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The effect of attitude towards Catalonia's independence on response latency when translating ideologically conflicting press headlines\*

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# **Abstract**

The present paper explores the role of political ideology in translation by focusing on the influence that the affective charge of sociopolitical concepts may have on the translation process of 51 Catalan translation students in the specific context of Catalonia's independence crisis. The study tests whether the students' political position in the independence conflict in Catalonia influences the time they use to understand newspaper headlines on the independence crisis and choose a suitable translation. Participants' reaction times are assumed to be influenced by the relevance of expressions whose ideological content matches or not participants' position in the conflict. Results from the study report no significant interaction for the congruency between participants' ideology and the content of source text or translation options. But even if no statistical significance is reported, the tendency observed in the data reveals that the influence of affectively congruent or incongruent content on response time may be different for ST understanding as compared with making a final decision on the translation equivalent. In our study, ideologically congruent stimuli slowed reaction time down during ST comprehension, but speeded it up when making a final decision to select a suitable equivalent.

**Keywords:** ideology; reaction time; emotion; translation; Catalonia's crisis.

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### 1. The relationship between political attitude, emotions and cognition

The link between political attitude and cognition is becoming a topic of rising attention in psychology and neuroscience. From the point of view of neuroscience, the possibility of identifying neurological differences between liberals and conservatives opens a window of opportunity in any activity where politics and ideology may play a part. We live in a world where economic, educational and social decisions are deeply politized. Thus, it should come as no surprise that the prospect of telling someone's political bias by scanning their brains seems a golden opportunity to gain control.

Before the turn of the present century, research on the link between politics and brain functioning concentrated mainly on the impact of personality and social environment on shaping political attitudes. However, new evidence relates previous psychological reports on liberals and conservatives to biological differences in brain structure and functioning, pointing to the crucial role of brain structure and response in developing a political orientation. Liberals' greater ability to cope with conflicting information and be open to new experiences has been correlated to greater conflict-related activity and increased grey matter volume in the anterior cingulate cortex (ACC). Conservatives' greater sensitivity to threat or anxiety in the face of uncertainty is associated with an enlarged amygdala, the brain area where the development and storage of emotional memories takes place (Amodio et al., 2007; Kanai et al., 2011).

As thought-provoking as this evidence is, it should be interpreted with caution. A wealth of criticism has pointed to problems in the converging evidence related to the use of different methods, types of subjects, sample sizes, etc., warning of the perils of interpreting reported correlation results as causation. Work like the one cited here is not informing us that we may soon be able to use brain scans to tell somebody's political party. Rather, these studies show a pattern pointing to a possible link between brain structure and the psychological mechanisms that mediate political attitudes. And interestingly—but possibly not so surprisingly when looking at current politics and neuroscience—emotions play a crucial role among these psychological mechanisms.

Emotions are found to play a part in the functions of both the ACC and the amygdala. Among other things, the ACC is involved in conflict monitoring (Botvinick et al., 2004), evaluation of competing choices and emotion regulation, i.e., the ability to control the arousal or response to an emotional event while keeping higher executive functioning (Kerns et al., 2004). This behavior is congruent with reported evidence on liberals being more likely to respond to informational ambiguity, engaging in flexible thinking and working through alternate possibilities before committing to a choice (Jost & Amodio, 2012).

The amygdala, as part of the limbic system, has been claimed to be central for the formation of emotional memories and learning, so that people with a larger amygdala would tend to process information—at least initially—at an emotional level. This function agrees with con-

servatives being reported to be more sensitive to threatening facial expressions and respond more aggressively to threatening situations. Similarly, when faced with an ambiguous situation, conservatives would tend to process the information initially with a strong emotional response, preferring stability and being less flexible and inclined to change (Jost & Amodio, 2012).

These findings are certainly intuitive and may well be consistent with many people's different models of political behavior. But this kind of "locationist" evidence assuming discrete emotion categories to be specifically localized to discrete brain areas or anatomical networks is not exempt of criticism. An alternative model challenging the role of these brain areas in processes such as emotional memory formation is the "constructionist" approach. This approach assumes that emotion categories result from a conceptualization process by which sensations from the body or external world are made meaningful in a given context using prior experience. We may presuppose political behaviors to relate to the different response and size of specific brain areas or to emerge from a conceptualization process informed by our previous political experiences and knowledge. One way or another both models presume that processing ambiguous situations or conditions that require evaluation from a given ideological stance will cause bodily changes in affect and emotional appraisal—whether assumed to occur simultaneously or not—likely to have effects on cognitive processing.

