ & & \downarrow & & \downarrow \\ & & \llbracket \text{cd-shaped(the(pitas))} \rrbracket^{\mathcal{M},g,c} & & \downarrow \\ & \swarrow & & \searrow & \downarrow \\ \llbracket \text{cd-shaped(the(unsliced))} \rrbracket^{\mathcal{M},g,c} & & & & \llbracket \text{cd-shaped(the(unnibbled))} \rrbracket^{\mathcal{M},g,c} \end{array}$$