Research Networking Programmes

Short Visit Grant ☒ or Exchange Visit Grant ☐

(please tick the relevant box)

Scientific Report

Proposal Title: Building a resource to help authors to overcome the tip of the tongue problem

Application Reference N°: 7189

1)   Purpose of the visit

Prepare the upcoming Networds conference (http://www.networds-esf.eu/index.php?page=final-conference) by defining a set of goals relevant for different communities (neuroscientists, psycholinguists, and computational lexicographers) and by clarifying potential terminological problems. Different communities use not only different terms referring to a similar reality (for example : activation/access/search/navigation), they also associate sometimes very different meanings to the very same term (for example, mental lexicon, lemma, lexeme). All this may lead to misunderstandings, i.e. communication problems, causing silence or noise;

Discuss certain points concerning my invited talk for the Netword's conference : "Needles in a haystack and how to find them. Can neuroscientists, psychologists and computational linguist help us to overcome the Tip of the Tongue problem?" (http://www.networds-esf.eu/index.php?page=final-conference#nws_bookmark_0). For example, we discussed whether I could show that my work relates to the one of other people working in a different paradigm, the goal being to build a bridge between the different communities. Since my work deals with electronic dictionaries (i.e. how to enhance them in such a way that they will be really useful for language producers, writers, speakers, the

question arouse how this relates to what we know about the mental lexicon, work on impairments (aphasia, tip of the tongue problem, speech errors, ...).

See how my work and the one being carried out by the group in Pisa can be integrated into a larger whole, in order to extend or complete each other;

Discuss what new points should be addressed and what other actors could be involved in a follow-up venture of the Netword project.

2) Description of the work carried out during the visit

My work in Pisa consisted mainly in giving a talk (http://www.ilc.cnr.it/en/content/needles-haystack-and-how-find-them-case-lexical-access), and in discussing work in progress (PhD student) or completed work done by members of the research group led by Prof. Pirrelli. This gave me the opportunity to see their software and to understand better their approach, while being able to show how my research related to their work. Apart from that, I've discussed intensely with Prof. Pirrelli how our work could yield products usable in real world (classroom, reading aids, ...), as this is a too often neglected aspect of our community. These discussions were very stimulating and it was good to see that for once there is a high level researcher willing to consider also these aspects or extensions of our work.

3) Description of the main results obtained

We are still working on a document to be used during the Netword conference (possibly to be put on a website). Its goal is to foster awareness raising concerning the goals, methods and metalanguage used by the different communities, as well as to clarify common interests and specific differences, be it only with respect to terminology.

4) Future collaboration with host institution (if applicable)

We plan to join our forces for a future Networks event (definition of a follow up event), and we plan to visit each other on a more regular basis in Pisa or Marseille. Being involved in a pluridisciplinary venture here in Marseille (BLRI: Brain, Language Research Institute, http://www.blri.fr/accueila.html), I believe that it would be really good for Dr. Pirrelli to pay us a visit, and explore if there are not other colleagues here with it would make sense to have a collaboration. The BLRI brings together experts in Linguistics, Computer Science, Psychology, Neuroscience as well as Medicine, covering thus quite a bit of the knowledge needed to understand the underlying process of language and its neural representation in the brain. One of the goals of the BLRI is to develop a generic, integrated model of language possibly yielding concrete tools or digital emulations of the human brain in action.

5) **Projected publications / articles resulting or to result from the grant** *(ESF must be acknowledged in publications resulting from the grantee's work in relation with the grant)*

Being in charge of a special issue of the Journal 'Cognitive Science', title: Cognitive Aspects of the Lexicon, I have invited two colleagues from Pisa (Prof. Pirrelli and Prof. Lenci) to contribute. This issue will appear this autom.

6) **Other comments (if any)**