APHLUENTIA++

SUPPORTING TECHNOLOGY-MEDIATED COMMUNICATION FOR APHASIA

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CONTEXT

Aphasia is a disorder of language that is acquired secondary to brain damage typically in the left hemisphere (e.g., stroke), that affects the ability to communicate. It involves different degrees of impairment in four primary areas: spoken language comprehension, spoken language expression, written language expression and reading comprehension. This results in limitations to how they can interact with others to, for instance, communicate aspects about how they are feeling and their needs, making it hard for them to lead a more independent life or have their difficulties addressed. Previously, @IEETA, work has been developed to assist the communication of people with aphasia when they are in bed and during their daily life. However, each person with aphasia has different needs and life contexts and, thus, it is important to adapt the help (e.g., what sentences to make available), to each person. In this context, the Speech and Language Therapist (SLT) can have a central role in helping the person with aphasia establish an assistance that is adapted, over time, to her condition and needs. Additionally, the developed assistive communication tools for the bed and daily routines still work independently and their joint configuration is strongly desirable.

OBJECTIVES

Advance a solution supporting the communication of people with aphasia by integrating assistive communication approaches for multiple contexts and supporting their customization.

TENTATIVE WORKPLAN

- Acquisition of skills in human-centred design, multimodal interaction, and conditions affecting communication, specifically aphasia

- Review of the current state-of-the-art for assistive tools for communication giving particular attention to those that may be relevant for persons with aphasia and the work previously carried out @IEETA (bedroom assistant and mobile app)

- Identification of users, scenarios, and requirements adopting, from early-on, a user-centred approach

- Integration of the existing solutions and iterative development of a platform for their customization

- Writing: documentation, publications, and dissertation

CONTEXT

This work is developed in line with ongoing research at IEETA particularly regarding project APH-ALARM.