



Un viaggio nella competenza bilingue



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Verso una definizione di competenza bi-/ plurilingue

Plurilinguismo: un fenomeno diffusissimo

- 7,159 lingue ufficiali in 196 Paesi (2025: <https://www.ethnologue.com/insights/how-many-languages/>)
- > 50% della popolazione mondiale parla almeno due lingue (de Hower, 1998; Tucker, 1998; Grosjean, 1982, 1994)





Bilinguismo: un problema terminologico

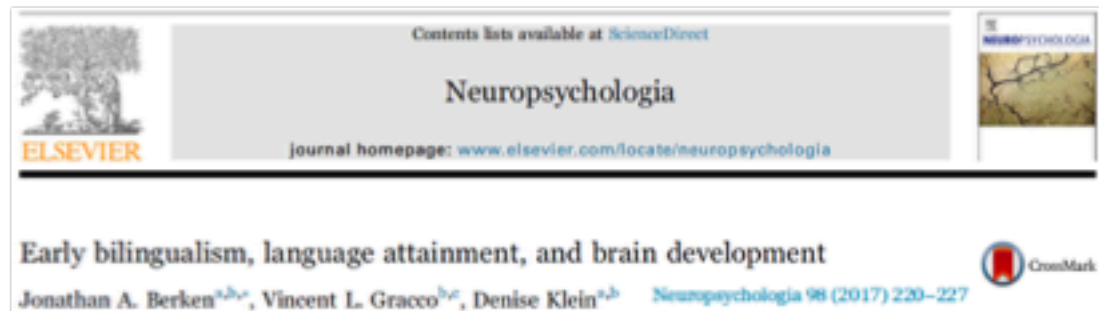
Esistono molti modi diversi di essere bilingui

Bilingualism as a Slice of Swiss Cheese

*Ellen Bialystok** *Frontiers in Psychology* November 2021

Età di acquisizione di una L2

- Bilingui simultanei
- Bilingui sequenziali precoci
- Bilingui sequenziali tardivi



Livello di proficiency

- Bilingui bilanciati
- Bilingui dominanti

(Peal and Lambert, 1962)

Effetto esercitato dalla L2 sulla L1

- Bilingui additivi
- Bilingui sottrattivi

(Lambert 1974)

Una definizione operativa di competenza bilingue

Insieme di conoscenze implicite/esplicite che
permettono di usare due o più lingue/dialetti
indipendentemente da altri fattori

Clinical Neurolinguistics
of Bilingualism

Andrea Marini, Cosimo Urgesi, and Franco Fabbro

The Handbook of the Neuropsychology of Language, First Edition. Edited by Miriam Faust.
© 2012 Blackwell Publishing Ltd. Published 2012 by Blackwell Publishing Ltd.

Bilinguismo: un ambito multidisciplinare

➤ Livello linguistico

- Effetti collaterali del bilinguismo sulle strutture linguistiche
- Code switching/mixing "Pappa, vuoi come here a casa lunchen?"
- Interferenza linguistica (prestiti vs. calchi)
- Fattori crosslinguistici (transfer positivo vs. Negativo)
- Interlingue

Bilinguismo: un ambito multidisciplinare

- Livello linguistico
- Livello glottodidattico



Bilinguismo: un ambito multidisciplinare

- Livello linguistico
- Livello glottodidattico



Foundations for a New Science of Learning

Andrew N. Meltzoff^{1,2,3,*}, Patricia K. Kuhl^{1,3,4}, Javier Movellan^{5,6}, and Terrence J. Sejnowski^{5,6,7,8}

Science, 2009 July 17; 325(5938): 284–288.

