

# Aphasia Research Newsletter

Issue 2: December 2015



ARC CENTRE OF EXCELLENCE IN  
COGNITION AND ITS DISORDERS

## A busy year has passed!

Thank you to everyone who participated in our research!

We aim to understand the language problems of people with aphasia and to make treatments more effective.

We also investigate the harder questions - how and why treatments work.

In 2015, we worked to make better theories of how language works. We also looked at which words are particularly hard in aphasia, and at problems spelling. We also presented our work at conferences worldwide.

2016 looks to be an exciting year with lots of new projects. We hope you enjoy reading about our work!



**Professor Lyndsey Nickels**  
Aphasias Research Group Leader



## Greetings from our group!

### New this year...

#### Primary Progressive Aphasia and Related Disorders Clinic

*Cathleen Taylor, Karen Croot & Lyndsey Nickels*



*Cathleen Taylor Karen Croot*

Primary progressive aphasia (PPA) is a type of dementia that affects communication and everyday activities.

Around 6,000 to 15,000 older Australians have PPA. This is expected to increase. More speech pathologists are starting to work with people with PPA.

Cathleen, Karen and Lyndsey have successfully set up a new clinic for PPA and related disorders. This clinic is at War Memorial Hospital in Sydney.

The clinic is linked to the CCD at Macquarie University, and will provide speech pathology, medical and psychology services.

The clinic will also be involved in research to improve the lives of people with PPA and their families.

*Cathleen is a Speech Pathologist at War Memorial Hospital. She works with Karen and Lyndsey on research into treatment of PPA. She has started a PhD at Macquarie to further investigate treatment for people with PPA.*

# Research Highlights from 2015



## Improving conversations for people with aphasia

*Scott Barnes*

Conversation is an important part of people's lives. People with aphasia can find it very difficult to hold a conversation. It can also affect how others speak with people who have aphasia.

Scott examined how to improve conversation. People with aphasia and their spouses took part in an 8-week therapy program.

After therapy, couples had more success managing communication problems, and not letting aphasia interrupt their conversations. However, some people with aphasia continued to have difficulty.

For more information on conversation therapy, visit the webpage: [ucl.ac.uk/betterconversations/aphasia](http://ucl.ac.uk/betterconversations/aphasia)

## Nonlinear Spelling

*Teresa Schubert & Lyndsey Nickels*

We have been investigating why some people with spelling difficulties write the letters of words in a different order.



*Teresa Schubert*

For example, the word NOSE might be written by beginning with writing the S in the middle of the line and then adding the

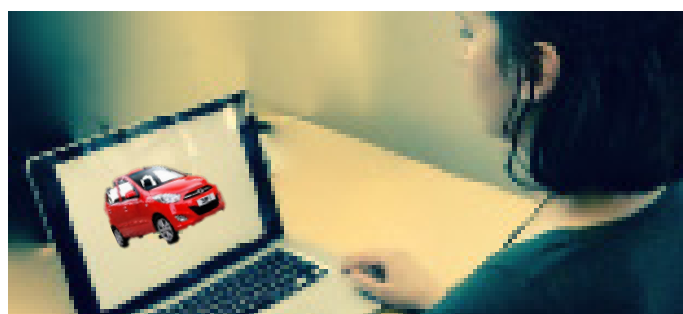
N and O in front of the S, and then the E after the S.

Understanding why people spell in this way can help us understand the spelling system. So far we have studied one man who writes like this, but we hope to find others who write this way.

## Does repeating 'bus' or 'drive' help in the naming of 'car'?

*Oksana Lyalka*

We want to understand why people with aphasia have lost words they want to say, and how we can treat this.



PhD student Oksana started working on this in Newcastle (UK) and has continued this research with us.

Oksana looks at how repeating words influences naming a picture later. The experiments include two tasks:

- 1) naming a set of pictures
- 2) repeating a word in the presence of a picture

It seems important to say the words again and again. But interestingly, saying a word (e.g. bus) that is related to the word you want to say (e.g. car) makes it **harder** to say the word you want.

Thank you to all the people with aphasia who have participated.

