

Correlation Among Sentences With Social Relations And Spatial Distance : A Gaze-Tracking Study

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Introduction

In everyday language, people commonly use spatial concepts to communicate aspect of social relations in expressions such as “he’s a close friend”.

The CMT suggests that such expressions arise because abstract representations such as social intimacy are grounded in physical experience such as spatial distance through metaphorical mapping

Spatial information can modulate participants’ reports on their social bonds in a way that is coherent with the conceptual metaphor hypothesis.

Purpose

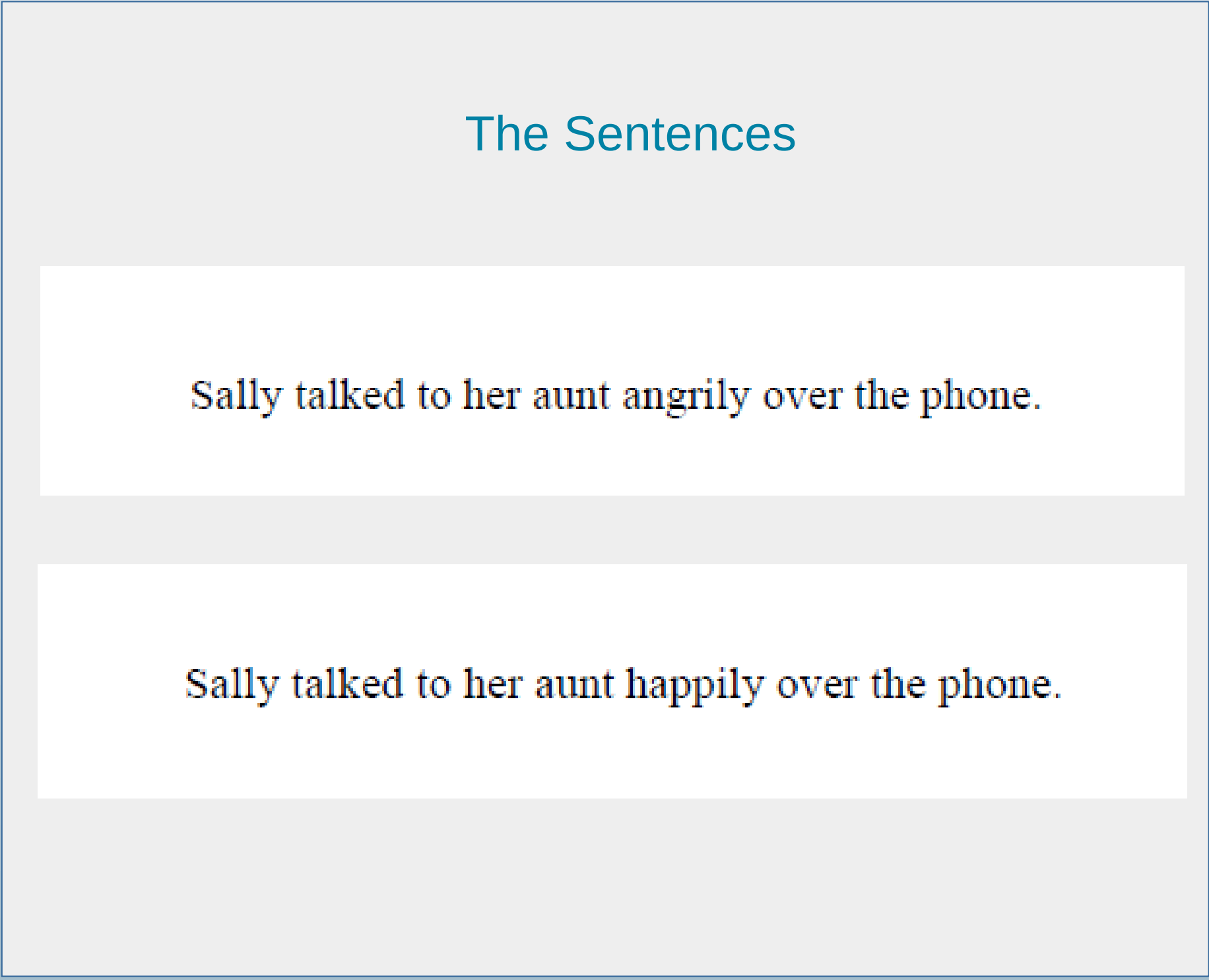
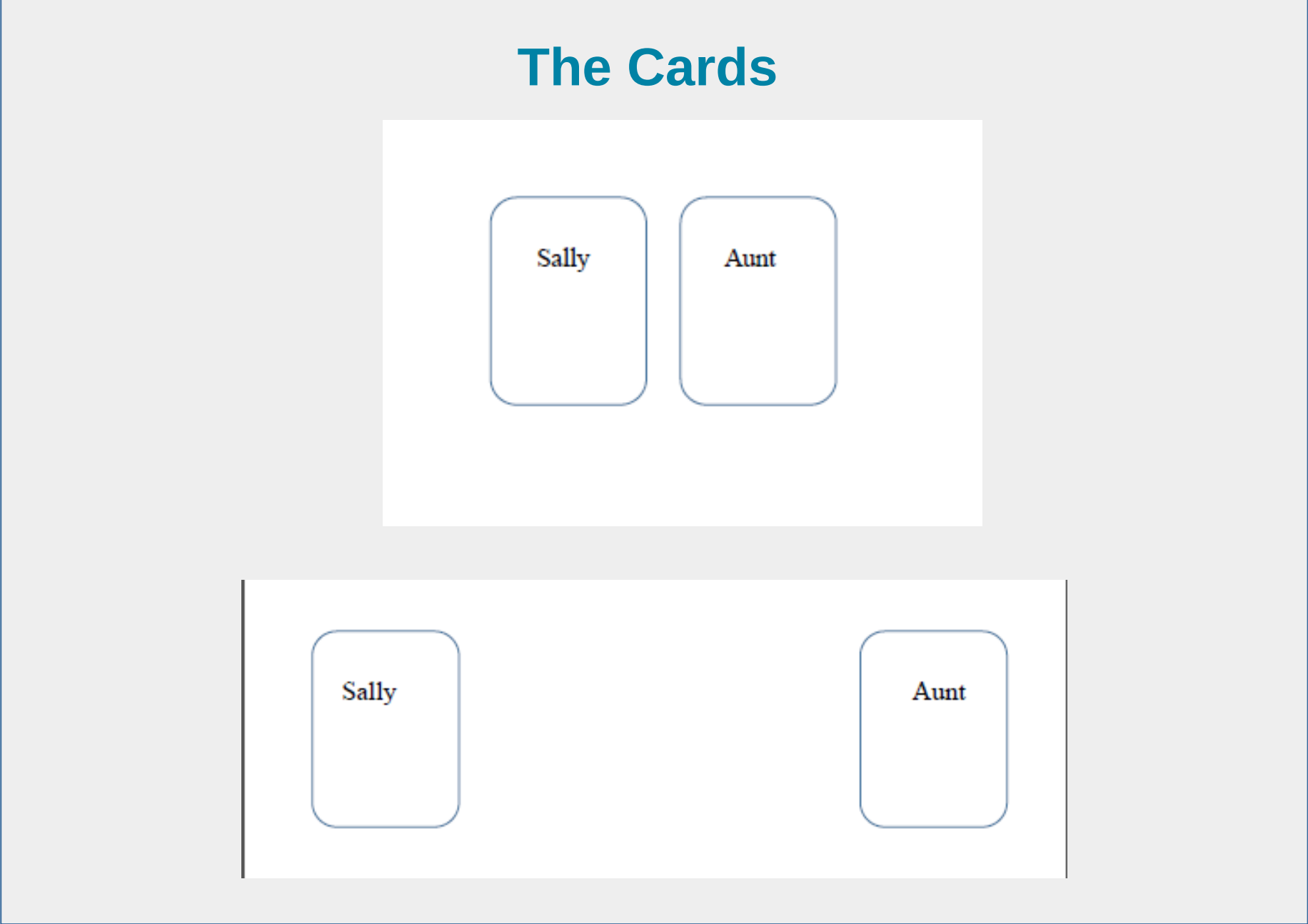
The aim is to extend findings of spatial distance effects on abstract sentence interpretation in two ways:

First, I examined a different abstract semantic domain, namely intimacy in social relations, which according to the CMT is also associated with spatial distance.