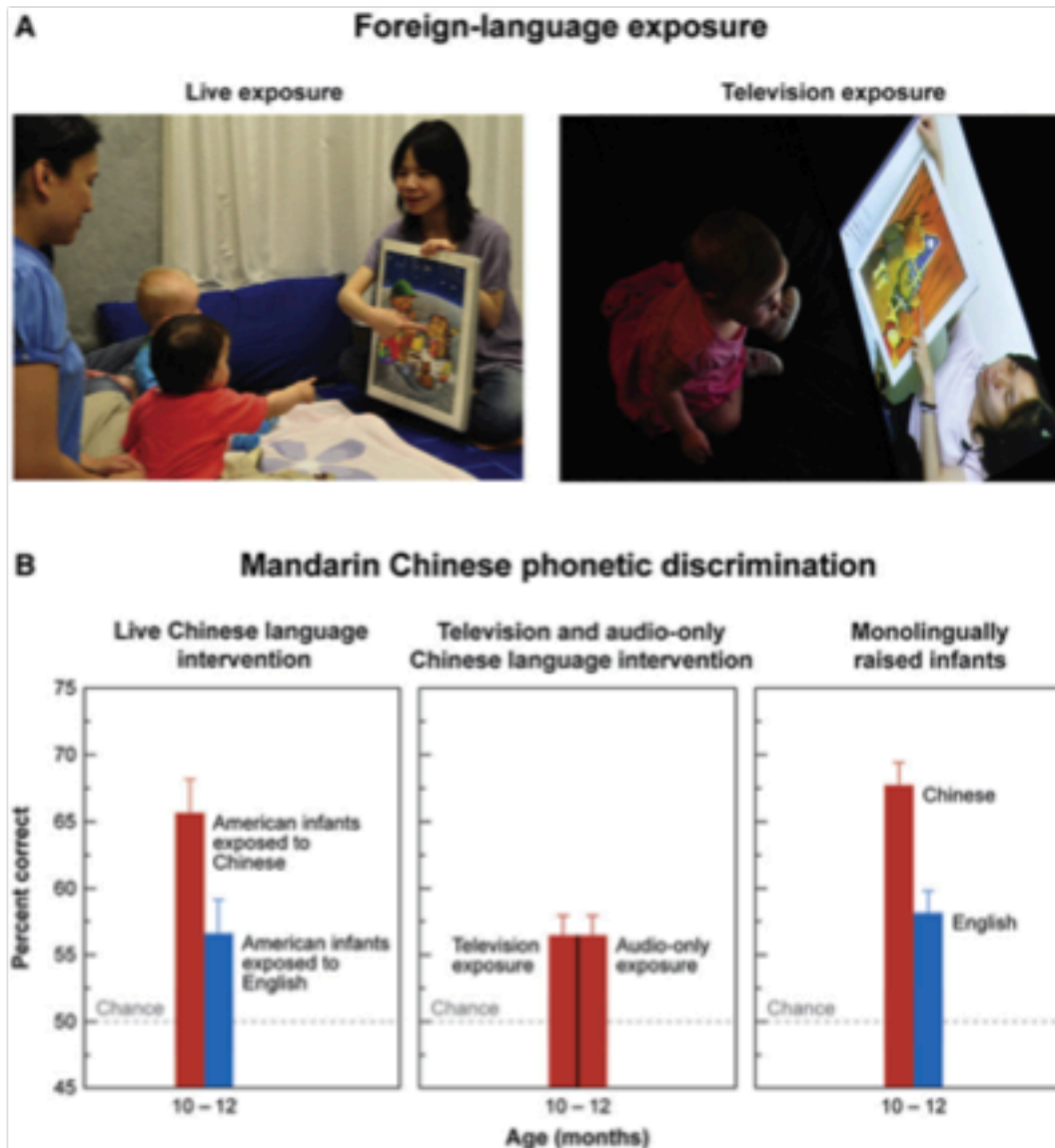


Figure 5. Social Interaction Facilitates Foreign Language Learning

The need for social interaction in language acquisition is shown by foreign-language learning experiments. Nine-month-old infants experienced 12 sessions of Mandarin Chinese through (A) natural interaction with a Chinese speaker (left) or the identical linguistic information delivered via television (right) or audiotape (data not shown). (B) Natural interaction resulted in significant learning of Mandarin phonemes when compared with a control group who participated in interaction using English (left). No learning occurred from television or audiotaped presentations (middle). Data for age-matched Chinese and American infants learning their native languages are shown for comparison (right) (adapted from Kuhl et al., 2003).

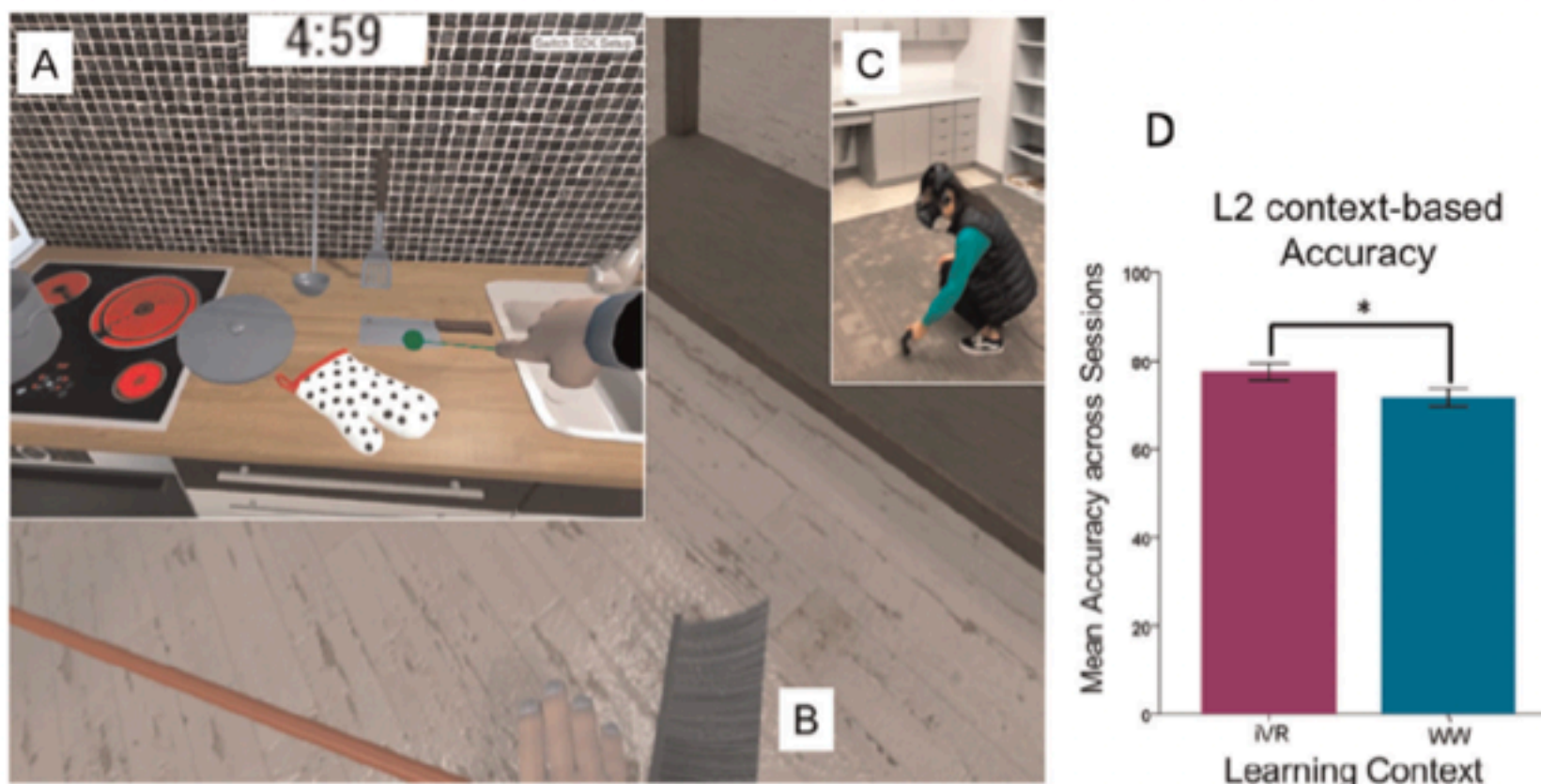
(Kuhl et al., 2003)