One of the measures most frequently used in neuroscience to explore the effects of emotional arousal and appraisal on cognitive processing has been response latencies. Existing evidence points to the relevance of both arousal and subjective significance when processing word meaning. In general terms, arousing stimuli are assumed to enhance automated processing whereas subjectively significant stimuli engage higher order processes involved in task execution. However, results on the interaction of these two factors are far from conclusive. In some experiments, longer response latencies were reported for highly significant stimuli, assuming that more attentional resources would be devoted to process potentially meaningful information (Citron, 2012). In contrast, there are also experiments where the longest reaction times were found for highly arousing words of medium subjective significance. The latter results point to the moderating effect of subjective significance on reaction time, with high and low significance exerting a facilitating effect that may reduce reaction time (Imbir et al., 2017).

The impact of political attitudes and values on behavior and cognition has also become a topic of increasing interest in psychology, where we have witnessed the emergence of political psychology as a new discipline (Mols & Hart, 2018). Politics is found to influence human behavior and brain functioning, and emotions are found to impact political choice and action.

For a critical review of the locationist versus the constructionist approach to emotions, see Lindquist et al. (2012).

Crisis-induced stress and political conflicts have been reported to interact with cognitive, emotional and self-processes to influence people's decision-making and psychosocial adjustment (Dubow et al., 2009).

Response latencies have been found sensitive to political circumstance and vote intention, resulting in improvements in the prediction of vote choice (Fletcher, 2000). They have also been used as evidence for the 'hot cognition' hypothesis, which assumes that sociopolitical concepts previously evaluated are affectively charged and that this affective charge is automatically activated faster than conscious appraisal on mere exposure to the concept. Most existing results report on faster reaction times to affectively congruent political concepts and significantly slower response times to affectively incongruent concepts (Lodge & Taber, 2005).

Despite discrepancies in the brain regions and cognitive processes implicated, the type of effect exerted or even the mediating factors involved, results suggest that political attitudes may have an effect on response latencies when processing information highly relevant for us or potentially in conflict with our views. The question arises, then, as to how and to what extent our political ideology can affect cognitive processing when undertaking a translation task. The present paper addresses this question with a study aimed at furthering our knowledge of the effects that translators' political stance may have on the translation process. But before introducing the experimental study, the existing evidence on the impact of ideology in the translation process will be reviewed.

# 2. Ideology and political views in translation studies

Ideology has been a hot button issue in translation studies since the so-called 'cultural turn' in the 1990s (Tymoczko, 2007). However, the interest of translation studies in ideology has been closely related to the relative power of the languages involved in translation acts, with virtually no experimental studies of the effects of translators' political stance on the translation process. Since the dawn of the new century, work on ideology and power has mainly focused on literary translation, discussing topics such as translation as rewriting, gender and translation, or translation and post-colonialism (Baker, 2010; Venuti, 2000).

The interest in ideology has been increasingly related to a general concern for translation as intervention, that is, for determining the extent to which translators and the rest of agents involved in the translation act intervene in the discourse (Munday, 2007). The focus on "interventionism" on the part of translators brings about the claim for greater awareness of the ideological values that may influence their job. Ideologically charged questions, such as the translators' ethics, their relative position in the source or target culture and the effects of their own ideological biases have been placed at the top of the research agenda (e.g., von Flotow, 2000; Tymozcko & Gentzler, 2002; Calzada, 2003; Cunico & Munday, 2007).

Still, the attempts to empirically measure the influence of ideology on the translation process do not match the rising awareness of the relevance of ideological issues in translation. A fair share of the blame should probably be taken by the abstract and elusive character of the concept—something which is, otherwise, the norm with most concepts in social science. Ideology is not only an abstraction that cannot be directly observed; it is also a complex construct representing many ideas whose meaning needs to be agreed upon. Ideology is associated to sets of beliefs, assumptions and values, all concepts equally abstract, vague and difficult to define.

