

Helping Strangers

How Language Acquisition Makes Individuals More Willing to Help Outgroup Members

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We are currently in one of the most acute refugee crises in history. The United Nations Refugee Agency estimates that there are about 60 million refugees and displaced persons around the world (2016). The response to this refugee crisis has been mixed. A recent survey about the Syrian refugee crisis, specifically, found that only 51% of Americans would support letting more refugees into the United States (Galston, 2015). Galston finds that even less would support the United States “doing more” to help refugees in response to this crisis. That support is not constant across all groups however. Minorities, younger individuals, and well-educated individuals are more likely to want to help refugees. This variance in support is interesting, but not new. There have always been groups of people that represent an outgroup that need help. Refugees just happen to be the most current salient outgroup. What explains why some people are willing to help outgroup members and some are not? There are several different answers. Galston provides some explanations, including education levels and age (2015). Other possible explanations seem likely as well, such as a person’s level of empathy, openness to new experiences, and risk attitudes. Perceptions of outgroups have been well-studied by social scientists, and this paper does not seek to revisit these explanations. Instead, it proposes to look at willingness to help outgroups from a more novel perspective. This perspective involves looking through the lens of language, which has received less attention in the literature on outgroups. Could learning a foreign language make a person more willing to help foreigners in general? Is there something about learning a language that makes a person more open-minded and empathetic generally?

This is a significant question, especially from the perspective of policy. Many people would consider it normatively good that a person be more willing to help their fellow human beings. If so, it is in society's best interests to find ways to promote this trait in its members. If part of the answer was as simple as encouraging foreign language learning, that would be extraordinarily useful information.

This paper seeks to test this proposed link between speaking multiple languages and willingness to help foreigners. It starts by reviewing the theoretical reasons existent in the literature, proposes a formal test using regression analysis on survey data, and discusses the findings of that analysis.

Reviewing the Literature

Why would learning an additional language make a person more willing to help foreigners? To answer that question, this paper first considers the state of the literature on language acquisition as a whole (language acquisition simply indicates that a person has acquired or learned at least one other language). There are a few broad schools of thought when it comes to assessing the impacts of learning and speaking another language. There are cultural explanations proposed by sociolinguists, psychological and cognitive explanations forwarded by social psychologists, and neurological explanations advanced by neurolinguists. Each school of thought brings the expertise and perspectives of each discipline to create a rich literature on why language acquisition affects both cognition and perceptions of others. This paper examines each

broad school of thought in turn and considers their explanatory strength in answering the research question.

Language as Culture

Many scholars believe that language affects behaviour and perception because language is inseparable from culture. This viewpoint is summed up elegantly by Mead (2009):

“A person learns a new language and, as we say, gets a new soul. He puts himself into the attitude of those that make use of that language. He cannot read its literature, cannot converse with those that belong to that community, without taking on its peculiar attitudes.”

A new language, in other words, gives a person access to an entirely new culture and understanding of norms within that culture. It is impossible to avoid this because each language comes embedded in its own particular cultural context, making language and culture almost inseparable (Chen, Benet-Martinez, & Ng, 2014). Chen et al. call this a “culturally congruent cognitive mindset.” Thus, when individuals acquire different languages, they also acquire knowledge about the associated social and psychological nuances embedded in the cultural context of these languages. Speaking that language primes the associated cultural norms, whether that be conceptions of self, values, or emotional expression. Another way to state this is that learning another language facilitates some level of acculturation with the culture that that language represents. Acculturation is the process of cultural and psychological change that results following exposure to a new culture (Sam & Berry, 2010). Acculturation is one of

several terms that are often used nearly interchangeably in the literature. Intercultural tolerance and intercultural competence are other terms that capture largely the same dynamic. Intercultural tolerance is the closeness one feels with another culture and level of toleration for that culture (Gojkov, 2013).

This connection between language, culture, and acculturation is important because it helps answer the question of why learning a language might make one more willing to help the outgroup. It is because the extent of acculturation is inversely related to ethnocentrism (Seelye & Brewer, 1970). In summation of this section then, learning a language facilitates acculturation, and acculturation in turn leads to a lower level of ethnocentrism. The discussion now turns to ethnocentrism itself, to better understand its impact.

The Psychology of Groups: Ethnocentrism, Social Identity Theory, and Intergroup Contact

Ethnocentrism

In the previous section, a connection between ethnocentrism and acculturation was suggested, with language learning driving acculturation. What is ethnocentrism though and how does it relate to being more willing to help the outgroup? The term was coined by William Sumner in his seminal work, *Folkways*. He called it the tendency to see one's own group as superior (Sumner, 1906). This definition has been refined by later scholars and fitted into the broader literature of group psychology. Kinder and

Kam's groundbreaking work, *Us against Them*, provides a refinement of the term. They call ethnocentrism the tendency to divide the world into groups, specifically one's own ingroup versus all other outgroups (2009). Like the title of their book, it is basically dividing the world into "us versus them".

