The contents of this report are the intellectual property of the authors. No part of this report may be circulated or reproduced without explicit permission from the authors, or from the School of Arts, Languages and Cultures at the University of Manchester, Oxford Road, Manchester M13 9PL, United Kingdom.
Perceived effects of childhood bilingualism on late third language acquisition

Emily Archer
Amy Hinchcliffe
Sophie Seeger
Wenlin Jocelyn Tong
1. Research Questions

In this research project, we have attempted to answer the following questions:

• In which situations do participants use which language?
• Is there code-switching in certain settings?
• Can we observe a language shift in certain settings?
• What do our findings tell us about the roles of languages in society?
• What are the advantages and disadvantages (if any) of being raised bilingually?
  Does it give the bilingual an advantage in late third language acquisition?

After conducting our study, our research aim changed slightly, moving away from the idea of code-switching and focusing more on the effects of childhood bilingualism on the perceived advantages during late acquisition of a third language. We also tried to add some focus on the idea of national identity within a language, as well as exploring the idea of language preferences across different domains, for example media.

As our study consisted of questionnaires and interviews we have decided to analyse our data qualitatively as opposed to quantitatively. Although this does not give us any solid figures or percentages, it allows us to draw some conclusions about multilingualism in bilingual students.

We have reason to believe that childhood bilingualism gives a perceived advantage in the late acquisition of a third language because it has been argued that bilingual speakers have “enhanced executive control” in their cognitive processes (Bialystok, 2011: 230). Following that, it is possible that this enhanced cognition provides some degree of perceived advantage to the bilingual when he or she picks up a third language later in life.

2. Methodology

We have focussed on the fieldwork techniques of in depth narrative interviews with the students to establish individual language histories and eliciting questionnaires that will be distributed to their parents (and students who do not have time for an interview) via email as many of them do not reside in Manchester. Evaluating the questionnaires and interviews we will be taking advantage of quantitative datasets that will showcase language choice in the different domains.

Some minor changes were made to the timeline of the project due to issues with scheduling, and the interviewing of parents was eliminated due to unavailability. In addition, due to issues with scheduling, we were only able to conduct in depth narrative interviews with two of the participants. Questionnaires were elicited via email to the rest of the participants. Also, further questions were added to the initial list in the questionnaire.
3. Findings

To maintain anonymity, the 4 participants in the present study have been given the following pseudonyms: Ms. D, Ms. K, Mr. G and Ms. A.

3.1 Ms. D

Ms. D is 22 years old, and has a British father and a Spanish mother. She grew up in Spain, where her dominant language was Catalan. She then relocated to England for studies at the age of 12, and it was at that point that she started to use English more frequently. She has also spent quite a lot of time in Italy with family and friends, but her written Italian only improved at university, where she is pursuing a degree in Italian. She also spent a year abroad studying in Italy.

She feels a stronger emotional connection to Catalan and states that it “feels most natural” to her because “it is [her] mother tongue”. She also prefers to consume media in Catalan as opposed to English or other languages in her repertoire because she doesn’t “relate to English humour that well”. These all show that bilinguals have different language preferences for various domains, and that languages have a distinct distribution of functions in society. These preferences are often linked to issues of identity and emotional connections to different languages.

Ms. D felt that being raised bilingually gave her an advantage when picking up Italian (her third language) later in life, stating that she thought that “there was some sort of advantage” because “Spanish and Italian are quite similar in terms of grammar”.

The following table is a summary of her language choices in an array of domains, and with a range of interlocutors.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Home</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Language</td>
<td>Catalan</td>
<td>1. English</td>
</tr>
<tr>
<td></td>
<td>2. Italian</td>
<td>Catalan</td>
</tr>
</tbody>
</table>
3.2. Ms. K

Born in England to an Indian, English-speaking father and an Italian mother who both moved to England in their early 20s, Ms K’s primary language may be English, but growing up with an Italian mother and among her Italian and Spanish friends, vacationing in Italy frequently, the two languages always played a significant role in the life around her, especially as something relating her to her mother and that part of her heritage and national identity. This early confrontation with Italian from the age of 5 upwards, allowed her to pick it up naturally, like any bilingual would, and taking Italian classes in her teenage years manifested the language significantly within her linguistic comfort zone. In particular when sharing memories with her mother in Italian or expressing her emotions, Italian seems more natural to her so code-switching occurs most frequently in these situations.