When researching the impact of ideology on translation, the problems are compounded by the intrinsic complexity of the task and the variety of factors and participants involved. Ideologically biased decisions can be taken not only by translators, but also by publishers, commissioners or even government forces—as in the case of translation censorship; besides, the consequences of such decisions can be observed on the strategies adopted by translators, but also on publishing policies, customers' requests, political pressures or the influence of the translation on the target culture. In light of this complexity, the empirical measure of the construct firstly requires a definition identifying the confluence of things it involves and the key ideas—i.e., the observables—that can be measured.

To our knowledge, the only empirical study targeted at measuring the influence of the translator's ideology upon the time they need to find a translation was the experiment carried out by Rojo and Ramos (2014). A working definition of ideology was provided to meet the specific requirements of their experimental design. Thus, the participants' ideology was identified by their position on a two-dimensional spectrum based on the correlation between their political views (towards the economic right or towards the left) and their social attitude (more or less authoritarian vs. more or less libertarian). In very broad terms, participants were thus placed on the most right-wing and conservative part of the spectrum or on the most left-wing and liberal part.

The *E-prime* software package was used to design an English-to-Spanish translation task based on a priming experiment with positive and negative priming conditions. The positive condition consisted in expressions primed by Spanish words potentially consistent with the subject's ideology whereas the negative condition consisted in expressions primed by words potentially contrary to the subject's ideology. For example, the expression *medical abortion* would have to be translated being introduced either by the Spanish word *crimen* (Eng. 'crime') as a term with a positive valence for right-wingers, or by *libertad* (Eng. 'freedom') as a term with a positive valence for left-wingers. The assumption was that conflicting terms will slow participants' reactions to produce an adequate translation, whereas ideologically congruent terms will speed them up. Results corroborated their postulated hypothesis, providing evidence that the type of prime exerted a significant influence on the time participants took to find a suitable translation. Words with a valence contrary to the participants' ideological

viewpoint elicited longer reaction times than words consistent with their beliefs. The effect was found for all participants, independently of their ideological stance.

Interestingly, when comparing the effect that the type of prime had on each group of participants, no significant effect of the intersection between prime and ideology was reported. Their results suggested that the participants' ideology did not exert per se a significant influence on the time that took to find a suitable translation. In other words, the participants' ideological profile did not make them translate any slower or faster. Only when they met a word or expression that challenged their ideological expectations did those expectations became a force exerting an influence on their translations.

As stimulating as these results were, the study presented some sampling limitations which should be addressed in future studies. Firstly, the sample size was rather small. Even if fourteen subjects took part in the study, only data from eleven participants was finally analyzed. Secondly, the sample was somehow politically biased. The range of issues selected to define the participants' political views was too broad—namely abortion, contraception, sex, euthanasia, death penalty, gay marriage and immigration—and none of the participants could be said to hold a radically conventional or right-wing stance for all the different topics. And thirdly, the sample was not very representative of the target population of professional or novice translators. Only a few of the participants were translation students and none of them were professional translators.

The following section introduces a study addressing some of these limitations with an experiment that explores whether being pro or against Catalan independence may influence the time translation students need to understand and find an adequate translation for headline phrases that may be congruent or incongruent with their political ideology.

# 3. The study

# 3.1. Aim and hypotheses

As previously mentioned, the present study aims to explore whether translation students' political position in the independence conflict in Catalonia may have an effect on the translation process in terms of the time used to understand the ST and choose a suitable translation. The Catalonia crisis was chosen because the conflict has thrown Spain into its biggest political crisis for 40 years. After a failed bid to break away in 2017, the region had its autonomy suspended for almost seven months by Madrid. Later on, in October 2019, Spain's Supreme Court sentenced nine Catalan politicians and activists to jail for that independence bid, but the president and several members of his deposed cabinet fled to Belgium to avoid the charges of rebellion, sedition and misuse of public funds. The study was carried out seven months later, in May 2019, with a region deeply divided between independence supporters and detractors.

We assume that participants' reaction times will be influenced by the relevance of expressions whose ideological content matches or not participants' position in the independence crisis. Based on previous translation results, ideological congruency is expected to speed reaction times up whereas incongruency is assumed to slow them down.