Importantly, they note that ethnocentrism varies by degrees. People are not ethnocentric or not; they are more or less ethnocentric. There may also be an inclination to confuse ethnocentrism with simple prejudice. It goes beyond prejudice, because ethnocentrism does not involve one group to which an individual feels hostile, but rather a "relatively consistent frame of mind concerning aliens generally." (Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950). It is a perceptual lens through which people understand their world and social surroundings, with some people using this lens more frequently (Levinson, 1949).

As noted previously, acculturation leads to lower levels of ethnocentrism. Seelye and Brewer explain the logic behind this connection: acculturation to a social group apart from one's original ingroup involves recognition of new value systems unfamiliar or contradictory to those of the original socialization group (1970). Learning these new unfamiliar norms of behaviour helps an individual realize that his or her original socialization group's norms and behaviour system are not the *only* correct way, but rather one of many different systems. It is a discovery that helps move individuals lower on the ethnocentrism scale, towards cosmopolitanism. Seelye and Brewer test this using a series of interviews of Americans living in Guatemala (1970). They measure degree of acculturation, and find that high acculturation is correlated with a reduction of

commitment to the original ingroup. Holding ethnocentric views is by definition considering one's own ingroup to be superior and thus holding a strong commitment to that ingroup. Reducing commitment to that ingroup by acculturation then is a plausible way to reduce ethnocentrism. Some evidence of this is provided by Gagnon and Bourhis (1996). They found that individuals who identified strongly with their ingroup correspondingly discriminated more strongly against the outgroup, whereas individuals who identified weakly with the ingroup did not.

Social Identity Theory

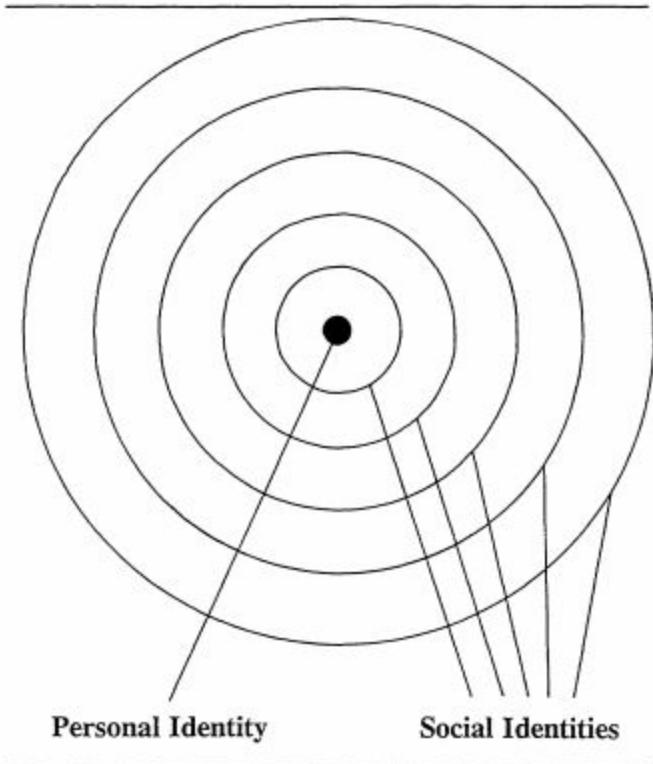
Reducing commitment to the ingroup is not the only process of reducing ethnocentrism, however. Social identity theory suggests that expanding one's ingroup would also reduce negative affect toward outgroups. Social identity theory is the theory of how we locate ourselves within the society in which we live and the ways in which we perceive others as locating us (Bradley, 1996). It is built upon the general assumption that human beings categorize themselves and others into social categories (Turner, 1985). These categories become groups wherein individuals find meaning and orientation.

The most important aspect of social identity theory for the purposes of this paper, is to understand the fallout that triggering a social identity has. When a particular social identity is made salient, individuals tend to think of themselves as having characteristics that are representative of that group (Brewer, 1996), and there are important benefits for the ingroup. Marques, Yzerbyt, and Levens find that people tend to favour ingroup

members, reward them more frequently, and evaluate them more positively than they do outgroup members (1988). This favouritism occurs even in the absence of any knowledge about the individual ingroup member's personal characteristics or views (Brewer 1996).

In the case of language acquisition, the language itself can become a cue that triggers a social identity. This is because language is an important social marker and source of identity. People tend to hold very potent attitudes about languages they speak and the languages others speak (Edwards, 1999). Lippi-Green argues that much of linguistic variation is structured around social identity. (1994) Language can be a means for exclusion; when people reject a language "they also reject the identity of the person speaking: his or her race, ethnic heritage, national origin, regional affiliation, or economic class." (p. 165). In other words, speaking the same language as another individual places them in the ingroup with its accompanying benefits, but failing to do so should also trigger the penalties associated with outgroups.