Studying both Italian and Spanish in university, Ms. K is surrounded by many other bilingual speakers of Italian and Spanish but as English is their shared language, it is also what gets used most in the academic domain. She says that the shared Latin language stems between Italian and Spanish and her general passion and pride in her bilingualism is what has given her a more open mind towards language learning and enabled her to learn Spanish a lot quicker than someone who was not raised by 2 cultures and languages like she was.

This also speaks for her sense of national identity, which she says: “In terms of language I am English but in terms of identity, that’s a whole other question, I don’t identify as English”. This is something bilingually raised people have to deal with growing up, a sense of not fully belonging to the country whose language they may speak, but whose culture they may not fully identify with.

The following table is a summary of her language choices in an array of domains, and with a range of interlocutors.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Home</th>
<th></th>
<th></th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlocutor</td>
<td>Mother</td>
<td>Father</td>
<td>Brother</td>
<td>Friends</td>
</tr>
<tr>
<td>Language</td>
<td>Italian</td>
<td>English (code switches)</td>
<td>English</td>
<td>1. English</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2. Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3. Italian</td>
</tr>
</tbody>
</table>
3.3 Mr. G

Mr G grew up in England with an English Mother and an Italian Father, who moved to the UK to study at the age of 18. His Father actively encouraged him to learn Italian from a young age although he was never taught formally. This has meant that he is fluent in English and Italian whilst being proficient in Spanish also. As he was never formally taught Italian he feels less comfortable using it in academic settings but will happily socialise in it. As it is his father’s native language he feels a connection to it and so he must maintain the language use. However, as he identifies as English along with his mother he finds he is most likely to use the English language. As Mr G is studying Spanish, he also feels comfortable using the language but is not quite as fluent as the other languages. This has meant he is more likely to use Spanish in the university setting only. Due to the fact that his mother is English, he identifies more with the language as well as the English way of life through the means of media and sense of humour and so on. However, he also feels a need to identify with Italian as a way of connecting with his father. As the languages learnt by Mr G are all of a Latinate (or similar) language family he feels it has been easier for him to learn other languages as he already has a basic knowledge of a similar language origin. He also expressed that learning Italian in an English setting at such a young age meant he picked up the language with much more ease than if he was older.

The following table is a summary of his language choices in an array of domains, and with a range of interlocutors.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Home</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlocutor</td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
<td>Italian</td>
</tr>
</tbody>
</table>
3.4 Ms. A

Ms A is fluent in both French and English. Her parents were both born in France, her father moved to England as a child and so was fluent in English too. She learnt French from her mother and father and English from her father and once she started school in England.

Although fluent in French, she cannot write it as well as she can speak it. As her siblings had the same linguistic upbringing as her and are fluent in both languages, she tends to code-switch at home with them, and as she lives in England media such as television and films are consumed in English. Her bilingualism helped her to learn Italian academically due to French and Italian being similar, but there are no other advantages or disadvantages to being bilingual. She feels both backgrounds have a cultural influence on her identity, especially French as she associates that with her early childhood and her parents.

The following table is a summary of her language choices in an array of domains, and with a range of interlocutors.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Home</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>French</td>
<td>1. French</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French/English</td>
</tr>
<tr>
<td></td>
<td>2. English</td>
<td>(code switching)</td>
</tr>
</tbody>
</table>

4. Discussion

Analysis of data:

In general, our findings show that there is a distinct distribution of functions for various languages in society.