The following two hypotheses are therefore posed:

- 1. A difference is expected in participants' reaction times when reading-to-translate headlines with different ideological content. Reaction times will be shorter when participants read headlines whose content is congruent with their political stance and longer when reading ideologically incongruent headlines.
- 2. A difference is expected in participants' reaction times when choosing between a translation equivalent ideologically in favour of independence and another against it. Reaction times will be shorter when participants choose a translation option whose content is congruent with their political stance and longer when choosing an ideologically incongruent option.

### 3.2. Participants

A convenience sample of 51 third-year translation students from the Translation and Interpreting Degree at the Universitat Autònoma de Barcelona was used for this study. A Catalan university was selected to ensure the impact of the stimuli over the participants' political stance. They all volunteered to participate in the study and received no credit for their participation. There were 6 males and 45 females, with an age range between 19 and 28 years old and a mean age of 21.13.

# 3.3. Design and materials

A Likert-type questionnaire with 10 items based on a 5-point agreement scale (1 = strongly disagree, and 5 = strongly agree) was designed to classify participants according to their position in the conflict (i.e., pro or against Catalan independence). One out of the 10 items explicitly asked about their level of agreement or disagreement with Catalonia's independence. The rest of items posed questions related to a more conservative or liberal political view, but were not specifically on the conflict (see Appendix 1).

The State-Trait Anxiety Inventory (STAI) was also used to measure participants' level of anxiety and control for its potential effect on reaction times (Aylward et al., 2017). The test measures two types of anxiety: trait anxiety—i.e., an individual's predisposition to perceive stimuli as threatening and thus produce an anxiety response—and state anxiety—i.e., the existence of threat-related stimuli in the environment around the assessment.

The free, open-source programme OpenSesame was used to build the experiment and register participants' reaction times. Being specifically designed to create experiments for the

social sciences, it features an intuitive graphical user interface and supports Python scripting for complex tasks. 30 newspaper headlines were selected from the internet, 20 experimental stimuli on the Catalan conflict and 10 distractors on different topics. Out of the 20 experimental stimuli, 10 were in favor of Catalonia's independence and 10 were against it.

A target expression was selected in each headline as the object of translation. For each expression, 3 different translation options were designed: a) one providing a literal translation of the source expression, b) one with ideological content in favour of independence and c) one against it. The literal translation provided a 'default' option that required inhibition in case one of the other two options were favoured.

To avoid making participants choose between three options that were very similar, a crossed design was used, with political ideology, i.e., pro (+I) or against (-I) independence as the independent variables, and reaction time (RT) as the dependent variable. Two versions of the questionnaire were therefore designed. For the translation of expressions within headlines, each version included only two options: the literal option and either the pro or against independence translation equivalent. Headlines and translations appeared in randomised order in the different versions.

**FIGURE 1** Experimental design

	VERSION A	VERSION B
TRANSLATION 1	+	<b>-</b> I
TRANSLATION 2	-1	+
TRANSLATION 3	+	<b>-</b> I
TRANSLATION 4	-1	+
TRANSLATION 5	+	-l
TRANSLATION 6	-1	+
TRANSLATION 7	+1	-1
TRANSLATION 8	-1	+1
TRANSLATION 9	+1	<b>-</b> I
TRANSLATION 10	-1	+1

### 3.4. Procedure

The study was conducted according to the code of human research ethics of the University of Murcia. All participants signed initially an informed consent form in which they agreed to participate in the experiment and were informed of the anonymity of their data and respons-

es, as well of the possibility to withdraw at any time. They were also given an information sheet where detailed information and instructions were provided on the different phases of the experimental design. No specific information was given on the aim of the experiment, although they were told that it was part of a research project on emotions and translation.

After signing the consent form and reading the information sheet, participants were requested to complete the Likert-type questionnaire on political ideology and the STAI-Trait and State Inventory.

Participants were then explained how to download OpenSesame on their computers and open the version of the experiment assigned. They were briefly instructed on how to conduct the experiment and informed of the existence of an initial trial phase to get used to the test dynamics. Once they had all completed the experiment, they were instructed to access the data file and send it to an email address created for the experiment. They were finally requested to complete the STAI-State Inventory again to detect possible changes in their anxiety levels from the beginning to the end of the experiment and answer two open questions oriented to obtain any qualitative information of relevance for the experiment.