**Quindi “interazione” è la parola chiave
dell’insegnamento delle lingue ...**

Le tecnologie ci vengono incontro: l'esempio della realtà virtuale

Immersive Virtual Reality as an Effective Tool for Second Language Vocabulary Learning

Jennifer Legault ^{*}, Jiayan Zhao , Ying-An Chi, Weitao Chen, Alexander Klippel and Ping Li ^{*}



Languages 2019, 4, 13; doi:10.3390/languages4010013

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- Livello linguistico
- Livello glottodidattico
- Livello sociale
- Livello cognitivo

Livello cognitivo

- Bambini esposti a una lingua la imparano con apparente facilità

- I bilingui devono affrontare difficoltà aggiuntive
 - Discriminazione tra le lingue
 - Acquisizione di lessici differenti
 - Derivazione delle regole sintattiche delle diverse lingue

Eppure ...

- I bilingui possono acquisire le loro lingue **senza apparente ritardo** (Werker, Byers-Heinlein, 2008; Yip, Matthews, 2007; Pearson et al., 1993; De Hower, 1990)
 - Producono le prime parole intorno ai 12 mesi
 - Producono le 50 parole intorno ai 18 mesi

Come fanno?

➤ Ipotesi → l'esposizione a più lingue potenzia lo sviluppo di nuove abilità relative a:

- Discriminazione uditiva
- Apprendimento da input misti
- Abilità di generalizzazione
- Flessibilità cognitiva
- Memoria di lavoro ➤

Migliori capacità di discriminazione uditiva

Subcortical encoding of sound is enhanced in bilinguals and relates to executive function advantages

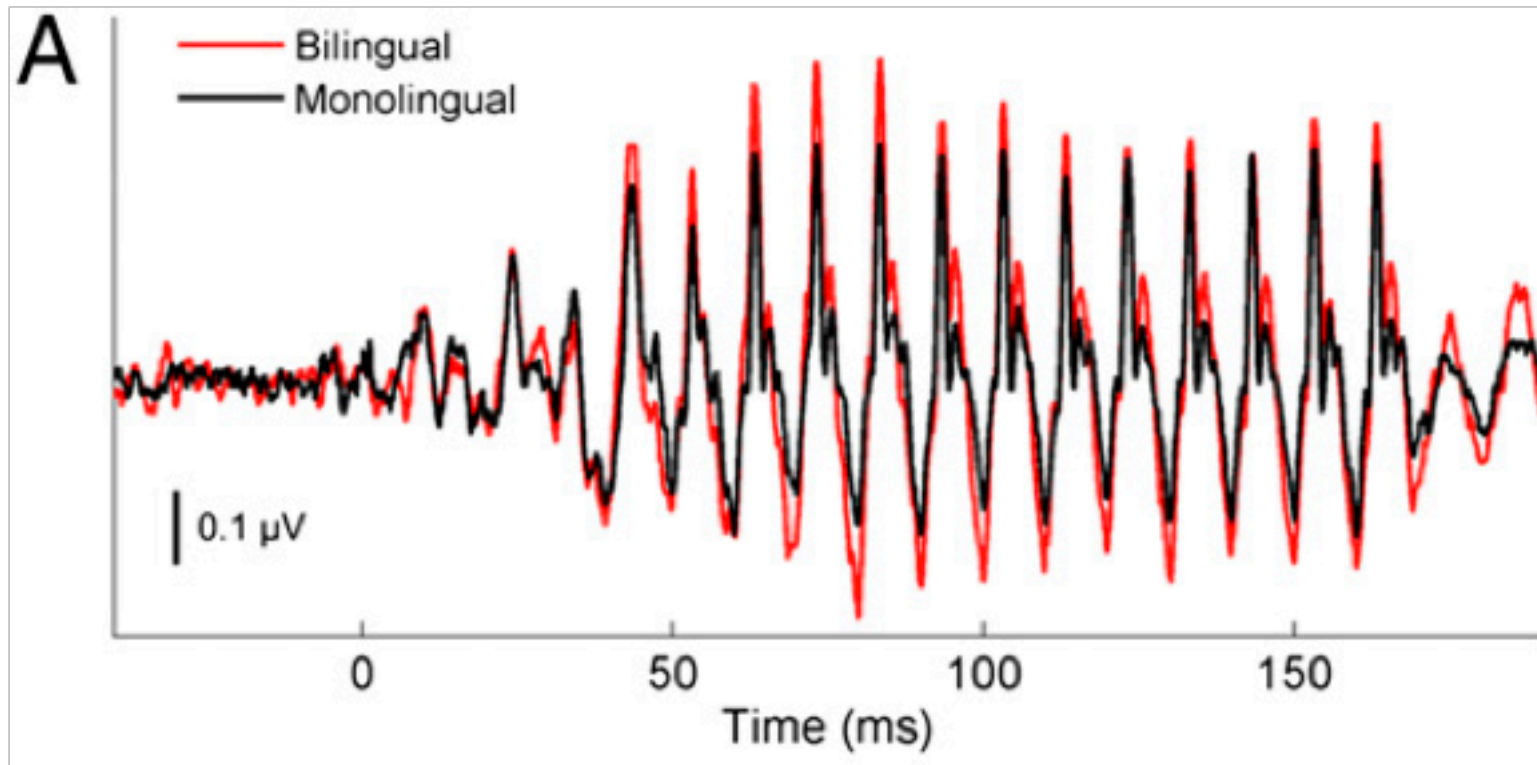
Jennifer Krizman^{a,b,c}, Viorica Marian^{b,c}, Anthony Shook^{b,c}, Erika Skoe^{a,c}, and Nina Kraus^{a,c,d,e,f,1}

