



## Neurobid Workshop

# Bilingualism and Bi-dialectalism: Contemporary research findings and trends

3 February 2020

University of Cyprus, University House "Anastasios G.  
Leventis", amphitheatre B108

## Welcome!

The Neurobid project (“Inside the bi-dialectal mind and brain: An electrophysiological study on executive functions”) was launched approximately two years ago in order to investigate how speaking more than one language (bilingualism) or a dialect of a language (bi-dialectalism) affects various aspects of language and non-verbal cognitive functioning. It is funded from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 800305.

Today, the project is very close to its completion and we are excited to share the outcomes with the world through conferences and journal articles. At the same time, we are looking for constructive feedback and challenging questions that will help us launch into the next phase of research. This is why we decided to organize this workshop and we are delighted that experts in the field from both Cyprus and the United Kingdom have accepted our invitation.

You can find out more about our project at [www.theneurobidproject.com](http://www.theneurobidproject.com) or, if you want to get regular updates regarding our project, you can follow our Facebook page at [www.facebook.com/neurobid/](https://www.facebook.com/neurobid/)

We hope you will have an interesting and productive day at our workshop!

The Neurobid team: Kyriakos Antoniou & George Spanoudis



**Neurobid Workshop**  
**Bilingualism and Bi-dialectalism: Contemporary research findings and trends**

3 February 2020

University of Cyprus, University House "Anastasios G. Leventis", amphitheatre B108

Please register by sending us an e-mail at [antoniou.kyriakos@ucy.ac.cy](mailto:antoniou.kyriakos@ucy.ac.cy) or by filling in the registration form at the following link: <https://forms.gle/dgUegg1ws12t4bZ77>

09:00- Registration

09:30

09:30- **Napoleon Katsos (University of Cambridge)**

10:25 *Bilingualism in Children with Developmental Disorders: From Human Rights to Language and Cognition*

Language of talk: English

10:25- **Marianna Katsoyannou (University of Cyprus)**

11:20 *Αυτοί οι νέοι που δεν ξέρουν πια τη διάλεκτο: η δυναμική του γλωσσικού ρεπερτορίου μίας διδialeκτικής κοινότητας*

Language of talk: Greek

11.20 Coffee Break

11:40- **Kyriakos Antoniou (University of Cyprus)**

12:35 *Inside the bi-dialectal mind: An investigation of executive control and irony comprehension skills*

Language of talk: English

12:35 Light Lunch

13:15- **Aris Terzopoulos (Coventry University)**

14:10 *So far but so close: word similarity and task demands affects recognition of translations with Greek-English bilingual adults and children.*

Language of talk: English

14:10 **Kleanthes Grohmann (University of Cyprus & Cyprus Acquisition Team)**

15:05 *Gradience of Lingualities: Some Research Issues for (A)typical Language Development in Diglossia*

Language of talk: English

15:05 Coffee Break

15:25- **Maria Kambanaros (Cyprus University of Technology)**

16:20 *Dialectal Adaptations of Assessment Tools for Diagnosing Bilingual Children with Language Impairment*

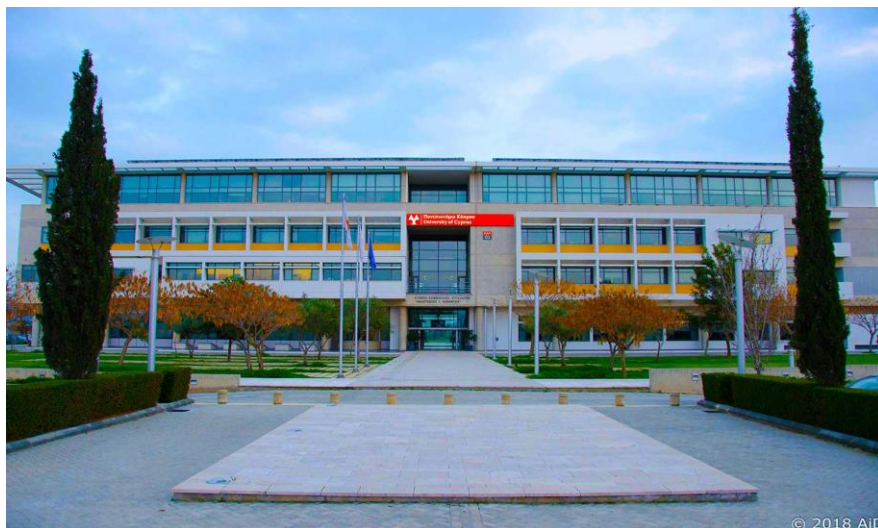
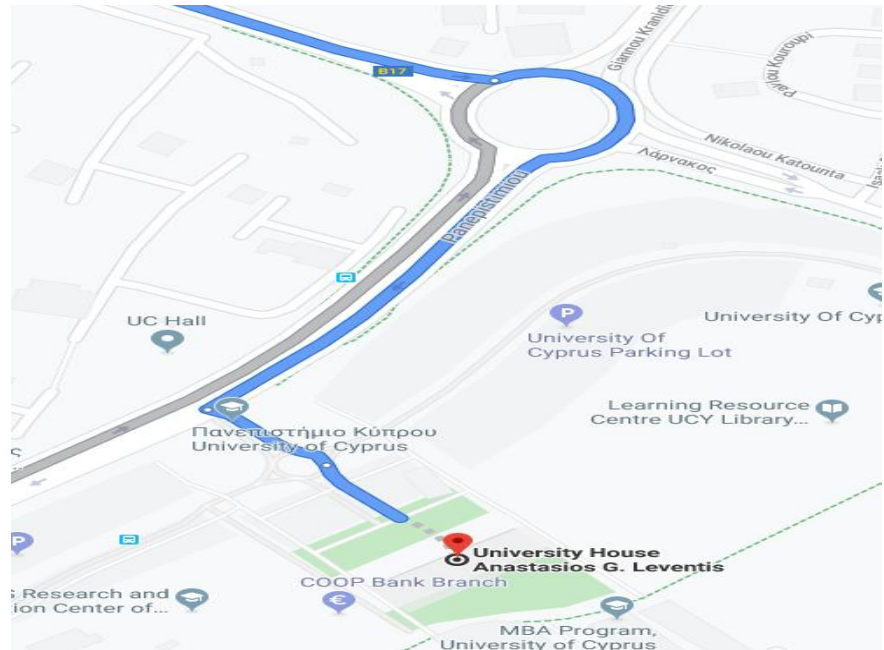
Language of talk: English