Learning another language not only gives speakers of the acquired language the benefits of ingroup rewards, but it also expands the ingroup of the person learning that language. It broadens the ingroup and diminishes the outgroup with each language learned, because each language learned means another group of language speakers with which one can find identity. The graph below illustrates this concept. It was created by Marilyn Brewer (1996). Each concentric circle represents a social identity. As one gains access to more social identities (like by learning more languages which leads to identity with speakers of those languages), one's ingroup becomes larger and the



outgroup smaller. A smaller outgroup leads to smaller effects against the outgroup, or a lower level of ethnocentrism against outgroups in general.

Intergroup Contact

A final psychological explanation found in the literature is intergroup contact. This refers to the level of contact a person has with people that represent the outgroup. If the reader is not convinced that language acquisition leads to acculturation, there is still an argument that learning a language at least increases familiarity and contact with the culture and members of that language group. In her classic work, *Hearing the Other Side*, Diana Mutz (2006) argues that “hundreds of studies on intergroup contact...unambiguously demonstrate that contact reduces prejudice” (p.64). In the case of language learning, familiarity with the language also engenders at least some level of familiarity with the culture. As one gains familiarity and contact with other cultures,

intergroup bias is diminished. There will thus be smaller penalties for the outgroup, leading a person who learns additional languages to score lower on ethnocentrism because the assumption that outgroups are much worse than the ingroup has been damaged by intergroup contact.

Language and Cognition

Many linguists believe that language, apart from simply being a part of culture or social identity, can even affect cognition. For example, Shatz, Diesendruck, Martinez-Beck, and Akar (2003) tested comprehension of false belief among preschoolers speaking different languages. False belief is the recognition that others can have beliefs about the world diverging from one's own (Woodruff & Premack, 1979). Languages vary in their lexical explicitness to express false belief, and so some children were better able to mentally understand false belief based upon the language they spoke. This illustrates that even something as innocuous as differing language structure can affect cognitive processes like false belief comprehension (Chen, 2015).

Further evidence is provided by Chen, Benet-Martinez, and Ng (2014). They find that people adopt a cognitive style based upon what language they are speaking. They conducted an experiment using Chinese-English bilinguals to test levels of dialectical thinking based upon whether the interviewer conducted the interview in English or Chinese. Chen et al. define dialectical thinking in their study as the level of ease in interfacing between contradictory viewpoints and facts (2014). When responding in Chinese, subjects correspondingly showed much greater levels of cognitive dialecticism, showing that knowing additional languages can have a very real impact

upon a person's cognitive style. They theorize that the Chinese language is much more dialectically-oriented than English, which leads the person who learns or speaks Chinese to show greater levels of dialectical thinking when using that language.

Having discussed how learning a language might alter cognition, it is still not apparent why it would alter cognition in a direction that specifically benefits the outgroup. To understand that, it is necessary to discuss cognitive empathy. Cognitive empathy is the capacity to understand another's perspective or mental state (Rogers, Dziobek, Hassenstab, Wolf & Convit, 2007). Levels of cognitive empathy vary by individuals, but there is also evidence that people are able to increase their levels of cognitive empathy (for example, see Georgi, Petermann & Schipper, 2014 and Greenberg, Rentfrow, Baron-Cohen & Simon, 2015). Having a high level of cognitive empathy means that an individual is more likely to be empathetic of, and understanding towards, their fellow human beings. There are several environmental factors that can help increase a person's level of cognitive empathy, and one them appears to be language learning. Dewaele and Wei tested the relationship between cognitive empathy and knowing multiple languages and found a statistically significant correlation (2012). A correlation does not provide conclusive evidence of a causal link, of course, and it is conceivable that higher cognitive empathy could lead to interest in learning other languages. The relationship does exist, however, and it seems more likely that the causal arrow points the other way. Consider the logic behind learning a language that Dewaele and Wei present (2012). They posit that to speak another language authentically is to take on a new identity. It is a chance to step into a new and unfamiliar