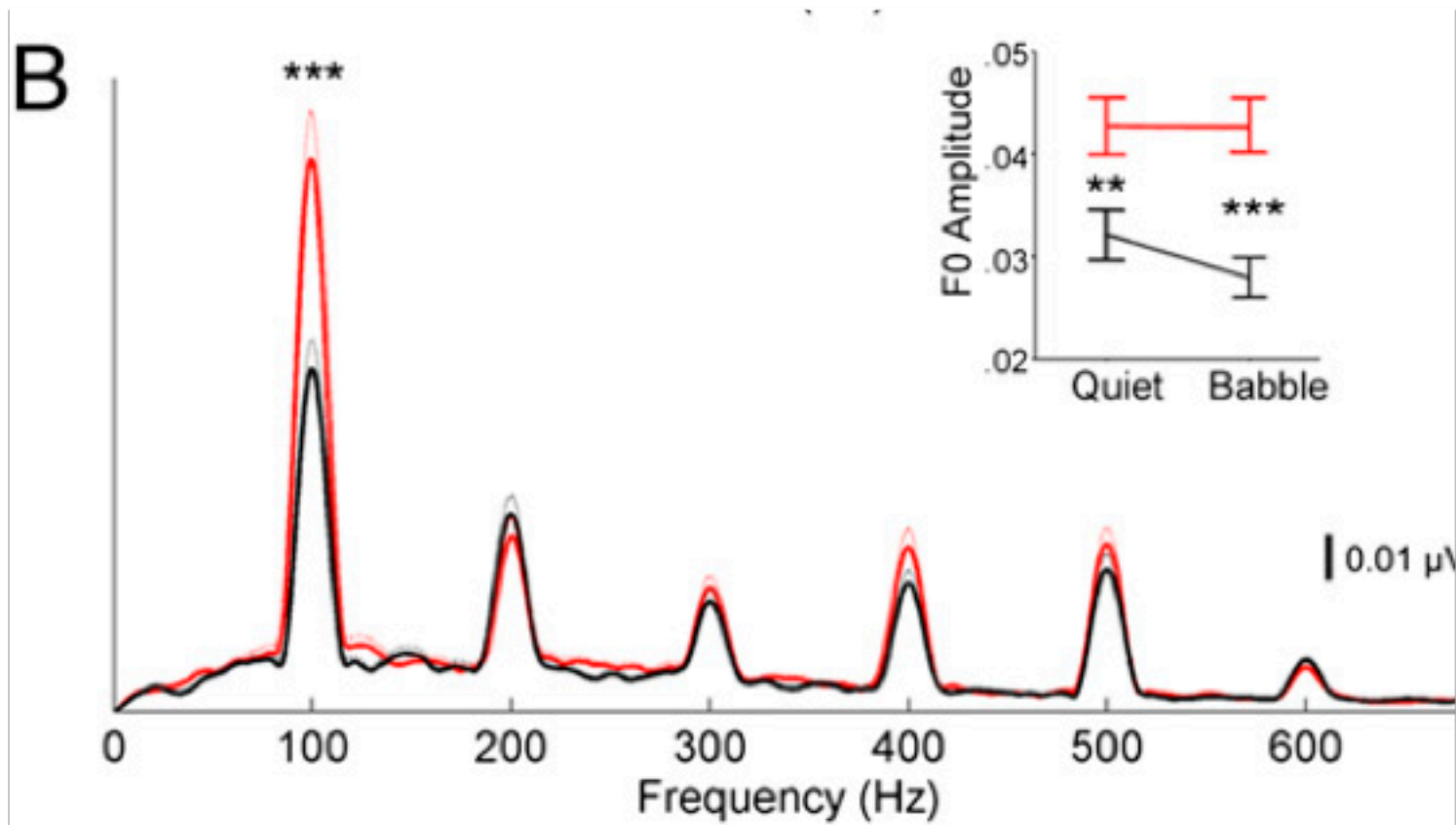
Jennifer Krizman^{a,b,c}, Viorica Marian^{b,c}, Anthony Shook^{b,c}, Erika Skoe^{a,c}, and Nina Kraus^{a,c,d,e,f,1}

- Tipo di studio → EEG (cABR) e comportamentale
- Partecipanti → 48 matricole (Scuola superiore, Chicago)
 - 25 Monolingui (52% fem.)
 - 23 Bilingui Spagnolo-Inglese (56.5% fem.)
 - Bilanciati per età (14 anni) e livello socio-economico