### 3.5. Results

The preparation of data for the analysis of results firstly involved classifying participants into three different categories according to their scores in the Likert-type question on their level of agreement with Catalonia's independence (where 4 and 5 indicated much or total agreement, 1 and 2 total or much disagreement and 3 neither agreement nor disagreement). As a result, 16 participants with 4 and 5-point scores were classified as clearly pro-independence, 15 with 1 and 2-point scores as clearly against independence and 20 with a 3-point score as neutral.

To determine the effect of the ideological stance of participants, headlines and the interaction between both factors in the reaction time (RT, henceforth) response to headlines and translations, two-way ANOVA tests were run in Generalized Lineal Model (GLM) module. Whenever results rendered a statistically significant result (p<0.05), multiple paired comparisons (Bonferroni correction) were calculated.

Table 1 below displays results for participants' RT when reading headlines before providing a translation. As shown, the participants' ideology was the only variable that displayed statistically significant differences. Bonferroni post hoc tests reported that the RT of participants against independence was significantly superior to that of participants in favor of independence (p = 0.001) and those with a neutral position (p = 0.004), with no statistically significant difference found between neutral participants and those in favor (p = 0.998). Effects from the ideology of headlines (p = 0.984) and the interaction between that of participants and headlines (p = 0.709) were not statistically significant.

 TABLE 1

 Descriptive and statistical contrasts for Headlines RT

EFFECT	HEADLINE DT. moon CE		TEST EFFECTS			
EFFECI	ПЕА	<b>HEADLINE RT,</b> mean SE		F(dg. fr.)	<i>p</i> -value	eta²
Subject Ideology				F(2;1011) = 8.04	< 0.001	0.016
Pro	8.71 (0.47)					
Against	11.24 (0.48)					
Neutral	9.21 (0.42)					
Headline Ideology				F(2;1011) = 0.02	0.984	0
Pro	9.66 (0.50)					
Against	9.73 (0.50)					
Neutral	9.77 (0.35)					
Subject*Headline				F(4;1011) = 0.54	0.709	0.002
	Pro	Against	Neutral			
Pro	9.27 (0.89)	8.69 (0.89)	8.17 (0.63)			
Against	10.67 (0.91)	11.26 (0.91)	11.79 (0.65)			
Neutral	9.05 (0.79)	9.23 (0.79)	9.36 (0.56)			

dg. fr.: degrees of freedom. SE: standard error. eta²: partial eta squared (effect size)

Table 2 shows results for the participants' RT when choosing a translation option. Statistically significant results were reported for the ideology of participants (p = 0.039) and translation options (p = 0.001). Bonferroni post hoc tests reported that the RT of participants against independence was significantly inferior to that of neutral participants (p = 0.046), but no difference was found with those participants in favor of independence (p = 0.997). No statistically significant difference was reported either between neutral participants and pro-independence ones (p = 0.271). Regarding the ideology of translation options, the RT for pro-independence options was significantly longer than for literal options (p = 0.003), but no significant difference was found with options against independence (p = 0.998). The difference in RT between literal options and those against independence was not statistically significant either (p = 0.072). No statistically significant effect was found for the interaction between participants' ideology and the translation options (p = 0.271).

### 3.6. Analysis of results

## 3.6.1. Hypothesis 1

Our first hypothesis predicts a difference in participants' reaction times when reading-to-translate headlines that may agree or disagree with their ideology. Reaction times are

**TABLE 2**Descriptive and statistical contrasts for Translation RT

EFFECT	TDAN	TRANSLATION RT, mean SE			TEST EFFECTS			
EFFECT	ITAN				<i>p</i> -value	eta²		
Subject Ideology				F(2;660) = 3.25	0.039	0.01		
Pro	7.49 (0.75)			,				
Against	6.90 (0.69)							
Neutral	9.10 (0.59)							
Translation Ideology				F(2;660) = 7.40	0.001	0.022		
Literal	6.26 (0.29)							
Pro	8.87 (0.72)		-					
Against	8.35 (0.88)							
Subject*Translation				F(4;660) = 1.29	0.271	0.008		
	Literal	Pro	Against					
Pro	6.47 (0.52)	7.84 (1.21)	8.15 (1.81)					
Against	5.98 (0.53)	8.09 (1.36)	6.62 (1.46)					
Neutral	6.34 (0.44)	10.68 (1.19)	10.29 (1.25)					
	CE	1		1/ (( , , , )				

dg. fr.: degrees of freedom. SE: standard error. eta2: partial eta squared (effect size)

assumed to be shorter when participants read headlines whose content is congruent with their political stance and longer when reading ideologically incongruent headlines.

