

From the Crime Scene to the Language Lab and Back:

— Cross-linguistic Empirical Research on Language and the Law and its Practical Applications

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Abstract

In this paper I present evidence for the importance of close collaboration between academic researchers and practitioners in law and language and illustrate its benefits for linguistics, legal studies as well as professional practice and public service. The interactive relationship between language and the law has been studied from many different angles in the past by linguists and legal experts. However, much of this research has been based on single case studies, or a handful of cases, which have not been sufficient for the purpose of establishing the strength or the extent of the observed effects of language on matters of legal importance. The purpose of the present paper, which has been written at the explicit request of the editors, is to pull together a number of research strands that my collaborators and I have pursued over the last two decades and to critically assess the findings from a number of studies, our own and those of others. The main conclusion drawn from these analyses is that legal communication in both monolingual and multilingual contexts needs to be addressed from an interdisciplinary perspective that brings together insights from both the language lab and the everyday experiences of practitioners. These insights and their supporting data can inspire each other's endeavours for the ultimate benefit of those members of society who are most in need of support and of impeccable public service, such as victims, witnesses and suspects in a justice system.

Keywords

legal interpreting, police communication, real-life data, witness testimony, witness memory

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1. Introduction

The aim of this paper is to provide insight into how empirically grounded academic research based on a variety of data sets (corpus and experimental) can inform, and be informed by, professional practice. We shall see how different theories and methodological approaches within linguistics and translation studies help us achieve a better understanding of when, where and why problems in various legal communication and translation may arise and how different problems identified in professional practice can inspire academic research and help it move forward.

Various types of corpus linguistic data, spoken or written, have been used in support of legal arguments, for example in the context of trademark litigation or authorship determination (Coulthard & Johnson, 2007). Specialised corpora collected via fieldwork have also been created for the purpose of academic research, for instance, in studies of court or police communication (Berk-Seligson, 2002; Leahy-Harland & Bull, 2017), where the data were searched and analysed based on a specific criterion (e.g. number of closed vs. open questions, frequencies and types of additions or omissions in translation, etc.). By contrast, we have fewer studies of legally relevant experimental linguistic work. One early notable example was the seminal study on how language creates false witness memories (Loftus & Palmer, 1974). More recently experimental methods have been used in order to probe for language- or culture-specific effects on witness memory and jury judgments (Filipović, 2011, 2013a, b, 2016, 2018, 2020, 2022a; Hijazo-Gascón, Gómez-Bedoya & Filipović, under review).

In the current paper the focus will be on how different methodological approaches can be integrated into a holistic analysis of communication between police and victims, witnesses and suspects, highlighting the important consequences (real or potential) that linguistic and cultural differences can have on legal outcomes. As our societies are increasingly multilingual and multicultural, the backdrop of our present discussion is legally relevant cross-linguistic and cross-cultural communication and the difficulties it poses for many aspects of policing, including the efficient elicitation and processing of communicative evidence.

In the next section (2) we give a brief discussion of some previous research that has dealt with multilingual communication in police interviews (UK) or police interrogation (US). Section 3 provides an illustration of different empirical methods that have been used in this research programme by the current author and associates, with the goal of showing how analysis of naturally occurring data in an extensive corpus can lead to the detection of serious unresolved communication and translation problems and to an experimental probe for potential further consequences of these problems. Section 4 shows how individual insights from professional practice in both language education and policing can also inspire empirical academic research and lead to valuable findings that advance academic research and improve professional practice.

Finally, the last section (5) offers conclusions and suggestions for future research involving multi-method approaches to data collection and analysis that forges tighter connections between academic researchers and language and law practitioners, with a view to jointly developing research-informed best practice.

2. Studying the Interactions of Language and the Law across Languages and Cultures

The relationship between the language and the law has been studied from many different angles and has included various legally relevant communicative contexts, such as multilingual courtrooms (e.g. Berk-Seligson, 2002; Hale, 2004, 2014) or police investigations (e.g. Berk-Seligson, 2009; Filipović, 2007a, 2013a, b, 2019a, 2022b, c, d; Filipović & Hijazo-Gascón, 2018; Hijazo-Gascón, 2019; Kredens & Morris, 2010). All types of legal communication, spoken or written, if relevant for the law, can be studied within the field of forensic and legal linguistics. A sample of language is relevant for the law if it has a role to play in legal processes such as criminal investigations or court proceedings, be it a contract, a personal letter or a recorded conversation. Police interview transcripts as well as records of court proceedings are all examples of forensically relevant texts. The study of such data enables us to understand what specific problems arise in this particular communicative context and to understand the consequences for the parties involved that may be more significant in this context than in some other communicative situations (such as e.g. daily conversations or business negotiations).