PNAS | May 15, 2012 | vol. 109 | no. 20 | 7877–7881

Bilingui → Intensa risposta del tronco encefalico





**Migliore capacità di apprendere da
input misti e generalizzare regole**

Flexible Learning of Multiple Speech Structures in Bilingual Infants

Ágnes Melinda Kovács* and Jacques Mehler

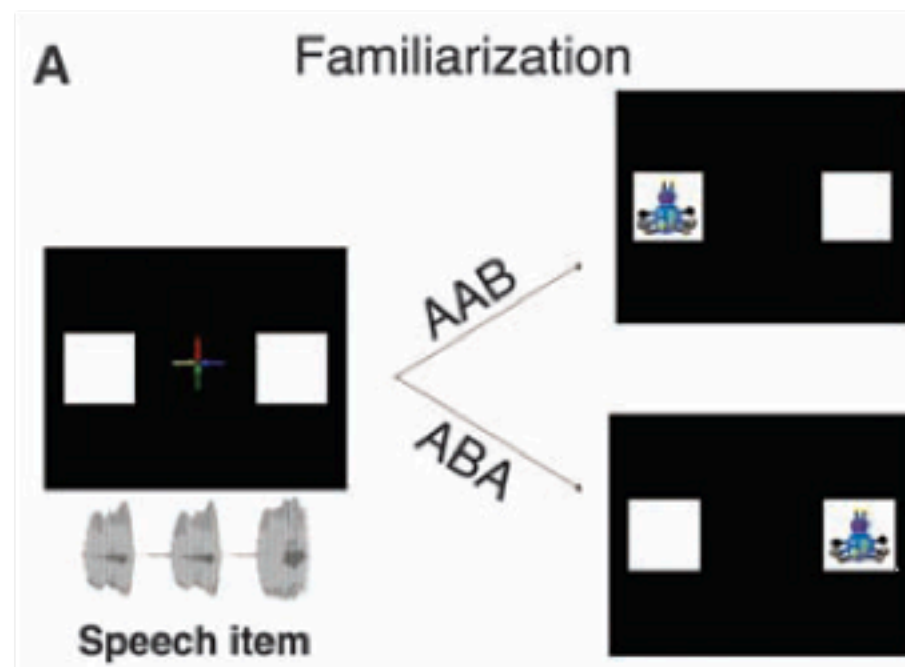
SCIENCE VOL 325 31 JULY 2009

- Studio → Eye-tracking
- Soggetti → 44 infanti preverbali (12 mesi): 22 bilingui (12 bambine) vs. 22 monolingui (12 bambine)
- Compito → Ascoltare sequenze trisillabiche durante l'osservazione di un monitor
- Stimoli → Trisillabi di due tipi: ABA vs. AAB
- NB → AAB più facile da processare a livello percettivo

Due condizioni

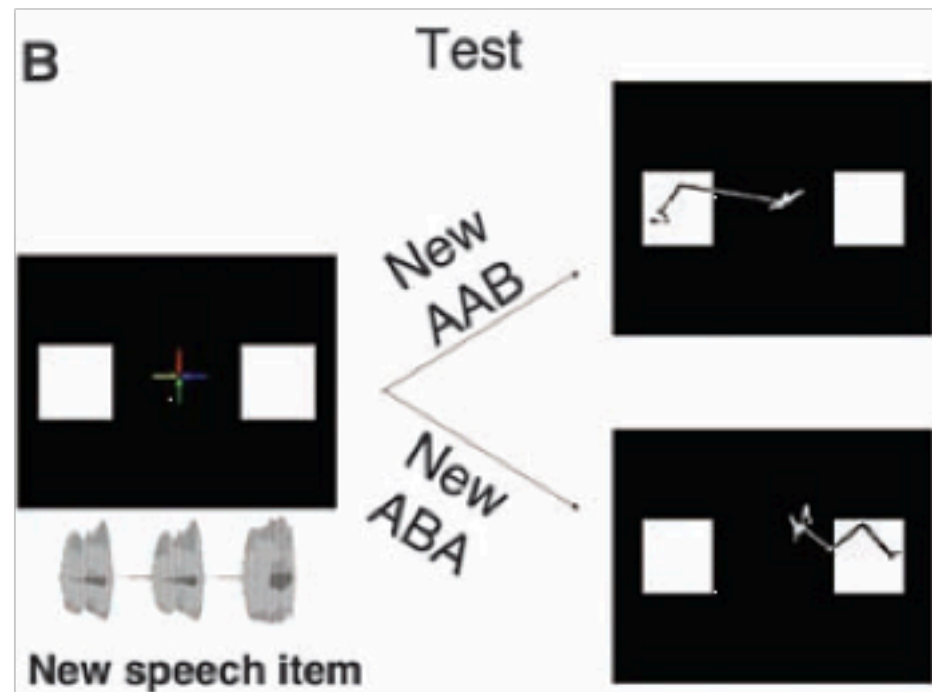
- Familiarizzazione
- Condizione sperimentale

Familiarizzazione



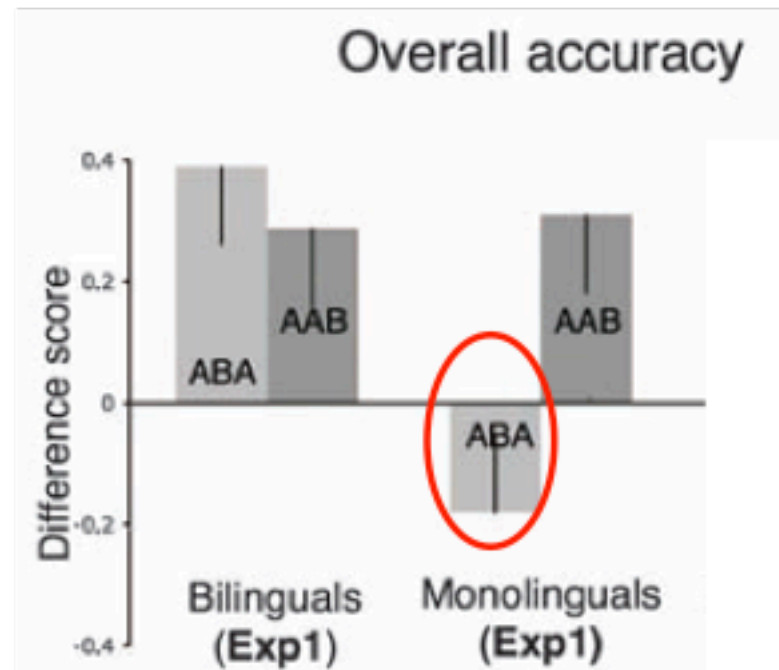
36 stimoli AAB e ABA con presentazione casuale

