

## Editorial

## Is negation unique? On the processes and products of phrasal negation

Is negation pragmatically unique and psychologically more difficult to process than affirmation, as assumed by many pragmatists and psycholinguists (for a review, see [Horn, 1989](#))? This volume sets out to investigate the long-standing view that negation is marked and functionally different from affirmation. In the initial article, **Rachel Giora** argues against the widely assumed “functional asymmetry of affirmation and negation” ([Horn, 1989:202](#)). Based on a wide array of naturally occurring instances, she argues in favor of functional equivalence of negatives and affirmatives. These findings, she shows, can be explained on the basis of coherence and relevance-oriented cognitive machinery. While this machinery initially allows salient meanings to become available regardless of negation, it later monitors their relevance to prior or future contexts. In the final analysis, it is their global discourse role rather than the local negation marker that determines whether they would be suppressed or retained for further processes.

That initially a local cue such as negation is ineffective is also demonstrated by two other studies in this volume. **Uri Hasson** and **Sam Glucksberg** show in their contribution that, initially, affirmatives and negatives are alike. They both give rise to affirmative related concepts only. Thus, quite early on, 150–500 ms after reading either affirmative or negative targets (The train to Boston was a/was no rocket), a probe (‘fast’) related to the affirmative concept (rocket) is facilitated, even though in the negative condition it is not contextually appropriate. (For similar results using pictorial probes, see also [Kaup et al., submitted for publication](#).) These findings have been replicated for an even longer delay. **Barbara Kaup**, **Jana Lüdtkke**, and **Rolf A. Zwaan** demonstrate, using pictorial probes, that as late as 750 ms after offset of target sentences, there is still no negation effect. Only much later on, 1000 ms after comprehenders have read affirmative and negative versions of isolated sentences, do negation effects become visible. In Hasson and Glucksberg’s study, after such a long delay, information made initially accessible, is reduced to base line levels following negation (but not affirmation). Still, alternative opposites emerge only much later on. In Kaup et al.’s study, only 1500 ms after offset of the target sentence, ‘The door is *not open*’ is represented as ‘The door is *closed*’.

However, even outside of a specific context, negation need not result in suppressing information within its scope. In their article, **Carita Paradis** and **Caroline Willners** show that, even when concepts have a ready-made antonym at their disposal, but the task is scaling, negation only mitigates concepts, rather than suppresses them entirely. Thus, ‘not wide’ in ‘The road is not wide’ is not equivalent to ‘narrow’, but only to ‘less than narrow’, and vice versa. This is particularly true of scalar concepts.

Thus, outside of a specific context, when sentences are presented in isolation, negatives are, at times, different from affirmatives. Negatives but not affirmatives weaken the interpretation of the concept within the scope of negation and at times even replace it with an alternative opposite. However, in most cases, the affirmative versions are not tested against comparable affirmative modifiers (but see Giora et al., 2005; Paradis and Willners, 2006). In addition, other methods such as event related brain potentials recorded from the scalp show that, when brain waves are the measure, negatives and affirmatives are processed along the same route: both retain rather than suppress information, even when no specific context is provided (Lüdtke et al., 2005).

Although, outside of a specific context, negation might effect various degrees of weakening, when it is used in a discourse context, negation can, at times, even function as an intensifier. In the final contribution, **Trine Heinemann** argues that negative interrogative requests come across as more powerful than their positive counterparts. While the latter meet with the addressee's resistance, it is the former that result in the recipient's compliance.

To actually substantiate the claim that negation is unique, it is not only negation that should be studied, but also comparable affirmation. In natural environments, there is hardly anything that negation can do that affirmation cannot (Giora, 2006).

## References

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