16:20 Concluding remarks, open discussion

**Venue**

UNIVERSITY OF CYPRUS  
University House "Anastasios G. Leventis"  
1 Panepistimiou Avenue  
2109 Aglantzia, Nicosia

Amphitheatre B108



## **Bilingualism in Children with Developmental Disorders: From Human Rights to Language and Cognition**

Napoleon Katsos (University of Cambridge)

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Among parents and professionals there is a common albeit empirically unsupported belief that bilingual exposure may be detrimental to the development of children with neurodevelopmental disorders such as autism. Starting from the observation that bilingualism is a fundamental human right of children, I will then review studies that capture the lived experience of bilingualism by autistic children and their carers. I will report on a systematic meta-analysis of the emerging literature which reveals that bilingualism has no adverse effect on the linguistic and cognitive development of children with autism. Moreover, I will outline three possible cognitive models of pragmatic competence which suggest that bilingualism may be beneficial for children with autism in terms of communicative competence. I will then present experimental studies on pragmatics in bilingual children with and without autism that suggest this might be the case. The interplay of qualitative and quantitative methods and the benefits of participant-informed research will set the background for this presentation.

## **Αυτοί οι νέοι που δεν ξέρουν πια τη διάλεκτο: η δυναμική του γλωσσικού ρεπερτορίου μίας διδialeκτικής κοινότητας**

Marianna Katsoyannou (University of Cyprus)

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Η εργασία αυτή βασίζεται στη διαπίστωση ότι στη σημερινή κυπριακή κοινωνία εμφανίζονται ουσιώδεις ενδείξεις ότι η διγλωσσία μεταξύ κυπριακής διαλέκτου και κοινής νέας ελληνικής έχει αρχίσει να υποχωρεί με την έννοια ότι εμφανίζεται μία νέα ποικιλία, την οποία θα ονομάσουμε κοινή ή αστική κυπριακή και η οποία, εκτός από την καθαρά γλωσσολογική της όψη, ορίζεται σε σημαντικό βαθμό από κοινωνιογλωσσολογικούς παράγοντες. Το κλειδί για την κατανόηση του φαινομένου, το οποίο αλλού έχουμε ονομάσει διδialeκτισμό, είναι η αντιστοίχιση των μορφών της γλώσσας με τα υφολογικά επίπεδα επισημότητας ανάμεσα στα οποία κινείται κάθε ομιλητής.

**Inside the bi-dialectal mind: An investigation of executive control and irony  
comprehension skills**

Kyriakos Antoniou (University of Cyprus)

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Recently, there has been an upsurge of research on the consequences of bilingualism for language and cognition, reflecting an increasing awareness that findings with monolinguals do not apply to a substantial portion of the world's population and that the mind and brain function differently in bilinguals. Contrary to bilingualism, however, bi-dialectalism (i.e. speaking two closely related dialects of the same language) has so far received relatively little research attention (at least from a comparative perspective that contrasts bi-dialectals' neuro-cognitive profile to that of monolinguals and bilinguals), even though bi-dialectalism is also prevalent worldwide. In this talk, I will present the results from recent research conducted in Cyprus to investigate two interrelated questions: (1) How bi-dialectal speakers compare to bilinguals and monolinguals in an aspect of non-linguistic cognitive functioning, that is, executive control skills and (2) How they compare to bilinguals and monolinguals in terms of irony comprehension, that is a pragmatic phenomenon that lies at the interface between language and non-verbal cognition. In doing so, I will also briefly discuss the controversy surrounding the bilingual cognitive advantage hypothesis and will further examine what our findings on irony comprehension show with regards to the representation and processing of pragmatics in the bilingual mind.

