

Multilingualism:

from the brain to the classroom

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Multilingualism

- ...describes the various forms of social, institutional, and individual ways that we go about using more than one language. Included are not only varieties such as national languages but also regional languages, minority languages, migrant languages, sign languages, and, in the broadest sense, dialects (Franceschini, 2011, p. 344)

Our journey into multilingualism

- ...from the brain to the classroom



<https://neurocritic.blogspot.com/2010/12/neuroradiology-as-art.html>



<https://camillaquintana.com/blog/how-to-raise-bilingual-children-successfully-according-to-the-experts/>

Multilingualism in the brain

Languages vie for attention!

Multilingualism in the brain

- ‘turning an additional language on’ is easy (Emmorey et al., 2014)
- ‘turning a language off’ (inhibiting a language) is hard (Emmorey et al., 2014)
- switching into the easier (dominant) language is harder than switching into the more difficult (non-dominant) language (Meuter & Allport, 1999; Litcofsky & Van Hell, 2017)

Multilingualism in the brain

How do we know that inhibiting languages is hard?

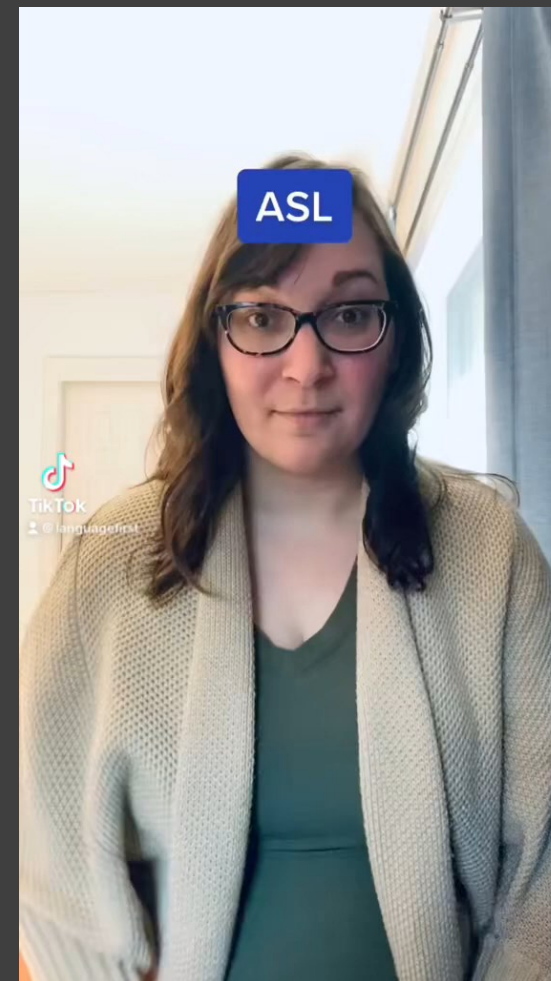
- Bimodal bilinguals
 - overwhelmingly code-blend rather than code-switch (Borinstein et al., 2008)
 - frequently whisper spoken words when signing (Petroj et al., 2014)

- 1) English: Tweety has binoculars too
ASL: BIRD HAVE BINOCULARS

(Emmorey et al., 2008, p. 49)

- 2) Italian: Chi ha chiamato?
LIS: CALL WHO
“Who called?”

(Donati & Branchini, 2013, p. 109)



<https://www.youtube.com/shorts/SsiXRF5VT44>

Multilingualism in the brain

Languages are not separate in the brain!

