



Flexible functional adaptation of selective attention in bilingualism

Mirjana Božić^{1,2}

¹ Department of Psychology, University of Cambridge

² Fellow and Director of Studies for Psychological and Behavioural Sciences,
King's College, Cambridge

Learning and using multiple languages places considerable demands on our cognitive system, and modulates the mechanisms of selective attention in both children and adults. Yet the nature of these adaptive changes is still not entirely clear. One possibility is that bilingualism boosts the capacity for selective attention; another is that it leads to redistribution of the available capacity to maintain optimal attentional control under the increased processing demands. I will present research investigating the nature of modifications of selective attention in bilingualism. Using behavioural and neuroimaging techniques, our data confirm that bilingualism modifies the neural mechanisms of selective attention even when monolinguals and bilinguals display equivalent performance; and that the degree of similarity between their languages plays a further key role in shaping this modulation. Importantly however, instead of enhanced attentional capacity, these modifications appear to reflect redistribution of the available resources, in line with the notion of functional plasticity and degeneracy in the bilingual processing system.