According to our findings, being raised bilingually does give the participants an impression of having an advantage during late 3rd language acquisition, perhaps because the participants are more sensitive to the presence of different morphological, syntactic and phonological systems in different languages. Also, there is an added perceived advantage when the third language is closely related to one of the languages in the participant’s existing language repertoire. For example, in the case of Ms. D and Ms. K, Spanish and Italian are both Italic Indo-European languages and have similarities in terms of syntax and lexicon. This would arguably give the participant an edge, perceived or otherwise, if he or she attempts to learn Italian later in life, having already learnt Spanish whilst growing up. This is supported by a 2015 paper by Rothman, which links the concepts of cognitive
advantage and typological closeness. Rothman cites his Typological Primacy Model (TPM), asserting that there is morphosyntactic transfer from first language (L1) and/or the second language (L2) to the adult third language (L3) acquisition process. He also states that it is possible that “the mind unconsciously determines typological (structural) proximity based on linguistic cues... to determine holistic transfer of one previous (the L1 or the L2) system” (Rothman, 2015: 179).

A focus of our original research questions was how bilinguals used code switching, if at all. Our literature review showed that code switching is common among bilingual families, for many different reasons whether it be related to the language the person is most comfortable with (Greene, Pena & Bedore 2012), the families want for children to learn the majority language of the country (Namei 2008), or domain based and relying on the speaker’s interlocutors (Loakes, Moses, Wigglesworth, Simpson & Billington 2013). There was ample evidence in our study of code switching as would be expected, varying from person to person based on their linguistic backgrounds. Those with families that were also bilingual tended to code switch in the home with their siblings, for example if they were consuming media in English. There is also evidence for the most ‘comfortable’ language and different domains having an effect on code switching as Mr G says he felt more comfortable socialising in Italian than using it in academic settings. Ms D also reports that different domains condition which languages she uses while Ms. K would code-switch to Italian when being more “emotionally expressive”.

After looking at our participant’s feelings towards multilingualism and the acquisition of a third language, it would appear that there is a clear link between the ease of acquisition of a second language and the apparent age at which the language was learnt. This links strongly with the Critical Period Hypothesis, which states that language must be acquired before puberty. This is something that would appear to be true with our participants with regards to their second languages but it does not relate to any languages they are learning at university level. The ease at which they learned their second languages could also be a reflection on the language similarities. As most of the participants are speakers of languages with a similar language histories, they may have been able to find links within languages that helped the process of language acquisition - a feature that may have further helped them when coming to study a language at a higher level. However, this is something that we cannot “prove” so to speak, but we can draw solid conclusions on what we have gathered. By gathering qualitative data we have been able to draw on emotions and opinions as opposed to numbers which has allowed us to view any positive or negative feelings that may stem from bilingualism. The qualitative nature of the study does not take away from the validity of our findings, in fact it allows us to create a solid foundation to which further study could be built upon.
It is possible to identify a link between mother tongue and national identity. In the case of Ms D, she identifies as a speaker of Catalan, stating that it feels most “natural” to her and that she has more emotional attachment to it, especially when she is speaking it in a colloquial context. However, it is also important to note that the comfort level within a language does not automatically equate to that language being linked to the sense of national identity. As with Ms K, just because English is her mother tongue, she does not solely identify as English but as mixed race with her Italian roots being just as significant to her sense of national belonging and her father’s Indian roots being very significant to her as well, even though she does not speak Hindi. These findings may seem rather simple and perhaps even “obvious” but it is something that may be of prominence when studying bilingualism as national identity is something many people may not be able to relate to, especially seeing as, in terms of language development and the Critical Hypothesis Theory, bilingualism is often neglected.

Suggestions for future research and limitations:

Future research could include a larger pool of participants, which was not possible in the present research project due to limitations in time and resources. The larger pool of participants could then lend greater credibility to the results of the research. We initially intended to gather questionnaires from the parents of the participants but, after multiple tries, were left with no response. This simply meant that we had to narrow our sample size and led to us adding more questions to the interviews/questionnaires in order to gather as much information as possible. Although these changes occurred, it did not hinder our study as we were able to go more in depth into aspects of language that we previously had not considered. This meant that code-switching had to take somewhat of a backseat but it allowed us to expand on national identity - an interesting aspect of multilingualism.