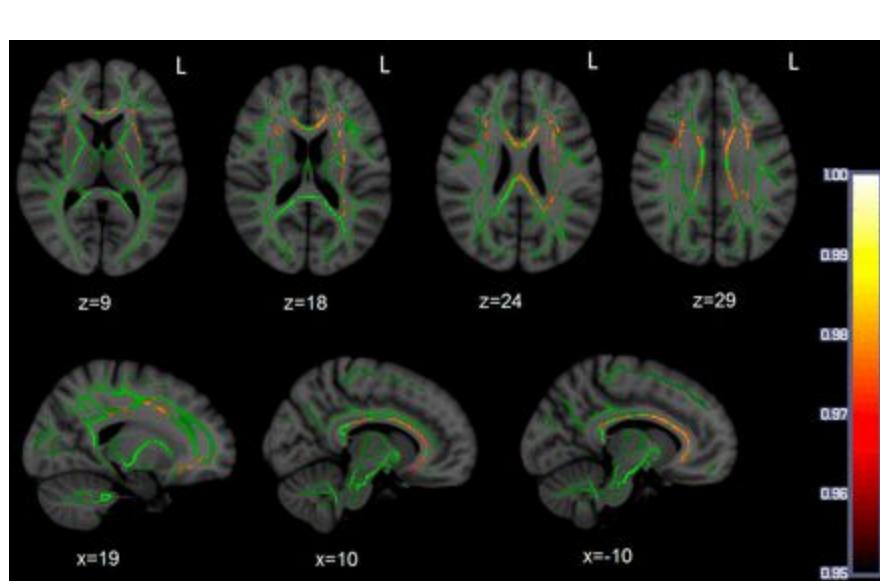
pair of shoes. Learning the language grants access to the culture in which the language is embedded, and facilitates acculturation, as examined previously. As Chen et al. point out, the person learning the language will also adapt the cognitive style that the language promotes (2014). Having assimilated all this automatic baggage that comes with language learning, is it any wonder that a person will be more cognitively empathetic and understanding of others' points of view? The language learner has already had to take a "crash course" in understanding the nuances and emotional complexity of another group's behavioral and moral codes just by learning the additional language.

Language and the Brain

Neurolinguists provide evidence of the impact of language-learning from a different perspective. Most of this literature is devoted to showing the benefits learning additional languages has upon cognitive functioning in the brain, including multi-tasking and multi-competence by subtly altering brain structure (for example see Pliatsikas, Moschopoulou & Saddy, 2015). Other scholars have found that learning another language impacts how the brain codes colour, time, and other everyday stimuli (Chiu, Leaung & Kwan, 2007). The most important finding as it relates to this paper, however, is the discovery that learning a new language induces neuroplasticity in the brain (Bialystok, 2014; Ping, Legault & Litcofsky, 2014). Ping et al. call neuroplasticity the ability of the brain to functionally and physically change or reconfigure its structure in response to environmental stimulus or cognitive demand (2014). Using MRI, they find that individuals who learn an additional language actually experience a change in the

anatomical structure of their brains, including increased gray and white matter in several regions of the brain.

This finding has been replicated by several scholars including Pliatsikas et al. (2015). The chart below is drawn from their research, and shows the areas of the brain



that have increased white matter density as a result of second language acquisition. The green lines show the standard space white mass skeleton, or regions where white mass is found, and the

red lines show areas where higher fractional anisotropy values for bilinguals have been found. Rather than being bogged down in a sea of highly technical, unfamiliar neuroscience research; it is sufficient for the purposes of this paper to say that fractional anisotropy values have been related to greater white mass integrity in other studies, and so are evidence of neuroplasticity as a result of second language acquisition (Pliatsikas, 2015).

Part of the challenge in discussing the neuroscientific impacts of language learning is that different studies show completely different areas of the brain being used with second language acquisition. Pliatsikas and colleagues find increased white

