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14.II.1983

Dr. Graeme Clark,
Professor of Otolaryngology,
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Dear Dr. Clark,

The last time I was in contact with you was after I had returned to Canada in 1982. I am writing now to follow-up on that correspondence as I am close to the completion of my doctorate and am keen to find out if I can do post-doctoral research with you in Melbourne.

Here is an outline of the type of work I am interested in doing. Would you please evaluate it and advise me whether or not it is feasible at this stage of your research? If it is not, I would appreciate any alternative suggestions you may have. I would like to carry-out a training study with a pre-lingually deaf person(s) who has been fitted with a multi-electrode implant. The study would consist of a program for training speech reception and speech production and the generalisation of these skills into oral discourse.

I would base the speech production work on Dan's phonetic and phonologic system of development. The subject's speech ability would be assessed at the phonetic and phonologic levels before and after he/she is fitted with the implant and at several intervals throughout the training.

In speech reception I would like to carry-out a program for training the detection, discrimination, identification and comprehension of speech through the multi-electrode implant. The procedures already developed in your research with adventitiously deafened adults would be used as the basis for this work.

I am particularly interested in assessing and teaching discourse level skills as this has been the focus of my doctoral research. In this study I have gained experience in using a fine-grained system of analysis for assessing the cognitive processes that occur in discourse comprehension. The theoretical model for the system was developed by my thesis supervisor Dr. Carl Frederiksen in the early 1970's and the analysis techniques have only recently been used in research studies. Several aspects of comprehension are assessed in the analysis system. The subject listens to a passage and is asked to tell it back in their own words. The first stage

of the analysis deals with exact recall and any sections that have been changed are categorized as inferences. The second stage is the classification of these inferences into text-based or knowledge based sub-types. The final stage is called frame analysis. This refers to the cognitive skills employed when we organise connected information into large units for storage and retrieval. These units vary when we are confronted with different types of discourse. For example, a procedure can be organised as a series of action or as an exposition. A narrative can be organised as a series of events or as a problem with a plot.

Recent research on discourse comprehension has revealed that normally hearing children pass through several stages in the development of these discourse skills. In my doctoral research I compared the performance of 20 prelingually profoundly deaf children with a group of normally-hearing children matched by age and another group matched by reading level. I found that two-thirds of the hearing-impaired children had skills at the earliest stage of discourse development and had not progressed beyond it. Six of the children had developed higher level skill and for example, were able to relate the problem frame of a story and the expository frame of a procedure.

I will be interested to use these discourse analysis techniques with other populations of hearing-impaired children and adults. They are particularly useful for evaluating the effect of different types of speech input and language training on the cognitive processes in comprehension.

If there is any possibility of doing post-doctoral research with you please let me know. I plan to submit my thesis in the spring (about May, 1984) and would be free after the oral defence some time in July or August. You mentioned in your last letter that you may be able to support a post-doctoral student from your research funds. If this is not possible, would you please advise me of the public or private funding agencies in Australia I could apply to for support? I can also apply to the Canadian Government for a post-doctoral research grant as I am married to a Canadian and will return to Canada after the study is completed.

I will look forward to hearing from you in the near future as to the feasibility of these plans for research and possible avenues I could pursue for support.

Yours sincerely,

Gaye Musgrave (née Nicholls)