

Language context and decision-making: Challenges and Advances

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As we are writing this paper the President of the United States is meeting with the President of North Korea in Singapore and the heads of the G7 nations are meeting in Canada. Members of these meetings speak a range of languages – English, Japanese, Italian, Korean, Spanish and French. As they make important decisions about trade and nuclear weapons they also choose what language to use when they negotiate these topics. The Special Issue that we introduce evaluates the relationship between these two types of choices through both empirical and theoretical perspectives.

People's decisions are affected by several factors supposedly irrelevant to the specific details of the decision making problem (e.g. Thaler, 2014). The time of day, the difficulty of an experience, the familiarity of the situation, and many other are factors than can affect our revealed preferences on everyday basis. We have recently discovered that the foreignness of the language people use affects their choices – people make systematically different decisions in a foreign language compared to their native tongue (Keysar, Hayakawa & An, 2012; Costa, Foucart, Arnon, Aparici, & Apesteguia, 2014; see for reviews, Costa, Vives, & Corey, 2017; Hayakawa, Costa, Foucart, & Keysar, 2016).

The discovery of the “foreign language effect” has produced different reactions from scholars in different fields. For instance, for researchers working on language processing and especially for those interested in bilingualism, the results have sparked curiosity and have been seen as a way to broaden the scope of their own research by linking psycholinguistic research, reasoning, and decision making. In other words, it has become another way to study the relationship between thought and language.

For researchers interested in decision making the phenomenon might seem as just another example of “supposedly” irrelevant factors affecting people's decisions. We propose that this is not just another variable, but one that is crucial for understanding how people evaluate the options afforded by the decision making situation. We think so because language

context is unavoidable when making a decision. That is, we are always embedded in a linguistic context, and for many of us such context is often a foreign language one. It is in fact estimated that over 100 million citizens of the European Union, or about 25% of its population use at least one foreign language regularly (Eurobarometer, 2012). Many of us routinely buy products, order food, and even evaluate the merit of scientific projects in a language other than our native tongue. But the use of a foreign language as a communication tool goes well beyond science, tourism, or international trade. Certain languages have received the status of a lingua franca reaching global dimensions of usage in international meetings where far reaching decisions are commonly taken, such as at the meetings of the delegates of the North Atlantic Treaty Organisation (NATO). Hence, if we want to understand people's judgments, revealed preferences, feelings, and choices, we must understand how language context shapes them.

This enterprise is not an easy one because of at least two major challenges related to the features of foreign languages that may modulate their role in the interplay with decision making. The first one has to do with the fact that native and foreign language processing differs in many ways. Foreign language processing is usually slower and less fluent, induces higher cognitive load and elicits a lower emotional reactivity. To make things more difficult, all these factors have been shown to affect people's choices and revealed preferences in decision-making contexts, and hence they might also contribute to the foreign language effect. Disentangling which of these factors are behind this phenomenon is one of the major challenges of this line of research. The second challenge relates to the definition of a foreign language and to the large variability of individual experiences with such a language. This variability is found in how and when a foreign language has been acquired (in a social vs. an academic context; early or late in life), its current use (immersed or not), the proficiency attained, and so on. All of these factors can modulate the variables that are likely to be behind the foreign language effect (e.g., cognitive load, cognitive fluency, emotional reactivity, etc.).

Hence, we have to agree on a definition for “foreign language” in order to have more comparable studies. However, not only do these theoretical linguistic considerations complicate drawing definite conclusions about the impact of the language context in decisional processes, but also the theoretical postulates of current models of decision making represent a challenge to understand the foreign language effect. These models come in different flavors and, although they may share some core features, they widely vary regarding the specific processes claimed to be behind people’s decision behavior. As such, the interpretations given to the foreign language effect can vary depending on the theoretical framework one adopts, making it difficult to develop a comprehensive mechanistic explanation.

Given these intrinsic difficulties, perhaps the most pragmatic way to advance in this field is to have a better understanding of the decision making situations in which language context affects choice. This is important because it is not obvious which are going to be those situations and whether they may result in better or worse outcomes. Still, the current experimental landscape presents a wide variety of language effects in the domain of risk, moral judgment, cheating, mental accounting, reasoning, and mental imagery, among others. But there is still a lot to do, and the articles presented in this Special Issue help to advance on this exploration by assessing the effects of foreign language on moral judgment, irrational beliefs, risk assessment, causality inference, cognitive control, and expectations about the future. Importantly, these studies have speakers from many different languages, including native speakers of Italian, Spanish, English, Polish, Cantonese and Basque, as well as foreign speakers of English, Spanish, German and French. This allows to generalize beyond a specific language pair, and to widen the scope of the test scenarios to cases where English is not the foreign language.

Despite advancing rapidly towards completing the experimental picture in which foreign language effects are present, there are still several contexts that remain largely unexplored.

Most of the studies reported up to date have been concerned with contexts in which people have to make individual choices. However, many everyday life situations involve people interacting with each other to reach joint decisions, such as in the case of the meetings of the NATO delegates mentioned before. We know very little about how language context affects these situations, and this is certainly a domain in which we have to advance given the potentially important social, economic and political consequences that the results may have. Sunstein's article in this Special Issue touches briefly on this matter: "*When public officials in English-speaking nations are trying to resolve a difficult problem, should they try to conduct their meetings in French?*". Sunstein affirms that "*of course that would be crazy*", and we agree. But we agree even more with his statement that "*many people do indeed negotiate and try to resolve hard issues in a language other than their own, as when French, German, Spanish, and Dutch politicians use English in the European Union*". "*Perhaps their use of that language is helpful.*" Regardless of whether using a foreign language in a negotiation context is useful or not, it is important to understand how such use may affect the way people weigh the different options afforded by the negotiation. As we do not make decisions in a vacuum but rather in contextualized situations, the language we use in that context is playing an important role. Better start assessing whether and how it actually affects our negotiation strategies and outcomes.

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