Esperimento



NB: gli stimoli sono diversi tra le due condizioni

Risultati



- Conclusioni → Vantaggio per I bilingui nell'apprendimento di nuove associazioni uditive-visive

Migliore flessibilità cognitiva

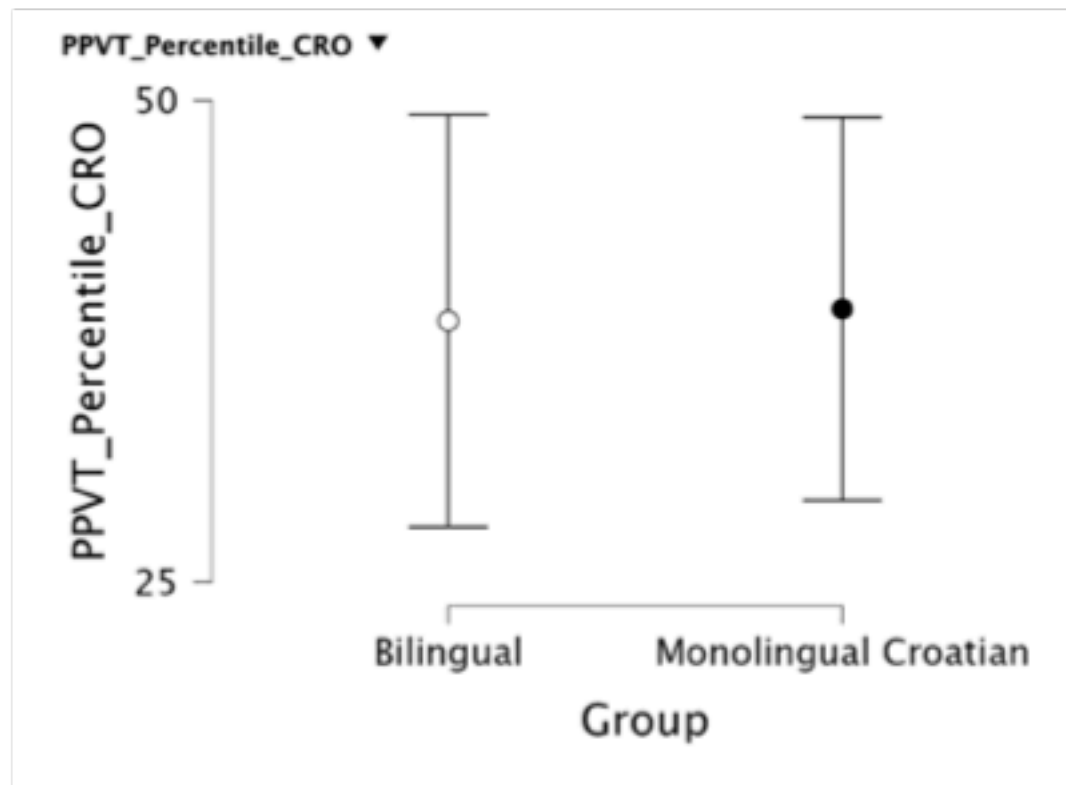
**An assessment of the effect of bilingual exposure on cognitive skills
in Croatian bilinguals**

Nada Poropat Jeletic, Renata Martincic Maric, Sara Kosutar, Andrea Marini

	Age Years & Months		Education_Italia_Years of education	
	Bilingual	Monolingual Croatian	Bilingual	Monolingual Croatian
Valid	31	30	31	30
Mean (arithmetic)	11.50	11.02		
Std. Deviation	1.026	1.025		
Minimum	10.02	10.02	5	4
Maximum	13.03	13.08	6	6

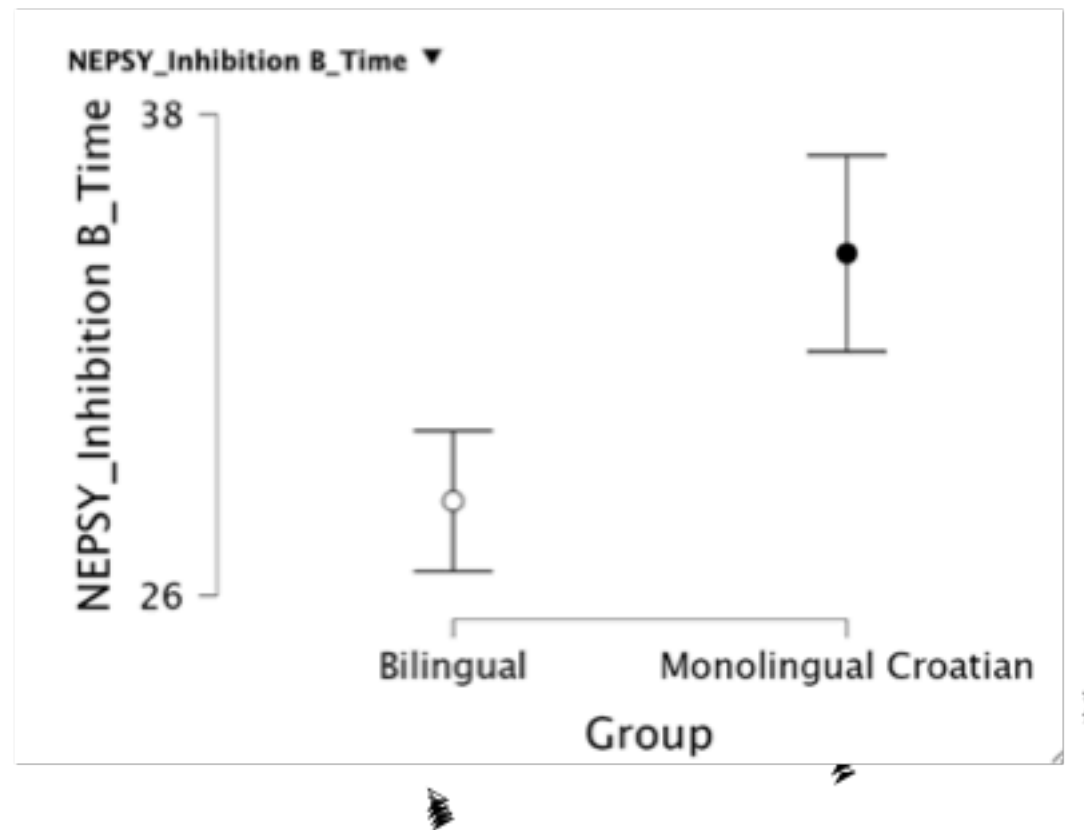
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- Livello sociale
- Livello cognitivo
- Livello neurocognitivo