Results in Table 1 above show that the effect of participants' ideology when reading-to-translate the headlines is statistically significant, with participants against independence being slower than those in favour and those being neutral. It seems that participants against Catalonia's independence have greater difficulties when reading-to-translate headlines on a topic that *per se* conflicts with their ideology.

However, the hypothesis is not corroborated since results show no statistically significant interaction of the congruency between participants' ideology and headline content. Interestingly, the tendency observed in the data is the opposite to our expectations, with ideological congruency having an impeding effect rather than a facilitating one. Both pro- and against-independence participants take longer to read headlines congruent with their ideology than incongruent ones (Pro/Pro = 9.27 vs. Pro/Against = 8.69; Against/Against = 11.26 vs. Against/

Pro = 10.67). Considering that it is unlikely that congruency has *per se* an impeding effect, this tendency might be caused by a greater allocation of attentional resources. Congruent stimuli may be more arousing and of higher relevance, initially attracting greater attentional resources and causing a delay in response time.

### 3.6.2. Hypothesis 2

Our second hypothesis predicts a difference in participants' reaction times when choosing between a translation equivalent ideologically in favour of independence and another against it. Reaction times are expected to be shorter when participants choose a translation option whose content is congruent with their political stance and longer when choosing an ideologically incongruent option.

Results in Table 2 show statistically significant effects for both the participants' ideology and that of the translation options. As for the participants' ideology, the effect reported is the opposite to the one found when reading-to-translate. Whereas participants against independence take the longest time to read-to-translate the headlines, they are the fastest to choose a translation. Once again, this supports the claim in the translation studies literature that translation options start to be considered when reading the source text (e.g., Macizo & Bajo, 2006; Whyatt, 2003), so the longer you spend doing so, the less time you would need to decide on the target equivalent.

Regarding the effect of the ideology of translation options, literal options—as expected—need the least time, whereas pro-independence options take significantly longer than literal ones. Discarding literal translations for pro-independence options takes longer than when rejecting them for options against independence. A plausible explanation for this result could be that, in political independence conflicts such as the Catalonian one, taking a stance for autonomy may be harder since it involves opposing central government main-stream politics.

As with hypothesis 1, results show no statistically significant interaction of the congruency between participants' ideology and translation options. Nevertheless, the tendency in the data points towards the facilitating effect of ideological congruency versus the impeding effect of incongruency (Pro/Pro = 7,84 vs. Pro/Against = 8,15; Against/Against = 6,62 vs. Against/ Pro = 8,09). Such facilitating effect of ideological congruency when choosing a translation equivalent can be explained in terms of the 'hot cognition' hypothesis, which assumes faster reaction times to affectively congruent political concepts on the basis of the faster activation of positive affective charge. Still, this is only a tendency and no significant result is reported. Intriguingly, this tendency reverses the one observed when reading-to-translate, suggesting that the effect of ideological congruency/incongruency may vary in different stages of the translation process.

### 4. Final discussion and conclusions

We humans are social creatures. We are biologically equipped to mirror each other's movements and gestures, emotions, political attitudes and even communicative intentions. But such amazing powers of our mirror neural system come at a price. In exchange for these unique human endowments, we must accept our inability to escape the influence of the social and political world surrounding us. Constant exposure to situations of conflict and crisis has unavoidable emotional and cognitive consequences. We now know that crisis-induced stress may impact our decision-making strategies, our response reactions to stimuli and even our health (Solomon & Marston, 1986). We also know that exposure to sociopolitical concepts and events activates an affective charge that makes us biased information processors (Lodge & Taber, 2005). And yet, the scope and extent of the consequences of such bias for cognitive processing is to be determined for different tasks in different contexts.