Multilingualism in the brain

Russian-English bilinguals

- stamp = marka
- *Click on the marker.* (Marian et al., 2003)

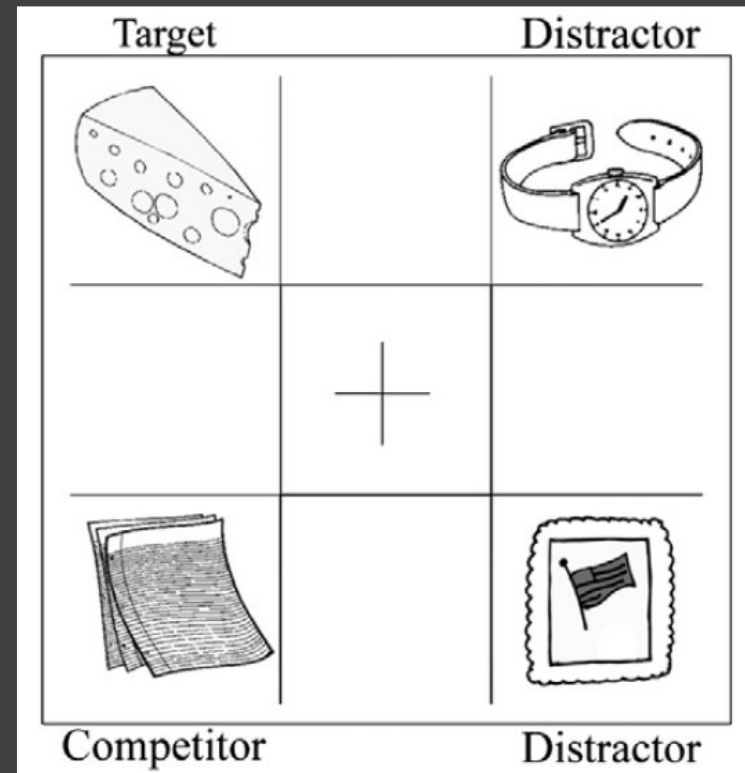


Multilingualism in the brain

ASL: cheese



ASL: paper (repeated)



ASL-English bilinguals

- *Click on the cheese.* (Shook & Marian, 2012)

Multilingualism in communication

Keeping languages separate is artificial!

Multilingualism in communication

Code-switching

1) Ich weiß nicht wie-viele transfer-en
I know not how-many-PL transfer-3PL
'I don't know how many [academic credits] will transfer'

(Fuller & Lehnert, 2000, p. 3)

2) le Stuhl
'the chair' (child, 1;10)

(Eichler et al., 2012, p. 243)

3) weil das is ein rhinocéros und der schimpf
'since that's a rhinoceros and he's ranting' (child, 2;6)

(Eichler et al., 2012, p. 246)

4) et puis Patti a sein Arm gebrochen
and then Patti has his arm broken
'And then Patti has broken his arm' (child, 3;7)

(Meisel, 1994, p. 435)

Multilingualism in communication

We use all of our linguistic
resources to communicate!

Multilingualism in communication

Cross-signing (D=Hong Kong Sign Language; A=Korean Sign Language)



Signer A produces the Korean sign PEOPLE for the first time, making eye contact and holding the sign in final position. Signer D does not respond, keeping a blank expression, i.e. off record repair.

A then repeats the sign more slowly, sustaining eye contact and questioning expression, again holding the sign in final position.

At A's repetition, D copies the sign and holds it in final position along with A.

As signer A begins to fingerspell 'people' and articulates P-E-O, signer D offers his understanding using a kanji-based sign for 'person' and then the sign for 'many'. Signer A stops spelling and affirms that signer D has understood the meaning.

Multilingualism in the English classroom



Acknowledge students'
multilingualism!