Another possible angle for future research would be to consider bilinguals who are attempting to acquire a third language that is genetically distant from the languages in their existing language repertoire. This could give us further insight as to whether being raised bilingually indeed gives the speaker a perceived cognitive advantage in late third language acquisition, as opposed to the advantage stemming purely from the genetic closeness of the languages. Future research could also look into actual advantages instead of just perceived advantages, an angle which was not possible in the present study due to limitations in time and resources. Additionally, it may be beneficial for Rothman’s Typological Primacy Model to play a larger role in the formulation of research goals and analysis of results in future related studies. It might also be worth taking into account the effects of interference from existing languages when picking up a third language.
5. References


Schmidt-Rohr, (1932) *Die Sprache als Bildnerin der Volker*.

6. Appendix

Interview Transcripts:

I – Interviewer  
D: Ms. D

I: You lived in Spain for a while. When was that? In what kind of language situation was that? Like how old were you?
D: I was brought up there, and brought up speaking Catalan. But my dad did speak with my from a young age in Italian because he didn’t know Spanish at the time
I: He’s British but he speaks Italian?
D: For the first few years of my life he would mix English with Italian
I: So your dad started introducing Italian to you but English was always also an integral part of your life? You were raised with both English and Catalan?
D: Yes but I only had my dad speaking in English to me. And I would speak it every summer. My English wasn’t really good. I couldn’t really hold a conversation. And then I came to live in England when I was 12. But I could always understand it.
I: But your father would mostly speak to you in English?
D: Yes
I: Did you go to a regular school here or was it a bilingual school?
D: In Spain I went to a normal state school
I: And when you were in the UK you also went to a regular school?
D: No I went to boarding school for 3 years.
I: But that was not a language boarding school, was it a regular English boarding school?
D: Yes (regular)
I: After a couple years in England, you were fluent in English?
D: Yes
I: But you mostly spoke Catalan with your mother?
D: Yes I speak Catalan with my mother
I: So Catalan is always the home language? With your father you always spoke-
D: -With my father. I started speaking to him in English maybe at the age of 8. My parents separated and my dad came back to England.
I: Ok. And when you came to live in England you only spoke Catalan when you’re on the phone with your mum?
D: Yes. And with my friends.
I: But those friends are all back in Spain? Did you have any friends in England that you spoke Catalan with?
D: No
I: So you have siblings. Age? Gender?
D: 20. Female
I: What's her situation? Did she have the same kind of situation growing up?
D: No, she never moved to England. I moved here when I was 12 and only went back for A levels.
I: So you didn't stay in England after you moved to England? You moved back to Spain? And you graduated in Spain? So you actually did your A levels in Spain. You moved back age, what, 15?
D: No, about 17 to 19. 2 years.
I: Alright. And then you came back to Manchester to study?
D: Yes
I: You did get raised partially Italian? Your father spoke to you in Italian as a child, occasionally?
D: Yes and I would go to Italy a lot. A lot of my summers were spent there. I was introduced to Italian at a very young age. I didn't necessarily speak it when I was young, but I heard it.
I: Were you ever schooled in Italian? Or did it only come with usage?
D: I wouldn't say I learned it formally.
I: So you never learnt it in school? It was always just around you and you picked it up?
D: Yes. But my writing only improved at university.
I: Then you did your year abroad (in Italy). Were you surrounded by Italian people or were you surrounded by Spanish?
D: I was pretty much speaking Spanish because the people I lived with spoke Spanish and then I learnt from my mistake and for the second half of the year I changed (inaudible).
I: So going back to your current language situation, could you do a ranking of the languages you feel most comfortable or proficient in?