Bilingualism and domain-general cognitive functions from a neural perspective: A systematic review

Lily Tao^a, Gongting Wang^a, Miaomiao Zhu^a, Qing Cai^{a,b,c,*}

A B S T R A C T

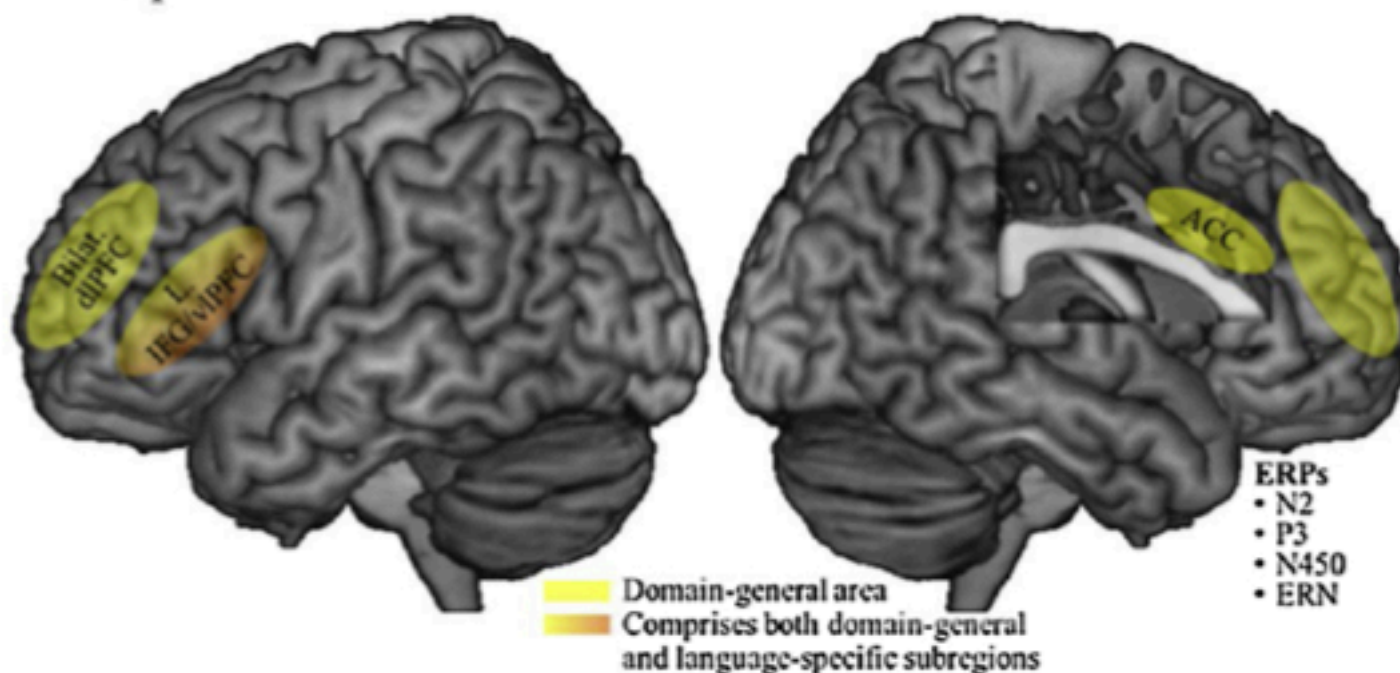
A large body of research has indicated that bilingualism – through continual practice in language control – may impact cognitive functions, as well as relevant aspects of brain function and structure. The present review aimed to bring together findings on the relationship between bilingualism and domain-general cognitive functions from a neural perspective. The final sample included 210 studies, covering findings regarding neural responses to bilingual language control and/or domain-general cognitive tasks, as well as findings regarding effects of bilingualism on non-task-related brain function and brain structure. The evidence indicates that a) bilingual language control likely entails neural mechanisms responsible for domain-general cognitive functions; b) bilingual experiences impact neural responses to domain-general cognitive functions; and c) bilingual experiences impact non-task-related brain function (both resting-state and metabolic function) as well as aspects of brain structure (both macrostructure and microstructure), each of which may in turn impact mental processes, including domain-general cognitive functions. Such functional and structural neuroplasticity associated with bilingualism may contribute to both cognitive and neural reserves, producing benefits across the lifespan.