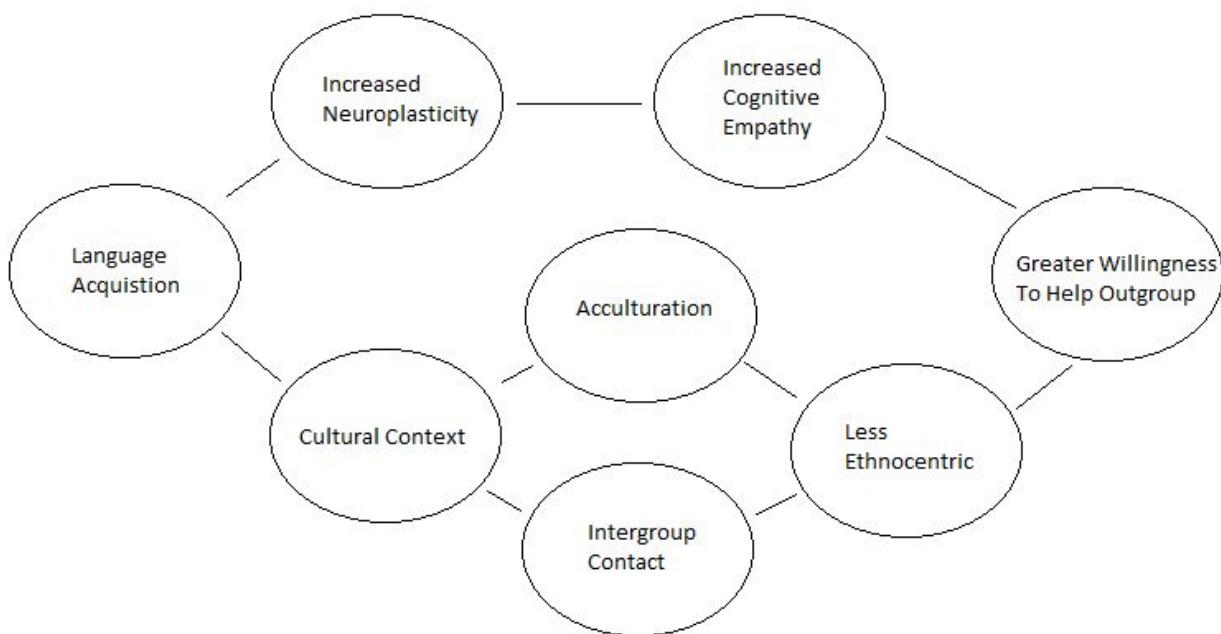
matter in the corpus callosum, bilateral superior longitudinal fasciculi, and inferior fronto-occipital fasciculus (2015). Tu and colleagues, in contrast, find increased brain activity and induced neuroplasticity in the left frontal gyrus and left inferior parietal lobule (2014). Other researchers find results in yet different areas of the brain (Ping, Legault & Litcofsky, 2014). It is clear that there is no broad consensus yet in which area of the brain is specifically impacted by learning a second language, but it is appropriate to claim that many neuroscientific fMRI studies have shown that language learning induces greater neuroplasticity in the brain by altering the amount of grey and white matter density.

These fMRI studies show that language learning impacts the actual physical structure of the brain, but does not explain the mechanism behind such a change. How does this work in everyday life? When thinking about a concept, a person will access relevant information about that concept in memory, as described in spreading activation theory (Collins & Loftus, 1975). To access that memory, it must be connected by a neural pathway or it will be inaccessible. Learning another language allows a person to utilize an additional neural pathway to arrive at the same concept. This is what is happening behind the curtain, as it were, when an individual can see a concept empathetically, or from another's points of view. It just means they can access additional neural pathways. Utilizing these neural pathways strengthens them, increasing density of white matter, and functionally making the brain more flexible in arriving at concepts from different perspectives. Scholars have different ways of labeling

this process. It is sometimes called language learning's ability to alter brain "functional connectivity" (Li, Abutalebi, Zout, Yan, Liu, Feng, Wang, Guo, and Ding, 2015).

The importance of this physiological change of the brain in terms of explaining why language learning might lead to an individual being more willing to help the outgroup relates back to the previous discussion on cognitive empathy. Cognitive empathy allows a person to understand others' points of views and rationales behind behavior. The change in brain structure resulting from language learning also promotes greater levels of cognitive empathy. Eres, Decety, Louis, and Molenberghs find that higher scores of cognitive empathy in individuals are associated with greater gray matter density (2015). Cognitive empathy, in other words, is not just a psychological process, it has its roots in the very structure of the brain. As a person learns a language, they induce neuroplasticity in their brain, leading to a higher capacity to process information that is cognitively empathetic towards others.

There are multiple possible causal mechanisms examined up to this point in the paper to explain why learning a language could lead to a greater willingness to help the outgroup. They are presented in the graphic below. This paper now moves from theory to an empirical test of the relationship between language acquisition and a willingness to help outgroup members.



Hypotheses

H1: Individuals who speak an additional language will be more willing to help the outgroup.

H2: With each additional language learned, an individual will subsequently be more willing to help the outgroup.

Research Design

To test the proposed hypotheses, this paper uses survey data that measures both number of languages spoken and willingness to help the outgroup. The survey was conducted by Eurobarometer (2012). Its strengths are the size and scope of the data.

There are over 26,000 responses across every country in the European Union using a multistage probability sample.

In terms of why this test is worthwhile, the examination of the literature revealed that the impact of language learning is well-understood in each subdiscipline, but there are few papers that try to take a more holistic view. This paper has tried to remedy that by using a wider net to pull through the disparate theories to catch arguments that include psychological, linguistic-cultural, and neurological explanations. Additionally, this paper uses a slightly different dependent variable than previous scholarship. Willingness to help the outgroup has not been looked at specifically as a variable, with most of the previous work using dependent variables earlier on the causal chain than willingness to help (see causal chain graphic).

