



COST IS0703

The European Research Network on Learning to Write Effectively

Summary report of the Short-Term Scientific Mission (STSM) made by Rui A. Alves to the Université de Poitiers.

COST-STSM-IS0703-7206

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University of Porto, February 9 2011

Dear Prof. David Galbraith,

I am pleased to submit for your approval the summary report of the STSM that I made to meet Dr. Thierry Olive, at the Université de Poitiers. As agreed the visit took place from the 13<sup>th</sup> to the 22<sup>nd</sup> of January 2011. The aims of the visit were fully achieved and resulted in a good fulfilment of the scientific objectives of COST Action IS0703. Importantly, this visit was timely to strengthen the fruitful cooperation that has long been established between the two teams.

Please, find attached to this letter two other documents: a) STSM scientific report; b) STSM host report.

Yours sincerely,

A handwritten signature in black ink that reads "Rui Alexandre Alves". The signature is stylized, with a large, sweeping flourish at the end.

Rui A. Alves

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### **Summary**

This is the report of the Short Term Scientific Mission (STSM) that Rui A. Alves made to meet Dr. Thierry Olive at the Université de Poitiers. As planned, the visit took place between the 13<sup>th</sup> to the 22<sup>nd</sup> of January 2011. The aims of the visit were achieved and resulted in a good fulfilment of the scientific objectives of the COST Action IS0703. Importantly, this visit was timely because it strengthened the fruitful cooperation that has long been settled between the two parties.

### **Aims**

This STSM had four main goals: 1) foster joint cooperation by starting new research avenues, and seek joint funding; 2) complete the submission of yet undelivered papers to ISI indexed journals, 3) plan ahead further studies, specifically experiments on bursts in elementary grade children; and 4) to allow Rui Alves to get acquainted with the new version of Eye & Pen software that is being developed by Denis Alamargot at the Poitiers Lab. All these goals were pursued, and to a great extent achieved. Next, we present a review of the works carried during the mission, its main results, and the advances in this research collaboration.

### **Works and results**

The visit started with a STSM planning meeting with Thierry Olive. Broadly two lines of work were established for this STSM. One looking at the present, for which appraisal of the long-standing collaboration, conclusion of some yet undelivered papers, and plan ahead of next studies were deemed crucial. The other line pointing to the future, specifically to the start of new research avenues between the parties.

For seven years now the two teams have been interested in the dynamics of writing. They have used the triple task technique to study how writing processes are orchestrated during the online production of text (Alves, Olive, & Castro, 2008; Olive, Alves, & Castro, 2009). They have shown that such management differs according to the writer's activity (pausing or executing). Through this study, a common interest on periods of execution, aka as bursts, has developed and the parties have carried studies to show that transcription demands impact on bursts, this either by experimentally manipulating transcription demands (Alves, Castro & Olive, in press; Olive & Alves, in prep), or by studying children differing in handwriting skill (Alves, Branco, Castro, & Olive, in press). During this STSM the parties have achieved through collaborative writing and revision to produce a paper that reports the findings from one experiment in which they manipulated transcription demands (high vs. low) and writing modality (typing vs. handwriting). As a consequence of high transcription demands, burst size decreased in both modalities.

Pursuing this line of research, the team noticed that a developmental characterization of bursts is lacking. Thus a cross-sectional study with Portuguese children from 2<sup>nd</sup> to 6<sup>th</sup> was planned. In this study narrative and expository texts will be collected using synchronic writing tools. Several options are available for online recording of writing, specifically the relative merits of digitizing tablets against digital pens were discussed. Current evaluation of the state of the art in logging tools favours the digitizing tablets option, that are deemed more mature, reliable, and accurate. Probably the best representative of such mature technology is Eye & Pen software (Alamargot, Chesnet, Dansac, & Ros, 2006), and an option for its use was made during this STSM. Importantly,

Rui Alves had a consultation with Denis Alamargot, where he got fully acquainted with the benefits and development prospects of Eye & Pen 2.

During the visit, Rui Alves attend a team's methodological seminar on "how to deal with reaction time outliers". The basis for this lively and much helpful discussion was a paper from Ratcliff (1993). In line with the article's conclusions, several methods for dealing with outliers were discussed and its relative merits weighted.

This STSM was also fruitful in regard to the start of a new research avenue between the parties. The intersection between writing and emotion is one that, with few exceptions, has been relatively neglected and unexplored by cognitive writing research (Alves, in press). Aware of this, Olive and Alves have long sought ways to initiate such exploration. A prime task for such development is to tag the emotion vocabulary that writers use in their writings. In other words, setting up an emotional lexical database is a necessary first step in any attempt to grasp the psychological meaning of emotion words in writing (see Tausczik & Pennebaker, 2010). A valuable example of such existing database is EMOTAIX that was recently developed by Piolat & Bannour (2009). During this STSM Annie Piolat was contacted, and she agreed with the development of a Portuguese version of EMOTAIX. The best approach to such adaptation, and the implementation of the database were discussed among the parties. EMOTAIX is currently implemented as a scenario in TROPES software. Opportunely, a team member of the Lab in Poitiers, Laurent Milland, has extensive practice with TROPES, was kind to share his expertise with Rui Alves. For that end Thierry Olive set-up a seminar on TROPES, which was very helpful to envision the usage of the Portuguese EMOTAIX. The teams also discussed the prospect of applying to a research grant from the French Agence National de la Recherche.

Overall, the aims of Rui Alves STSM were fully accomplished, and resulted in a good fulfilment of the scientific objectives of COST Action IS0703.

### **Future collaboration**

The cooperation between the parties benefited from a timely STSM. Under this mission the two teams planned joint research across two research avenues: i) the developmental characterization of bursts of language production; ii) the development of an emotional lexical database. Foreseeable is also the joint application to national research grants.

### **Foreseen publication**

A paper titled "Effects of Transcription Automaticity in Written Language Production" is now in the last round of revisions by all authors (Alves, Olive and Castro), and will shortly be submitted to an ISI indexed journal.

### **Acknowledgments**

I am very grateful to Thierry Olive, and the CeRCA's team for a very warm welcome in Poitiers, and for all the insightful discussions we had about research.

### **References**

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## STSM Host Report

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09 February, 2010

Dear Prof. David Galbraith,

I hereby confirm that the STSM scientific report presented by Rui A. Alves is accurate. The mission's aims were successfully achieved and the work plan for the visit was fully accomplished.

Kind regards,

Thierry Olive

A handwritten signature in blue ink, appearing to read 'Thierry Olive', is centered below the typed name.