Valence first

An experimental investigation of the affective dimension of verb meaning

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We present **two experimental studies** suggesting that **affective meaning is cognitively prior to referential meaning**.

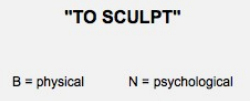
Theoretical background:
Tradition in analytic philosophy of language & formal semantics has focused on referential, truth-conditional meaning.
In the last years, there has been a rise of interest in non-truth-conditional aspects of meaning, but restricted to specific words (e.g. slurs...).
In the field of psychology, affect was first widely dismissed, but has been progressively re-enhanced about the end of the 20th century - see Zajonc's (1980, 2000) "affective primacy hypothesis".

▪ **Dimensions tested:** [referential dimension = physical vs. psychological meaning] / [affective dimension: positive vs. negative meaning]

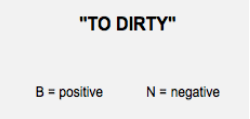
▪ **Verbs selected in the pretest** [*very* high and *equally* high with respect to valence and domain]
Physical positive: *cuddle / build / repair / caress / hug / produce / sculpt / twinkle / decorate / clean*
Physical negative: *rust / slaughter / slash / crash / tear / burn / hit / stain / delete / corrode*
psychological positive: *content / encourage / appreciate / impress / like / reassure / respect / admire / adore / cherish*
Psychological negative: *offend / despair / irritate / displease / dishonor / embarrass / discourage / dismay / criticize / dread.*

Experiment 1: Do we have a quicker access to referential information or to affective information within lexical meaning?

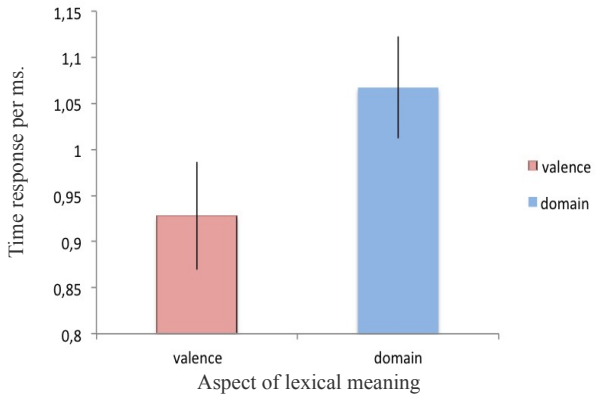
▪ **First question** [under time pressure – 2 seconds]
"Does the verb rather have a physical or psychological meaning?"



▪ **Second question** [under time pressure – 2 seconds]
"Does the verb rather have a positive or negative meaning?"



▪ **Results**



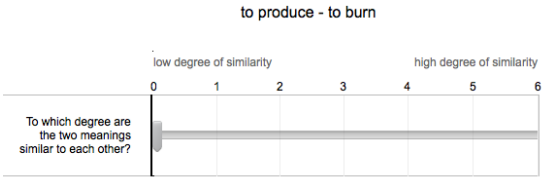
⇒ Speakers are much faster in detecting the valence (positive or negative) of a given verb than its referential domain.

Experiment 2: When we compare lexical meanings, do we give more weight to referential information or to affective information?

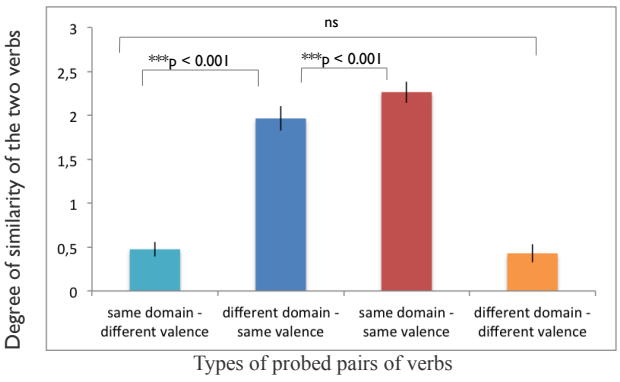
▪ **Pairs of verbs tested:**

	Domain		Valence	Example
[6 test pairs]	same	/	different	[*produce/burn*]
[6 test pairs]	different	/	same	[*hug/like*]
[4 control pairs]	same	/	same	[*impress/encourage*]
[4 control pairs]	different	/	different	[*adore/delete*]

▪ **Question type**



▪ **Results**



⇒ Speakers are much more sensitive to valence than to referential domain when asked to assess the semantic similarity of two verbs. The domain itself is only taken into account when the two lexical items already have the same valence.