The test itself is a generalized ordered logistic regression, regressing the dependent variable “Willingness to help” on the individual variables that represent language, and other control variables. The actual model can be summarized thusly:

$$\begin{aligned}
 &= \ln \left[\frac{\Pr(y_i \leq m | \mathbf{x}_i)}{1 - \Pr(y_i \leq m | \mathbf{x}_i)} \right] \quad \text{for } m = 1, \dots, J-1 \\
 &= \tau_m - \mathbf{x}_i \boldsymbol{\beta}_m
 \end{aligned}$$

Variables

The dependent variable is an individual's willingness to help the outgroup. This is a proxy variable represented by a question in the survey: “The EU should help any non-EU country worldwide hit by disasters such as major flooding, earthquakes, etc. by coordinating the sending of experts and equipment to affected areas.” Respondents

were asked to state their opinion along a four-point scale, ranging from totally agree, to totally disagree. Proxies are never ideal, but in this case the proxy taps into the actual dependent variable quite snugly. The question is essentially asking whether the individual thinks that his or her group (the E.U.) should help the outgroup (non-E.U. countries) in a situation where they clearly need help (having been hit by a disaster). The ingroup/outgroup dynamic is very clear here because it is explicitly primed in the question wording itself. Respondents are all E.U. citizens, and asked specifically about whether their organizational group, the E.U., should help those not pertaining to the group, non-E.U. citizens. In essence the question is asking about whether the E.U. should provide aid to foreigners. It is asking whether respondents agree with helping the outgroup.

The primary independent variable is speaking another language. The survey asks respondents to list all the languages they speak well besides their native language. This is operationalized in two ways. Firstly, a dummy variable is created called “Bilingual” which determines whether or not a person speaks at least one other language. Secondly, an interval level variable called “Multilingual” was created, which measures each additional language spoken. The first variable assesses the quality of the relationship; does knowing an additional language really make a difference? The second variable assesses the intensity of the relationship. Does each additional language intensify the impact on being willing to help?

Several control variables are included as well to make sure that the effect captured by language learning is not spurious. The first is education level. The

expectation in this paper is that highly educated individuals will likely be more cosmopolitan in their outlook, and thus more likely to help foreigners. It is coded as a dummy variable: whether or not an individual has attended university.

The second is political knowledge. This is a proxy variable as well, since the survey did not include a true political knowledge battery. There is a question in the survey, however, that asks respondents to self-rate their level of knowledge about E.U. disaster relief efforts and policy on a 1-4 scale. That is taken as a crude measure of political knowledge. It represents political knowledge because it directly relates to the dependent variable, which asks about willingness to help others in the event of a disaster. Those who feel like they know a lot about E.U. disaster policy already are taken at their word and treated as high in political knowledge, *at least about that particular area of politics*. It is a flawed proxy to say the least, but at least represents a means of providing *some* control for political knowledge. It is an important control because highly knowledgeable individuals might respond systematically differently than most other people on this issue, and might have stronger preferences because of their knowledge.

Gender is included as a control because women are often seen as more naturally empathetic than men. Whether that is accurate or not is beyond the scope of this research. It is included merely to try account for that possibility.

Level of urbanization is also included in the model. The expectation is that individuals living in large urban areas are exposed to a more varied range of cultures and opinions, making them more cosmopolitan and accepting of outgroups as per the

contact hypothesis. It is coded as a dummy variable in this paper, between those who self-describe as living in a “large city” representing one value, and all others the other value.

The final control variable is socioeconomic status. The expectation of this paper is that high socioeconomic status individuals will be more willing to help the outgroup than low socioeconomic status individuals, because more money means more opportunity for travel and education. More money means more opportunity for cosmopolitanism in other words. This is operationalized in two ways. Firstly, by using a financial variable called “Poor.” This is a dummy variable that relates to whether or not an individual has had trouble finding enough money to pay their bills. The second is social status. This question asks respondents to place themselves on a 10-point spectrum on where they feel they fall in society, with 10 representing the highest level of society. Together these variables capture differences in socioeconomic status by addressing finances and perceived placement in society (social class).

Results

Table 1.

Generalized ordered logit estimates for Willingness to Help¹. Each category is compared with the base category ("Strongly Disagree")

The E.U. Should Help...	Strongly Agree	Somewhat Agree	Somewhat Disagree
Bilingual	-.16*** (.04)	-.16*** (.04)	-.16*** (.04)
Multilingual	-.01 (.02)	.13*** (.02)	.16*** (.04)
Attended University	-.01 (.03)	-.01 (.03)	-.01 (.03)
Knowledgeable	-0.19*** (.01)	-.19*** (.01)	-.19*** (.01)
Female	-.02 (.02)	-.12** (.04)	-.27** (.09)
Large City	.03 (.02)	.03 (.02)	.03 (.02)
Poor	-.18*** (.04)	-.05 (.07)	.27* (.13)
High Status	-.02*** (.008)	-.02*** (.008)	-.02*** (.008)
Constant	-.61*** (.07)	-3.04*** (.08)	-4.5*** (.11)

* $p < .05$; ** $p < .01$; *** $p < .001$, two-tailed test

Standard Errors in Parentheses

N=22,806

Pseudo $R^2 = 0.0061$

Table 1 shows the regression coefficients for the model. Only three variables are statistically significant across all categories: Bilingual, Knowledgeable, and High Status.