D: Well I feel comfortable with each language in different scenarios, with different people. Like at a colloquial level Catalan feels most natural to me because it is my mother tongue. But at an academic level, English is more comfortable.
I: And Italian is there but it doesn't play such an integral part?
D: Sometimes I find that I can express myself better academically in Italian than in Spanish and Catalan.
I: You spoke both Spanish and Catalan? Not just Catalan? What's the deal with Spanish and Catalan? Spanish is only taught?
D: Yeah you get it taught at school. Mainly TV and. I did have some friends at school who spoke Spanish but at home it was always Catalan.
I: So it was just through the media. Is it just Catalan that has more of an emotional-
D: They both are, but Catalan has more. Usually people know both but are more comfortable with one. I have spoken Catalan a lot more and so am more emotionally attached to it.
I: Ok. So in your current situation in Manchester here studying. When are the times. Do you still even speak Spanish at all? Or is it just Catalan. What's the situation there?
D: I do speak quite a lot of Spanish.
I: In what situation now would you speak Catalan?
D: My mum and sister. Although I've started speaking to my sister in English a bit now. Dad English.
I: So English is the academic language to you. And your father. And your English friends?
D: Yes. And family.
I: And then Spanish? Do you. Friends?
D: Back in Spain
I: And Italian?
D: Friends that I've got here in England who are Italian. Friends back in Italy.
I: You study Italian. So Italian of course is something you do speak in the academic environment as well.
C: Yes
I: The language you feel most comfortable and secure in, would you say that's Catalan? Or can you not say that?
D: I.. No (i.e. not possible to choose one specific language). Sometimes I'll be better in expressing myself in English.
I: That's fine. Do you feel a cultural obligation? Do you feel some sort of pressure from, for example your parents, or your own sense of national identity, to use one language more than you are actually doing? Or do you feel quite free in your language choice?
D: I did when I was young, when my dad was trying to get me to speak English
I: Your dad was kind of forcing you to-
D: -Yes. And when I had to speak to my sister in English. Because she came very late to England and her English was really bad
I: So you had to do it to help her
D: Yes
I: Do you feel that being raised bilingually gave you an edge when you were learning a foreign language later in life?
D: Yes I think that there was some sort of advantage since languages like Spanish and Italian are quite similar in terms of grammar. So I think yeah it did help.
I: Do you consume any media? Like do you check out Spanish sites or a Catalan forum? What language setting is your Facebook?
D: Italian
I: So your Facebook is Italian?
D: Yes but I change it around
I: So media..
D: For example I don't relate to English humour that well. Comedy-wise. I don't always find English humour funny so I watch Catalan programs. It depends. When I'm in Spain I'll obviously read the Spanish newspaper and watch TV. I guess I kind of adapt to where I am.
I: Do you feel that Catalan plays a more significant role in your childhood than it does now?
D: Yes, because I lived there. But then again I still go back there a lot. I mean I speak in Catalan every day. I've spoken more Catalan this morning than English because I've been in my room. But sometimes I can go for weeks without speaking a word of Catalan.
I: Is there a difference in the language your mother speaks to you and the language you reply in? Or is it always Catalan?
D: Oh it's always Catalan
I: Do you add or put in Spanish words? Is there a kind of mix?
D: That happens anyway, you get some words introduced
I: And do you ever use English words when you speak Catalan or Spanish?
D: Yes sometimes I'll anglicise Spanish words in my essay. I do get confused. I think that a word is from that language when I'm actually borrowing it from another language.
I: What about your father? Is English the language you speak in or Italian?
D: Occasionally. But if I'm with my mum and my dad we usually speak Spanish. Because my dad doesn't speak Catalan.
I: When you read a book, just for fun, would you read in English?
D: Yes because I was introduced to reading in English, with my dad. He made me read.