Multilingualism in the English classroom

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Pockets of Possibility: Students of English in Diverse, Multilingual Secondary Schools in Austria

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Multilingualism in the English classroom

- English students in Austria:
 - National standards assessments 8th grade (year 4)(BIFIE 2020):
 - % of students who **don't** meet any of the English learning outcomes (CEFR level B1 or above):
 - middle school: 48%
 - AHS: 8%
 - multilingual students scored on average 22-35 points below students with German as their only home language

Multilingualism in the English classroom

- English teachers in Austria
 - multilingualism as a barrier to success in English (De Angelis, 2011, Erling et al., 2021, 2023b)
 - do not encourage L1 use in the classroom (De Angelis, 2011)
 - the more multilingual students at a school, the more teachers believe that their students are not achieving English learning outcomes (cf. Erling et al., 2021, 2023b)

Multilingualism in the English classroom

- Perceptions influence classroom practice (Pit-ten Cate and Glock 2018, 2019; Glock et al. 2019):
 - teachers inadvertently convey the message that students are not capable of meeting expectations (Valencia 2010)
 - negative impact on students' learning, motivation, self-esteem, academic self-concept, and well-being (Tsiplakides and Keramida 2010; Borg 2018)
- 'translanguaging stance':
 - requires a firm belief that students' whole linguistic repertoires are resources in general and specifically for learning (García and Kleyn, 2016)

Multilingualism in the English classroom

- Study in a small town outside of Linz
- **multilingual** students:
 - 108 at middle school
 - 56 at VHS
 - 44 at AHS



Multilingualism in the English classroom

The multilingual middle school students do very well in English.