¹ No multicollinearity problem was detected in the regression. Using a variance inflation factor test, the highest score for any variable was 2.9. Generally, a score under 5 is considered to be acceptable evidence of no multicollinearity.

The rest of the variables fail to reject the null hypothesis across each category, and thus cannot be concluded to be statistically different from zero consistently. Interpreting the substantive impact of these logit coefficients is more difficult, and thus a table of profiles is included below (table 2). It is important to note, however, that in Table 1, a negative coefficient indicates a greater Willingness to Help (the dependent variable) because Willingness to Help is coded 1 through 4, with 1 representing most willing. It is immediately clear then that speaking at least one other language is statistically significantly correlated with a greater willingness to help the outgroup, validating the first hypothesis.

Interestingly, though, there is no statistically significant effect for knowing *additional* languages. In other words, knowing one other language is much more important to being willing to help the outgroup than knowing multiple languages. This can partially be explained by some of the theoretical arguments examined earlier. The act of knowing another language exposes one to another culture, helps one think empathetically, and helps foster grey matter development in key areas in the brain that control empathy. Once that is developed, perhaps those structures are already in place to promote cosmopolitan thoughts, and another language only marginally increases one's willingness to help. The structure has already been set up by knowing one other language, and other languages learned subsequently to that experience diminishing returns. There is no evidence supporting hypothesis 2 in this data.

It is worth noting the lack of significance of several of the control variables as well. Galston, discussed in the introduction, found that education was a significant

predictor of being willing to help refugees. That is not the case in this data set. Granted, this data does not look specifically at refugees, *per se*, but both refugees and non-E.U. members in the midst of a natural disaster represent a sort of vulnerable, foreign outgroup. The effect should be the same. The fact that it is not perhaps points to the difference in population samples. Galston is testing Americans, while the sample in this paper is European. If Europeans are more cosmopolitan in their outlook in general than Americans, then obtaining higher education in Europe is likely going to show less effects than it does in America, where college attendance appears to make a person more tolerant of outgroups.

The size of one's city also has no effect upon a person being willing to help the outgroup. A surprising finding, and not what theories like the contact hypothesis would predict. Perhaps the greater contact that Europeans in large cities enjoy with foreign cultures and peoples is also offset by anxiety about immigration to those cities. The answer is not clear, and it is beyond the purpose of this paper to explain this puzzle.

Both gender and economic status find only partial significance across all categories, and so cannot be discussed as having consistent effects. The direction of the coefficients indicate, however, that women are more likely to help outgroups than men, which was expected. The coefficients for economic status reverse depending on the category, and thus show no consistent effect that can easily be interpreted.

Table 2

Profiles for variables showing statistical significance across entire range. Shows the likelihood by percentage of falling into the dependent variable category “Strongly Agree”.

	Average Person	Knowledge of E.U. Program (High)	Knowledge of E.U. Program (Low)	Perceived Social Status (High)	Perceived Social Status (Low)
Speaks a Foreign Language	53	62	47	55	50
Does not Speak a Foreign Language	49	58	43	51	46

Table 2 represents an attempt to reach some substantive conclusions about the impact of speaking a foreign language on a person’s willingness to help outgroups. The “Average Person” column represents the prediction for a person in the sample who has mean scores for all other variables. For this average person, speaking a foreign language makes him or her 4% more likely to be willing to help the outgroup.

The “Knowledge of E.U. Program” relates to the created variable “Knowledgeable” that was used as a proxy for political knowledge. Unsurprisingly, those who are more knowledgeable about the E.U. disaster relief program tend to support the application of that program. Language learning, however, appears to strengthen that support. Again there is a 4% increase among those who speak a foreign language and have a high level of knowledge, versus those who do not speak a foreign language but are still knowledgeable.

“Perceived social status” refers to the self-placement that individuals ascribe to themselves in society on a ten-point scale. Those who felt they were high-status were also more likely to help the outgroup, but again, that effect was strengthened with knowing an additional language by 4%.

Language acquisition has a remarkably stable effect in this particular dataset. It is both statistically and at least somewhat substantively significant, and the effect is the same when including other variables. “Somewhat substantively” is a little ambiguous. Is a 4% change in a person’s willingness to help the outgroup actually meaningful? To some degree, that is up to the interpretation of the reader. This paper argues that it is, and that perhaps a greater effect could be seen if the dependent variable clearly designated another culture. If for instance, the question asked about whether one would be willing to accept Syrian refugees into one’s country, there would probably be a greater language effect seen. The refugee crisis represents a level of salience that disaster relief does not achieve; a salience that would likely trigger people into thinking in terms of groups, competing cultures, and ethnocentrism. In that situation, having the moderating effect of language acquisition with its accompanying cultural context could help multilinguals show a level of empathy that is significantly greater than monolinguals. That is the expectation of this paper, but further testing needs to be undertaken before the accuracy of that claim can be determined.