S: Interviewer 2  K: Ms. K
S: Which language do you speak with your mother?
K: English and Italian
S: Which language do you use more with her?
K: Italian
S: So you switch between both languages when talking to her?
K: Yeah, most of the time, usually when I don't know a word in Italian then I'll say the English word. Sometimes she will speak to me in Italian and I might reply in English as well.
S: And with your dad you speak…
K: English
S: And with your brother?
K: English
S: Were you ever taught Italian or is it just something you picked up naturally because you were raised bilingually?
K: Yeah, I kind of picked it up growing up and then went to classes when I was in my teens, occasionally going to after-school classes…my brother would go weekly, so he had a bit more of an intense Italian language education I guess. I started taking it more seriously when I did my GCSEs because I did Italian GCSE and A Level.
S: What about Spanish? How early on did you learn it?
K: It was always a language I was exposed to because my mum had lots of Chilean friends so I would hear it a lot growing up and as it's fairly similar to Italian I could understand it and was always curious about the language so…yeah but I only really started learning it when I was in secondary school when I did it in my GCSEs as well
S: So you did both Italian and Spanish GCSEs.
S: Proficiency wise, if you had to rank the languages you are most comfortable in and which you are best at academically…
K: I guess English…it is my first language, really, so it’s the one I’m most confident in and most fluent in writing and then comes Italian and then Spanish
S: Do you feel a cultural obligation to use Italian with your family, out of respect to your mother? Do you feel some sort of pressure to incorporate Italian in your life like that?
K: Not necessarily, I was never forced to go to Italian classes as a teen for example. I’m more proud of it than anything else, it’s not something I have to actively remind myself of, it does come natural somewhat.
S: Do you consume any media in the other language?
K: I listen to Italian and Spanish music and also film as well, I really like Italian films.
Websites not so much, books I guess as well.
S: Do you think Italian played a bigger role in your life as a kid than it does now?
K: I associate it a lot with going on holiday as I used to go to Italy quite a lot, 2-3 times a year, so seeing family there I was obviously completely immersed in the language and culture.
K: In terms of language I am English but in terms of identity, that’s a whole other question, I don’t identify as English.
S: Do you feel that when you meet someone and they speak Italian, that you have a different kind of connection with them as opposed to just English?
K: Yeah I have an instant curiosity, if I’m in a group of English speakers and then someone starts speaking Italian of course…there’s an instant link.
S: What about code-switching? Besides with your mother, does it happen with your other bilingual friends as well and when does it usually occur?
K: I guess mostly with certain expressions that I don’t know and that can’t necessarily be translated, like idioms but mostly emotional expressions, like “mamma mia!” for example.
S: At university, what language do you speak with your friends there?
K: We tend to speak English, even if they also speak Italian or Spanish…we’ll speak in English.
S: And when you meet then outside university?
K: Yeah it mostly stays that way, but it also depends on the individual friend…if they’re first language is Italian I will speak Italian to them, but with the bilingual friends that I have, I will always speak English.
S: Do you think being raised bilingually helped you learn a 3rd language in university and college?
K: Yeah definitely, the Latin language stems between Italian and Spanish are the same so that definitely helped picking them up easier and more naturally. Also I guess in terms of just being more curious to learn other languages an intrigued in other cultures as well, that definitely comes from being bilingual, I’d say.
Sample questionnaire with updated questions:

1. Which language do you use to speak with your mother?
2. Which language does your mother use to speak with you?
3. Which language do you use to speak with your father?
4. Which language does your father use to speak with you?
5. Which language do you use to speak with your older siblings?
6. Which language do you use to speak with your younger siblings?
7. Where you ever taught the other language or did you just pick it up through conversation with family as a child?
8. Are you as proficient in the other language as English? Can you write it or only speak it?
9. Do you feel more comfortable using English or the other language? Do you feel a cultural obligation to use the other language even though you’d prefer not to?
10. Do you consume any media in the other language? If so, do you prefer consuming media in English or in the other language?
11. Do you feel like the other language played a bigger role in your life as a child than it does now as an adult?
12. Does the other language have certain emotional connotations and memories linked with it, different compared to English?
13. Do you identify more as a speaker of English or as a speaker of the other language?
14. Do you feel closer to someone who speaks the other language as compared to someone who doesn’t?
15. Were your parents born in the UK and if not, at what age did they immigrate? (need to determine cultural generation of the students and their parents)
16. Does domain (school, home, media) effect which language you choose to use?
17. Do you have the impression that you’re bilingualism helped with studying a third language?