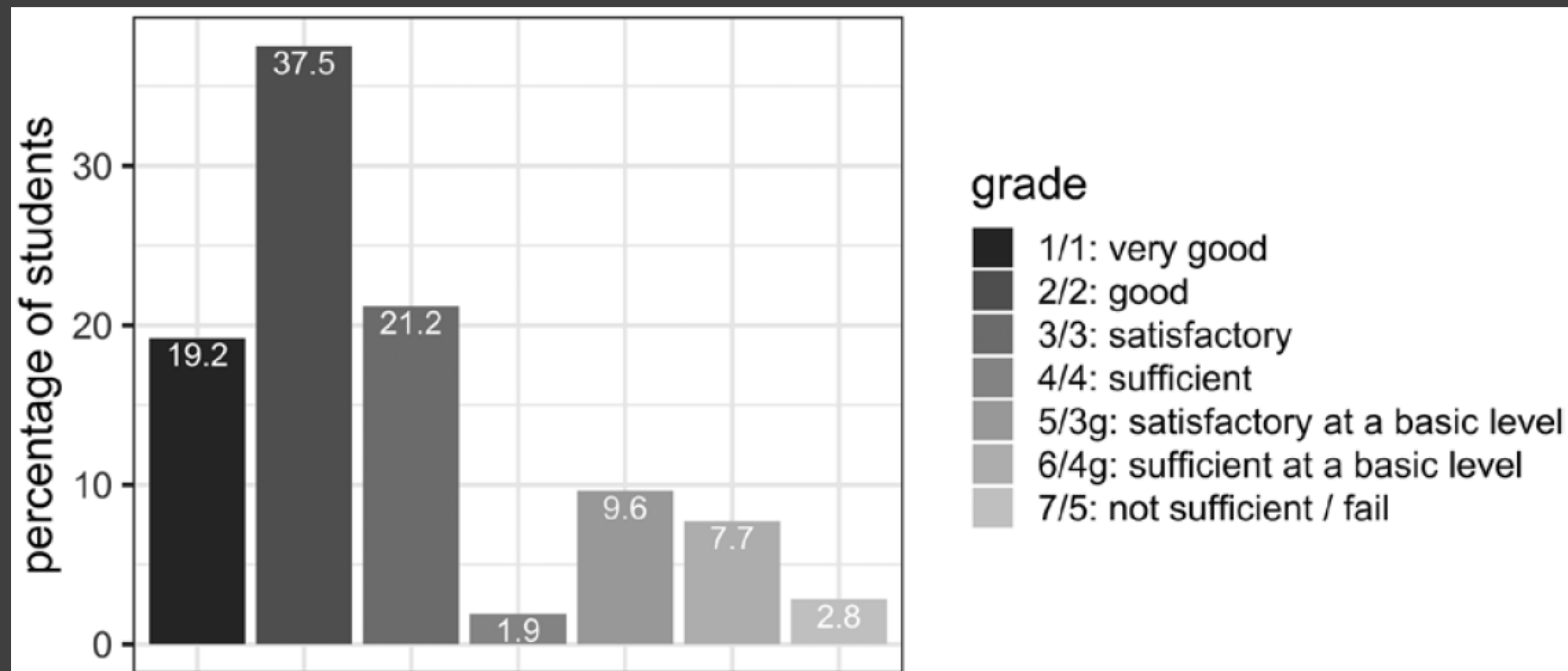
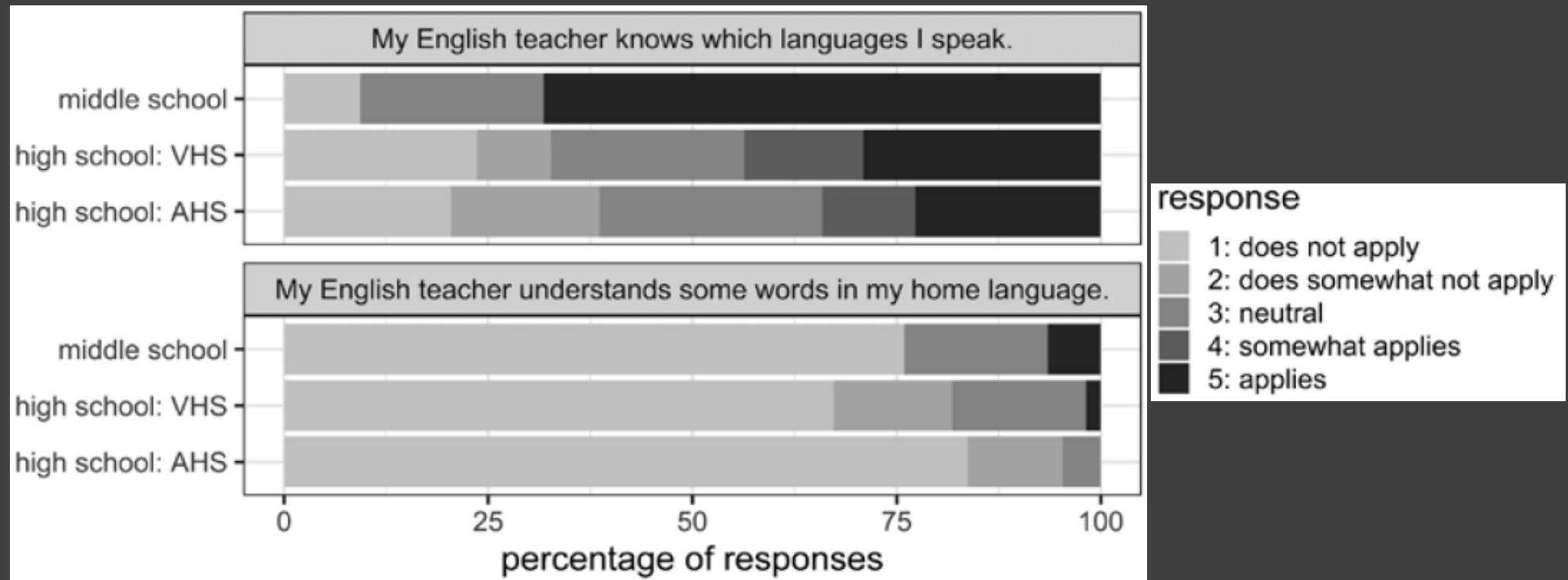


Figure 3: Distribution of middle school students' self-reported English grades. N = 104. Grades are listed as numeric value in analysis/official grade name: description of the grade.

Multilingualism in the English classroom

The middle school teachers see their students' multilingualism.