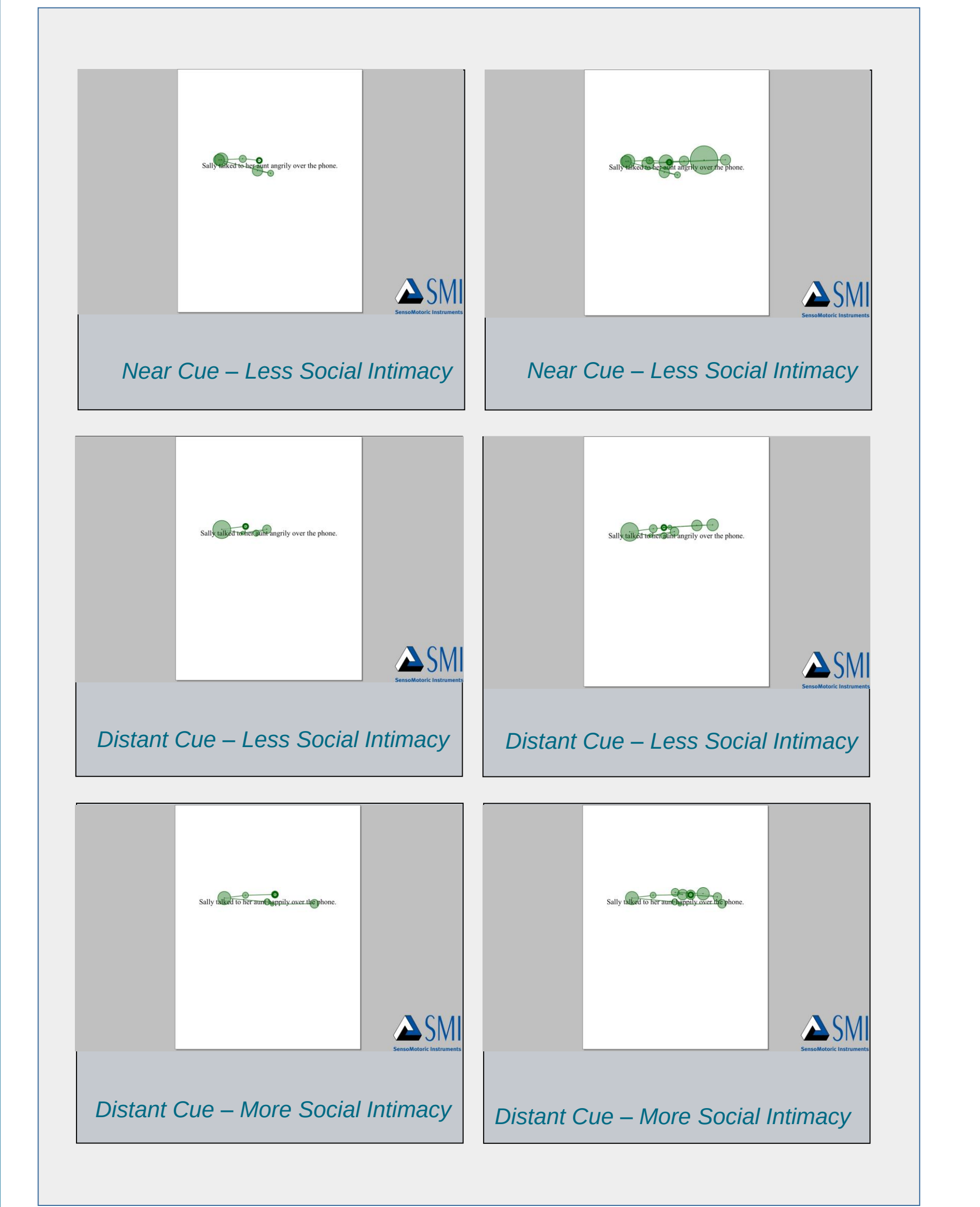
Second, I examined whether spatial distance effects could be observed in the absence of an „and“-coordination of nouns.

Experiment Design

- A gaze tracking experiment is conducted on a number of subjects .
- The Experiment involves a set of English sentences which are preceded by a pair of cards inscribed with a pair of nouns.
- The cards either move closer or further apart. The first pass and total time taken to read the sentence is recorded.
- The structure of the sentences were
NP –VP – NP – ADV –PP – NP



Path - Maps



Screenshots from Gaze-tracking path map video recorded via BeGaze

Expected Results

Reading time should be faster for sentences that display social intimacy when primed with cues of “lesser” spatial distance as compared to being primed by spatial cues of “more” distance.

Similarly, reading times should be faster for sentences that display lesser social intimacy when primed with cues of “more” distance.

References

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Project Details

Project done as a part of the course SE367: Introduction to Cognitive Science

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