## Word learning in aphasia

*Lyndsey Nickels, Shiree Heath & Nora Fieder*

Throughout life we need to learn new words. For example, a new book character (Dumbledore) or food (quinoa). This project examined word learning in people with aphasia.

Two tasks were used:

- 1) learning pairs of new shapes
- 2) learning names of new dogs, plants and musical instruments

People with aphasia and older adults without aphasia had difficulty with both tasks. Some people with aphasia performed no differently to the healthy older adults.

Our next step is to see whether learning ability is related to how well aphasia treatment works.

## Investigating Bilingual Aphasia

*Polly Barr*

Some words sound the same but have different meanings, like cricket: an insect and a game.

We designed a spelling treatment study for a bilingual man with aphasia. We found that treating the spelling of 'cricket' (the game) also improved spelling of 'cricket' (the insect).

Perhaps the improvement in untreated words is due to the letters shared with the treated words.

## Celebrations...Comings...Goings

### **Congratulations to Dr Trudy Krajenbrink, Dr Vishnu Nair and Dr Anastasiya Romanova who have finished their PhDs!**

Trudy is still at Macquarie University in the Aphasia Group, working on spelling problems and treatments for people with PPA.

Vishnu has moved to Flinders University, Adelaide. He is planning a project for bilingual aphasia treatment.

Anastasiya is now in Germany and continues to look at different types of words in aphasia (e.g. adjectives, nouns). She has also married and is expecting her first baby.

### **New Speech & Language Pathologists!**

Congratulations to Chelsea Button, Samantha

Maunder, Kate Perry, and Dayle Sweikert who have completed the Master of Speech and Language Pathology. Their projects examined conversation therapy, conversation repair, art therapy for aphasia, and communication on hospital wards.

### **Greetings and farewells**

Congratulations to Britta Biedermann who is now a lecturer at Curtin University, Perth. We are sad to say goodbye but she will continue working with us and visit often! The team is also sad to lose Shiree Heath, who has moved into Research Administration.

In 2015, Teresa Schubert and Ana Murteira joined us. Teresa is a postdoctoral fellow looking at aphasia and reading. Ana is a Speech and Language Pathologist from Portugal who looks at gestures of actions and naming those actions.



*Trudy Krajenbrink (L) and Anastasiya Romanova (R)*

*Vishnu Nair*

*Samantha Maunder and Kate Perry*

*Britta Biedermann*

*Ana Murteira*



## Coming up in 2016

### **Aphasia Rehabilitation Clinical Trial** **Lyndsey Nickels**

There are four national clinical trials in aphasia rehabilitation: Aphasia LIFT, VERSE, ASK and COMPARE. These trials look at the effectiveness of different types of aphasia therapy.

Professor Lyndsey Nickels is involved in the COMPARE trial, with groups to start at the Macquarie clinic sometime mid-late 2016.

COMPARE is a research study that compares the outcomes of multi-modal aphasia therapy and constraint induced aphasia therapy. The study will help identify which individuals respond best to each treatment.

***Please get in touch if you are interested in being involved in this trial later in the year.***

### **Two sides of the same coin: Event processing in stroke aphasia** **Inga Hameister**

A single event, like dinner in a restaurant, can be described in many different ways. Some individuals with aphasia have difficulties focusing on the main parts of an event, and may instead list many names.

Inga's PhD project investigates why this 'hyper-naming' occurs. Her research will help us to develop specific treatments for this kind of language impairment.



### **Spelling difficulties in aphasia** **Trudy Krajenbrink**

In 2016, Trudy will investigate spelling difficulties and spelling treatment for people with primary progressive aphasia (PPA). This research will help us understand the type of writing difficulties people with PPA have, and how we can improve communicative support for these people.



### **Do you want to help?**

Are you interested in helping us?

We are currently looking for people with aphasia who would like to help with our research:

- ***Non-linear spellers***  
*(see Teresa's piece on page 2)*
- ***People who show 'hyper naming'***  
*(see Inga's piece on page 4)*
- ***Anyone with word retrieval problems***
- ***Anyone interested in intensive treatment***  
*(see COMPARE trial this page)*

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