**So far but so close: word similarity and task demands affects recognition of translations  
with Greek-English bilingual adults and children**

Aris Terzopoulos (Coventry University)

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Late learners of a second language are compelled to achieve fast and accurate lexico-semantic processing of translations. Such processing is affected by word and script similarity and language dominance. While previous research focused mainly on adults and on similar (English-French) and different (English-Japanese) orthographies, there is limited evidence for partially different orthographies and for adults and children alike. In six experiments we examined the effects of word similarity (cognate status) with Greek-English bilingual adults (N = 170) and children (N = 178, 10-11 years old).

In all masked priming experiments, stimuli were cognate and non-cognate translations where either the prime was in the dominant language (L1) and the target in the non-dominant (L2), or vice versa. The control baseline involved unrelated word or form-related nonword primes. Mixed-factorial ANOVAs were used to analyse reaction times (RTs). Experiments 1a and 1b employed lexical decision tasks. Significant priming was observed for cognate translations with L1 primes and L2 targets only. Orthographic similarity was a significant predictor of the priming effects. In Experiment 2 with a semantic categorisation task, significant priming effects were observed for cognate translations in the L1-L2 direction for adults but in the L2 - L1 direction only for children, whereas non-cognates did not show any effects. There were no effects of orthographic or phonological similarity. In Experiment 3 with a naming task, significant translation priming was observed for cognate translations only and only in the L1-L2 direction. Phonological similarity predicted significantly priming effects only for adults.

Results from the eight experiments provide considerations for bilingual word processing models (BIA+, DevLex) and suggestions for the L2 teaching method. A significant implication is the selection of stimuli in bilingual studies from appropriately developed psycholinguistic databases (e.g. HelexKids, Bilex-Kids).

**Gradience of Lingualities:  
Some Research Issues for (A)typical Language Development in Diglossia**  
Kleanthes K. Grohmann (University of Cyprus & Cyprus Acquisition Team)  
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Cyprus is in a unique position for many purposes and for many reasons. This lecture will present the research agenda of the Cyprus Acquisition Team (CAT Lab). It aims to bring closer the potential impact the confined geographical space of this small island has on issues pertaining to language acquisition and subsequent development from a variety of perspectives, of imminent relevance for any study of multilingualism—that is, even beyond Cyprus: bilingual Greek Cypriot children, multilingual children from multicultural backgrounds, and children with atypical, even impaired, language development. Two main concepts will be introduced and pursued: the *Socio-Syntax of Development Hypothesis* (Grohmann 2011) and the notion of a gradient scale of multilingualism, dubbed *Comparative Multilingualism* (Grohmann 2014). The former takes the local linguistic variety, Cypriot Greek, seriously as the native language of Greek Cypriot children. Due to the sociolinguistic state of diglossia, children not only grow up with this unofficial, non-codified sociolinguistically Low variety but also with the High variety: Standard Modern Greek, one of the island's two official languages (and that of Greece). At the CAT Lab, we developed the notion of '(discrete) bilingualism' to characterize speakers in diglossic environments (Rowe & Grohmann 2013). Our research, in particular on object clitic placement, further suggests that bilingual children undergo refinements in their grammatical system after the critical period for first language acquisition, that is, even beyond the age of, say, 5 years. One of the most prominent factors is schooling, which falls within 'socio-syntactic' developments of language. The larger picture is one that places bilingualism on a gradient scale, which ranges from monolingual, monolingual speakers to multilingual, multilingual speakers across further differentiations such as bidialectalism, bivarialism, bilingualism, and different degrees of bilingualism (Grohmann & Kambanaros 2016). Our research suggests that this scale can be compared to performance in both receptive and expressive language tasks as well as cognitive tasks tapping into executive control (Antoniou et al. 2016).

**Dialectal Adaptations of Assessment Tools for Diagnosing  
Bilingual Children with Language Impairment**  
Maria Kambanaros (Cyprus University of Technology)  
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Clinicians and researchers recognize as exceptionally challenging the positive diagnosis in young children of (specific) language impairment (LI). Typically, language abilities are determined by performance on standardized language tests. However, very little is known about diagnosing LI in children exposed daily to a dialect (community language) and a standard language (school instruction). In this talk, I will report on the specificity and sensitivity of a range of language tests used so far to evaluate language performance in the context of diglossia (Cyprus) where a native dialect (Cypriot Greek) and the official language (Standard Modern Greek) co-exist. Properties of each test, individually as well as in different combinations, were also examined through logistic regression analysis in order to identify children with LI. Children with LI performed lower than the control group on the majority of the language tests. As for identification accuracy, the analysis revealed that many of the tests used are sufficiently accurate based on sensitivity and specificity levels. Furthermore, a combination of tests is proposed as a good tool for diagnostic purposes, while alternative choices are also suggested. Different language measures appear to be useful diagnostic

indicators for Greek-Cypriot children with LI. Speech and language therapists as well as researchers can now rely on an accurate diagnostic procedure within an evidence-based practice framework.