Limitations

This paper has presented a theoretical argument about why language might make a person more willing to help outgroups, and carried out a quantitative test measuring that relationship. It is clear that learning another language makes a person more willing to help outgroups, the outgroup in the case of this test being non-E.U. countries hit by natural disasters. What this paper fails to answer, however, is which of

the somewhat competing theories of language acquisition is actually at work here. Is it that language is synonymous with culture and therefore makes a person more cultured and cosmopolitan? Is it that learning a language enlarges one's ingroup and thus makes a person appear less ethnocentric? Is it that learning a language changes the physiology of the brain, strengthening areas responsible for cognitive empathy development? This paper does not allow us to get any closer to the answer, it merely shows that learning a language *does* have an effect. It provides evidence for the effect but not necessarily the underlying causal mechanisms.

There is also some question about the use of proxy variables. Even at the best of times, proxies can only give one an understanding of reality that is somewhat artificial. Whether or not willingness to provide disaster relief to non-E.U. countries really represents a willingness to help the outgroup is debatable. Some of the control variables suffer from a similar ailment. That is always the danger when using a secondary data source that was not collected specifically for the purpose of the study. This paper believes that the operationalization of the variables was reasonable and based on sound theory, but there is certainly room for skepticism.

The final limitation is that this paper does not determine causality. It establishes a firm correlation, but nothing further. It is not inconceivable that the effect theorized could be reversed. That is, one could imagine that those who are intrinsically more willing to help strangers, foreigners, and outgroup members (for whatever reason) are also those more willing and interested in learning a foreign language, thus explaining the correlation. That seems unlikely, especially given the solid theoretical footing

established by linguistic research that shows language learning having consistently strong effects on perception, but the possibility of reverse causality cannot be totally discounted, and is not disproved in this paper.

Further Research

There is ample opportunity to further clarify the exact impact that language acquisition might have upon perceptions of outgroups. Firstly, other cross-disciplinary approaches need to be adopted to consider all the theoretical reasons that language might have an impact. Currently, each branch of the social sciences is only explaining some of the effects. Cultural explanations of language learning do not credit psychological explanations. Psychological explanations do not address new findings in neuroscience. A holistic approach would advance our knowledge in this area much further than the current fragmented one.

Secondly, it would be interesting to see whether the nature of the outgroup matters at all. If an individual has a higher level of resentment or anger towards one particular outgroup over another, does that change the effect language acquisition has? This paper treated outgroups as one universal outgroup, but it would be instructive to see how language effects might differ by outgroup, if at all.

Thirdly, it would be interesting to see this study replicated with a different sample population, for instance in the United States. Only about a quarter of Americans speak an additional language (McComb, 2001). In contrast, of the 26,000 Europeans sampled in the internationally representative Eurobarometer data, over two thirds speak at least

one other language. It would be helpful to contrast environments where foreign language learning is common versus where it is uncommon to see whether the effects of language learning remain constant. It seems reasonable to assume that in Europe, where people are constantly exposed to neighbouring cultures, it is perhaps easier to be naturally cosmopolitan, and thus learning a second language shows less effects than it would in a more insulated environment.

Lastly, how much does language matter in context? This paper used subjects who responded to hypothetical natural disasters outside of Europe. Would we see a greater effect if respondents were asked about a specific country, or the plight of refugees, or whether they would personally help, instead of just answering about whether the government should help? These are questions that could be answered using different samples, with different dependent variables.

Conclusion

This paper began with a brief discussion of refugees, positing that perceptions of referees are characteristic of the broader discussion of outgroups, and what makes people more or less willing to help outgroups. Learning additional languages was presented as a possible method of encouraging individuals to feel more willing to help outgroups. Is there a definitive answer to the question of whether speaking another language makes a person more willing to help the outgroup? Having considered the theoretical mechanisms in the literature, and tested the relationship using statistical analysis, this paper can answer that question with some confidence. There is indeed a

statistically significant relationship. A person who learns another language is more willing to help the outgroup than a person who speaks no other language.

This finding has some policy implications as well. If a society deems it a normative good that its members be less ethnocentric, and more willing to help groups different from its own, then it should encourage language learning. This paper makes no specific recommendations, but the answer could be as relatively simple as including foreign language learning in school curricula from an earlier age, or at least devoting more resources to language learning programs. The data from this test suggests that just learning one other language could have a significant payoff in building a more empathetic, cosmopolitan citizenry. To return to the initial discussion of refugees; outgroups, foreigners, and strangers (which the refugees perhaps represent) are more likely to be helped by someone who speaks another language than someone who does not.

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