Multilingualism in the English classroom

- Y: Und wie wäre da so der Anteil an zwei- und mehrsprachigen Schülerinnen und Schülern, ungefähr?
- *Im: In einer der ersten glaube ich zwei drinnen.*
- *Jm: Die nur Deutsch sprechen.*
- *Im: In der anderen gibt es nur einen.*
- *Jm: Nein, gar keinen. Insgesamt sind es sicher über 90 Prozent.*
- Y: Okay, und von den kulturellen Hintergründen her: Von wo kommen die teilweise? Könnt ihr das irgendwie einordnen?
- *Jm: Ja wir haben einen großen Pool an türkischstämmigen Kindern, tschetschenisch und Ex-Jugoslawien. Das sind so die drei größten Teile, hätte ich gesagt. Aus dem syrischen und dem arabischen Raum gibt es auch noch vereinzelt welche. Das war's. Also eher aus dem Gebiet, würde ich sagen. Aus Afrika gibt es zwei. Also einen eigentlich nur. Sonst noch aus Portugal, ganz vereinzelt. Aber das sind halt nur Vereinzelte. Der große Pool sind die drei: Türken, Tschetschenen und Ex-Jugoslawien. Ungarn gibt's auch.*
- *Im: Ja, Ungarn und Rumänien.*
- Y: Jm, du bist ja schon länger da. Hat sich der Anteil verändert in den letzten Jahren?
- *Jm: Nein. Syrer sind mehr gekommen aufgrund des Krieges, aber nein, würde ich nicht sagen.*



languages



Article

Teaching English to Linguistically Diverse Students from Migration Backgrounds: From Deficit Perspectives to Pockets of Possibility

Elizabeth J. Erling ^{1,2*}, Anouschka Foltz ³, Felicitas Siwik ⁴ and Michael Brummer ³

Multilingualism in the English classroom

- Simple things to do:
 - tell students about the languages you speak
 - talk to students about the languages that they speak
 - be interested in students' multilingualism

Multilingualism in the English classroom

Harness students'
multilingual skills!

Multilingualism in the English classroom

- Teaching / reflecting on the possessive in English
 - Students reflect on how they express ‘belonging’ in German and their other languages (Erling & Foltz, accepted)

| Language | Phrase | Non-Latin spelling (if applicable) |
|-----------|---------------------------------------|------------------------------------|
| English | Melvin's book | |
| Arabic | kitab Melvin | كتاب ملفين |
| Turkish | Melvin'in kitabı | |
| Kurdish | Pirtûka Melvin | |
| Hindi | Melvin kee kitaab | मेल्विन की किताब |
| BCS | Melvinova knjiga | Мелвинова књига (Serbian) |
| Ukrainian | Knyha Melvina | Книга Мелвіна |
| Somali | Buuga Melvin | |
| German | das Buch von Melvin / Melvins Buch | |

Table 2: Melvin's book in a group of students' other languages.

Multilingualism in the English classroom

- Other aspects of grammar that can be compared across languages

- questions

- *Where do you live?*

- *Wo wohnst du?*

- *Tu habites où?*

- *Gdje živiš?*

- *Nerede oturuyorsun?*

- *Where are you from?*

- *Woher kommst du?*

- *Tu viens d'où?*

- *Odakle si?*

- *Nereden geliyorsun?*

- *Are you tall?*

- *Bist du groß?*

- *Jesi li visok?*

- *Uzun boylu musun?*

- *Do you like cats?*

- *Magst du Katzen?*

- *Voliš li mačke?*

- *Kedi seviyor musun?*

Multilingualism in the English classroom

- Other aspects of grammar that can be compared across languages

- negation

- *I don't eat apples*
- *Ich esse keine Äpfel*
- *Non mangio mele*

- I can't swim*
- Ich kann nicht schwimmen*
- Non so nuotare*

- *I don't see anyone*
- *Ich sehe niemanden*
- *Non vedo nessuno*

Multilingualism in the English classroom

- Other aspects of grammar that can be compared across languages

- simple vs. progressive forms

- *I walk to school every day*

I am walking to school now

- *Ich gehe jeden Tag zur Schule*

Ich gehe jetzt zur Schule

- *Vado a scuola a piedi tutti i giorni.*

Ora vado a scuola a piedi.

