

STSM Athens, 2011 April

- Purpose of the visit

My research interests was in time perception. My goal was to study visible timing perception in language. This often require a cross-disciplinary perspective to integrate concepts from linguistics and psychology and a cross-cultural analysis.

My research consisted in comparing the perception of visible timing features for Italian geminate consonants by foreign subjects not speaking Italian.

Specific objectives of this research are to verify if there are proto-timing abilities in perceiving visual time in language

- Work carried out in Athens

I have tested the Greek native speakers on the perception of the single and the geminate consonants, using video registrations. The participants were briefly trained to the task that specifically consist in visually discriminating single and geminate consonant spoken in a carrier sentence. The sentence was played mute in order to allow the visual discrimination of the different duration in the articulatory timing. They label the consonant perceived after each video

- Results obtained

The Greek participants have shown the ability to correctly discriminate the single from the geminate consonants in a way that seems to be significantly different to the chance (according to the Binomial Distribution). The task is really difficult to fulfill due to the fact that the average consonants in the Italian language during only from 60 to 100 msec. Furthermore, it must be considered that we are not talking about an absolute threshold but a differential one. Hence the results of the experiment are strongly supporting the idea of a proto-visual mechanism of time perception in speech

- Future results and goals

The results of this experiment will be processed, compared to those gathered on Italian native speakers, and submitted for publication

The long-term goal is to develop a series of experiments to test the perception of time not only on Italian but also considering different durational contrasts taking into account different languages

in order to develop a model of the underlying timing cognitive mechanisms in language processing. During my visit I have also assessed a new experimental procedure in which the participants have been watching paired videos because there seems to be an influence of the previous video on the second one if the consonant is the same. For example if they have seen "CASA" first and "CASSA" then, they are less accurate in the task. This decreasing accuracy is worthy to be explored because it seems to affect even native Italian speakers.