The study introduced in the present paper addresses this question by zeroing in on the influence that the affective charge of sociopolitical concepts may have on the translation process in the specific context of Catalonia's independence crisis. Our results did not corroborate our hypotheses, since no significant interaction was reported for the congruency between participants' ideology and the content of source text or translation options. However, some of the results suggest that political ideology may have an influence on students' reaction times during the translation process. Interestingly, even if having no statistical significance, the tendency observed in the data reveals that the influence of affectively congruent or incongruent content on response time may be different for ST understanding as compared with making a final decision on the translation equivalent. In our study, ideologically congruent stimuli slowed reaction time down during ST comprehension, but speeded it up when making a final decision to select a suitable equivalent.

As previously discussed, the facilitating effect of ideological congruency when choosing a translation equivalent can be explained in terms of the 'hot cognition' hypothesis, which assumes faster reaction times to affectively congruent political concepts on the basis of the faster activation of positive affective charge. But the question remains as to why the contrary effect is found when student translators had to read and understand the stimuli. Why did congruency increase the participants' response time at this point? As suggested in the psychology literature, a possible explanation for these results could be found in the greater allocation of attentional resources to highly relevant stimuli. Congruent stimuli may have been more arousing and felt of higher relevance, initially attracting greater attentional resources and causing a delay in response time. Moreover, this assumption seems to agree with existing results on horizontal theories of translation (e.g., Macizo & Bajo, 2006; Whyatt, 2003), which argue that the process of comprehension in reading for translation also involves online searches for translation matches. It may very well be then that, when reading the stimuli, participants were already searching for all possible alternatives, congruent and incongruent

ones, which might have temporarily inhibited the facilitating effect of ideological congruency. In contrast, once the stimuli had been understood and potential translation equivalents activated, ideological congruency facilitated the inhibition of the literal translation and the choice of a congruent equivalent.

There are also some methodological limitations of the study that should be acknowledged, the most obvious one referring to the ecological validity of the test. The restrictions imposed by the interface of the reaction time program and the search for experimental control often interfere with the potential generalization of results to real-life situations. Unlike real-world translation situations, our participants did not have access to the whole press article and were requested to choose between two available translation equivalents instead of translating them themselves. To understand the impact of these limitations, further research should be conducted with whole texts in more ecologically valid situations. Moreover, replication of the study with non-Catalan translation studies would be advisable to increase the generalization potential of the results. There is the possibility that, due to the extremely high relevance of the conflict in Catalonia, students had difficulties to affectively differentiate between proand against-independence headlines and translation options. Finally, future studies are also encouraged to triangulate reaction time measurement with other physiological measures registering the arousal of the stimuli affective charge.

The reported results provide intriguing evidence on the impact of political stance on the translation process. But what are the implications of these findings for translator training and the professional practice? Reaction time responses are usually measured in milliseconds, so even when we report on statistically significant differences, the difference is rather tight. Does it really matter if translators take seconds or even a few minutes longer to provide a translation when a term conflicts with their ideology? Even if the time difference seems negligible, professional translators may certainly value the opportunity of having a few extra seconds per working hour, a difference that could be translated into minutes per day, hours per week and even days per month. Increasing awareness of the effect of ideology on translators' work may, at the very least, contribute to maximizing efficiency and awareness of potential biases. Classroom support to enhance awareness and allow for a more efficient exploitation of our abilities and limitations can be provided by introducing the translation and discussion of ideological issues into curricula designs. Nevertheless, the translators' choice between inhibiting or following their bias will be influenced by the existing societal pressure and the strength of their personal beliefs, but will ultimately depend on their adherence to professional ethics.

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# 7. Appendix 1 - Questionnaire

Valore en una escala del 1 al 5 su grado de acuerdo con las siguientes afirmaciones, siendo 1 muy en desacuerdo y 5 muy de acuerdo

ITEM	1	2	3	4	5
La monarquía debería ser abolida					
Los homosexuales deberían poder casarse por la Iglesia si lo desean					
Cataluña debería ser independiente					
La prostitución no debería estar prohibida					
Las drogas deberían estar permitidas legalmente					
Cada ciudadano debe poder elegir libremente su nacionalidad					
El español debería ser la lengua oficial del Estado					
El Estado no debe intervenir en cuestiones tan personales como la identidad o la cultura					
El Estado no debería vulnerar el derecho a voto por motivos de seguridad					
No debe haber censura de opiniones por parte del Estado bajo ninguna circunstancia					