- adjective noun ordering

- *a red car*

- *una macchina rossa*

- *kırmızı bir araba*

Multilingualism in the English classroom

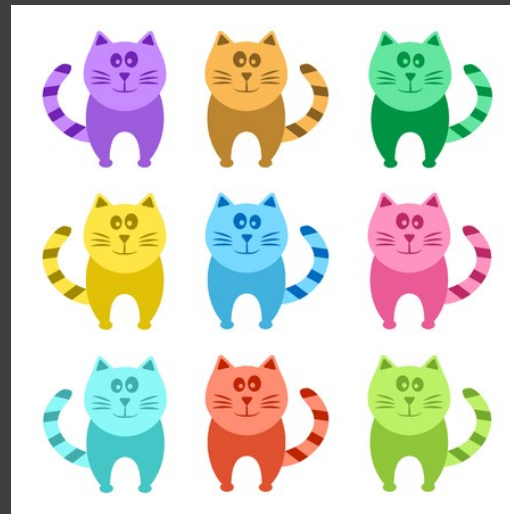
- Using linguistic fieldwork methods
 - adjective noun ordering
 - Ask informant: What's this in _____?
 - Ask the class: What's this in _____?



<https://www.vecteezy.com/vector-art/302528-little-house-in-six-colors>



https://en.ac-illustr.com/clip-art/23335904/11_illustration_soccer-ball-6-colors



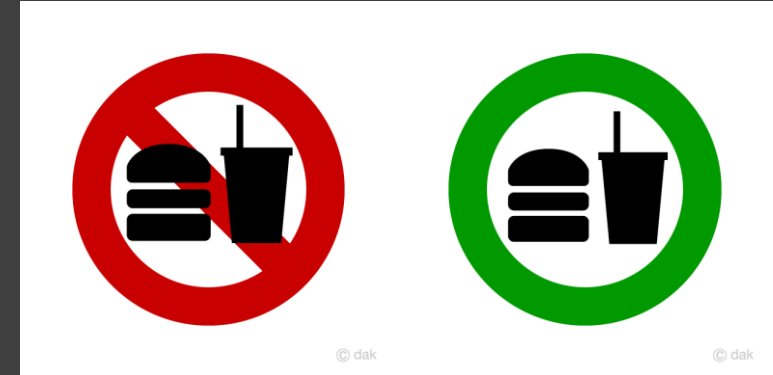
https://de.123rf.com/clipart-vektografiken/katzen_bunt.html



<https://www.vecteezy.com/vector-art/369032-cars-in-six-different-colors>

Multilingualism in the English classroom

- Using linguistic fieldwork methods
 - negation
 - Ask informant: What's this in _____?
 - Ask the class: What's this in _____?



<https://illustoon.com/?id=967>

<https://illustoon.com/?id=1003>



<https://www.safetysonline.co.za/products/no-pedestrians-road-sign-r218>



<https://www.creativesafety.com/no-running-prohibition-iso-floor-sign/>

https://www.beyondrevelation.co.za/wp-content/uploads/2017/04/SN4113_1024x1024.jpg



https://de.123rf.com/photo_138476463_no-swimming-and-swimming-allowed-sign-set.html

Multilingualism from the brain to the classroom

Brain

- Languages vie for attention!
- Languages are not separate in the brain!



Communication

- Keeping languages separate is artificial!
- We use all of our linguistic resources to communicate!



Classroom

- Acknowledge students' multilingualism!
- Harness students' multilingual skills!



Thank You
for
Listening...
any
questions?

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