Neuroscience and Biobehavioral Reviews 125 (2021) 264–295

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A. Response inhibition



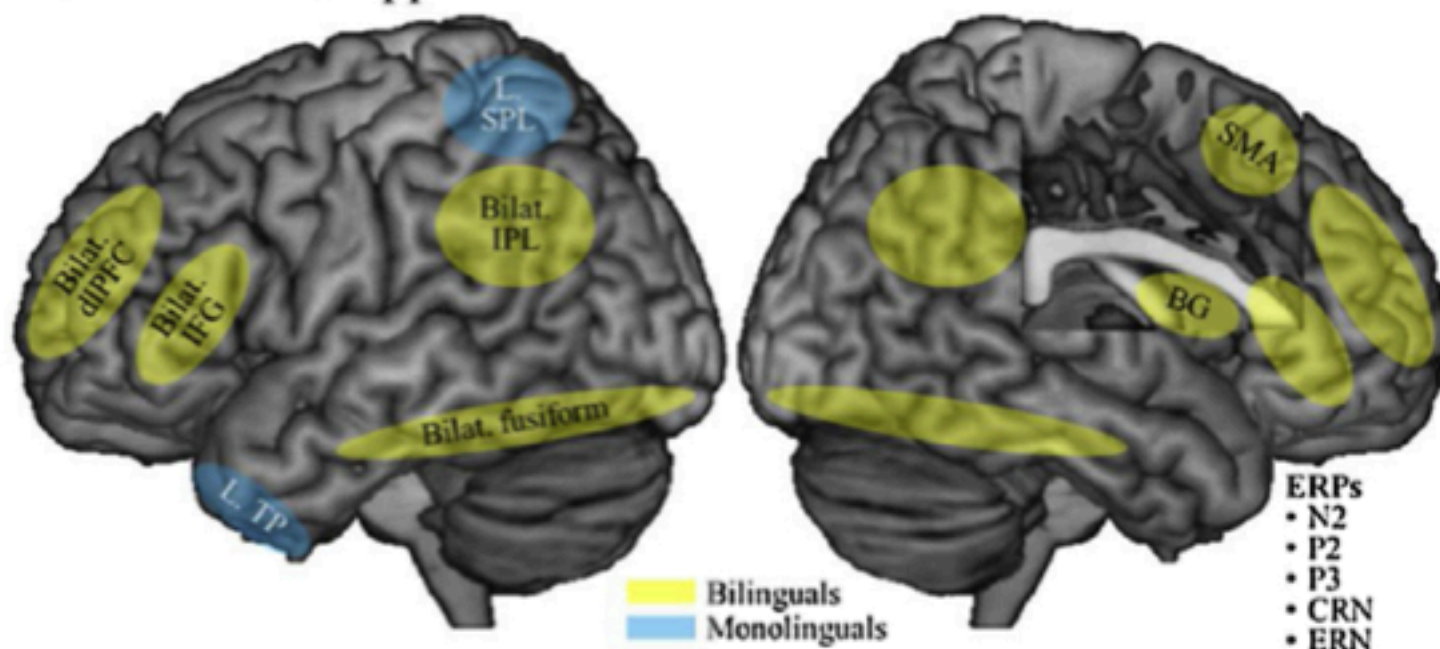
Overview of the effects of bilingualism (differences between bilinguals and monolinguals) on brain function

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B. Interference suppression



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C. Task switching



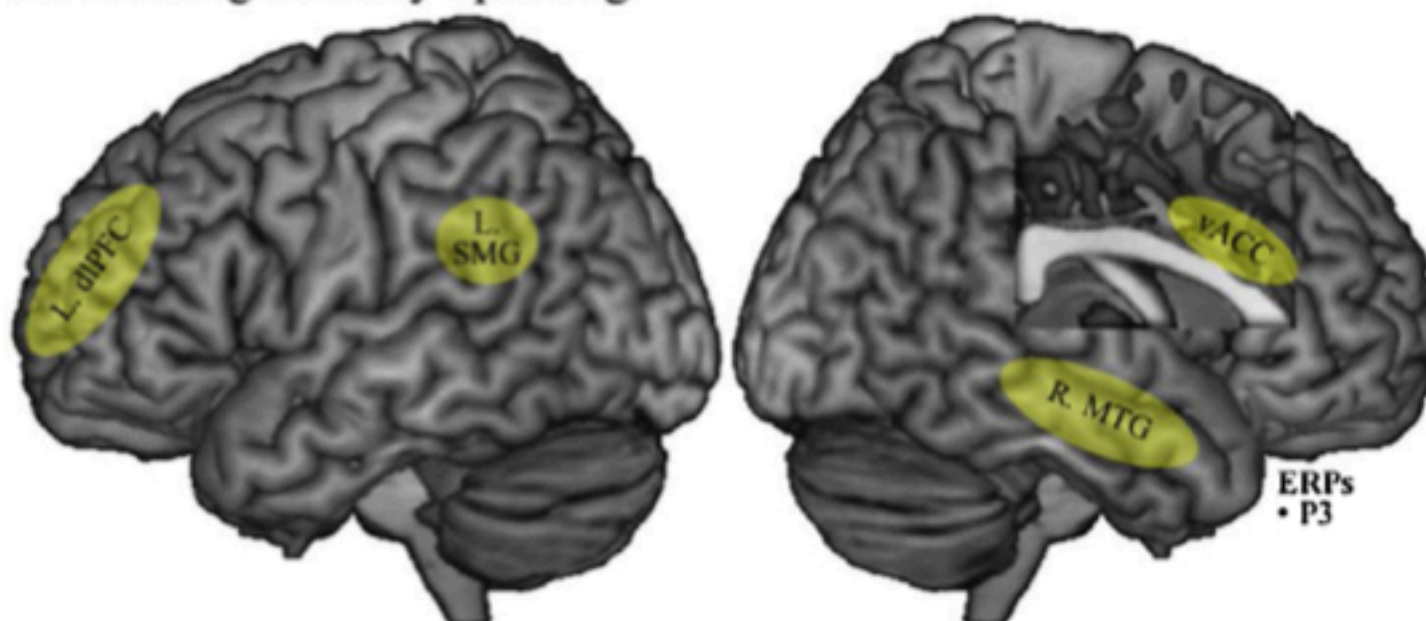
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D. Working memory updating



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Per approfondire



2025



2019



Grazie per l'attenzione!!!

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