For instance, Berk-Seligson (2002) studied courtroom interactions in a cross-linguistic (English-Spanish) setting and found that a number of features in court interpreting (e.g. hedges, hesitations, etc.) can alter the perception of a witness's testimony as being either powerful (if these features are absent from the interpreter's turns but present in the original speaker's turns) or powerless (if the interpreter adds them when interpreting). Interpreters are therefore in a position to change the characteristics of the original speech from powerful to powerless and vice versa and to affect the perception of the speaker by listeners (e.g. by a judge or jury members). Therefore, it is crucial to have an accurate rendering of the original speech in translation, which contains both the content expressed and the paralinguistic features (such as hedges or hesitations). Significant interdisciplinary research has been carried out in another context, namely that of interpreter-assisted multilingual police interviews in the UK and in police interrogations in the US¹. The benefits of using larger datasets for linguistic

¹ These two different terms, interview vs. interrogation, are used to distinguish the two very different methods of communication with the suspects in the UK and the US respectively. For further details see Oxburgh et al. (2015).

analysis have been made evident in recent work on police communication in both monolingual (e.g. Leahy-Harland & Bull, 2017) and multilingual contexts (Filipović, 2007a, 2013a, 2019a, 2022b, c). Much of the prior research in police communication (both monolingual and bilingual) involved mainly individual case studies or smaller samples, or used observational or self-report survey methodologies. Filipović (2022b, c, d) created a large, mostly electronically searchable corpus of over 200 transcripts of monolingual and bilingual police communication with victims, witnesses and suspects from both the US and the UK. This substantially large dataset has made it possible to detect numerous problems that arise of relevance for language and law research across the two most widely adopted methods of communicative evidence elicitation in the world (the UK investigative interview and the US interrogation method). This database has also made it possible to contrast monolingual and bilingual police communication as well as to obtain a more precise view of the *scale* of the problems that are encountered. For example, Filipović (2022b) discovered that miscommunication is more frequent in the US than in the UK context and she identified the main sources of miscommunication: (i) general psycholinguistic processes of deriving meaning via inferencing and (ii) linguistic and cultural barriers that, if not overcome, can result in unresolved or exploited misunderstandings, and in the US only (iii) procedural features, such as an adversarial questioning method, lack of legal representation and absence of professional interpreting. Similarly, Filipović (2022c) found shared problems in both UK and US interactions mediated by interpreters, which include difficulties of dealing with ambiguities in one language that are hard to render in the other, mismatches between labels for crimes in different legal systems and uses of words and related concepts specific to minority cultures that are different from their uses in the majority language. These findings are applicable to and useful for all police jurisdictions, not just the ones that use the UK or the US communication approach, simply because languages and patterns of usage differ across different communities or cultural groups that live in the same society, and this poses challenges for public services such as policing that must be addressed appropriately in order to ensure equality in access to justice for all (Filipović, 2021, 2022b, c, d).

It is not only language contrasts that are difficult to capture in translation or inadequate language assistance that may put individuals in a precarious position before the law. Filipović (2022d) has found that being interrogated by police officers who speak the mother tongue of the suspect and who come from the same cultural background carries the additional risk of using shared cultural heritage in order to imply shared views of events and elicit confessions through a minimisation of the severity of certain criminal offences.

As for experimental cross-linguistic research at the intersection of language and the law, we note that there is much less of it, though there are a number of psycholinguistic studies available that are relevant for legal communication, involving for example the role of inference in evidence elicitation, or the role of the mother tongue vs. a foreign language on witness memory or judgments. Some studies make their relevance to

the law and law enforcement explicit (e.g. Filipović, 2013a, b), while others do not highlight this relevance very prominently but the implications for legally relevant issues (e.g. witness memory retrieval) are evident nevertheless (e.g. Koster & Cadierno, 2018; Tosun & Filipović, 2022; Filipović et al., in press; see also Filipović 2019b for a detailed overview and discussion). In the next section (3) we shall see how all these different types of scholarly work can help us solve problems that arise in the daily practice of language and law professionals.

3. Real-life Examples Inspiring Lab Work on Language and the Law

In a corpus study of US police transcripts, Filipović (2007a) came across a case in which typological contrasts between two languages, English and Spanish, could be shown to play a crucial role in a potentially fatal misunderstanding. This led to the development of a research programme in Applied Language Typology (Filipović, 2017a, b), which involves a primary focus on typological contrasts that are of key relevance for different practical contexts of language use. The specific contrast in question related to the expression of intentionality and the different grammatical means for expressing this across languages. For example, the English sentence *Ariel broke a glass* can mean either that Ariel did this on purpose or that it was accidental because this expression is used to cover both meanings. The SVO (subject-verb-object) sentence structure may imply intentionality more strongly than non-intentionality because subjects in transitive sentences are normally agents (Tversky, 2011), and this can hold more for some verbs where more force is involved or where the events referred to with the specific verb are more inherently intentional (e.g. *push*) than with others (e.g. *spill*). In any case, the key fact is that the sentence format *X broke Y* can, and is often used, to describe non-intentional events of breaking. By contrast, in Spanish there are two different structures that regularly force and capture a distinction between intentional and non-intentional actions. When the breaking of the glass is intentional, Spanish speakers say *Ariel rompió el vaso*, with the same SVO structure as in English, but in Spanish this is habitually reserved for clearly intentional actions. If the breaking of the glass was not intentional, then speakers of Spanish (and of many other languages with a similar typological feature; see Filipović, 2019b) use a different structure, the so-called affective dative, which indicates that the subject was a non-intentional agent, as in *Se le rompió el vaso al Ariel* (=lit. 'To Ariel the glass broke'; meaning 'Ariel broke it by accident'). Both English and Spanish have another construction, the inchoative *the glass broke* (*el vaso se rompió*), but in this case there is no reference to the agent ('Ariel') that was involved (e.g. in the context of witness testimony).

This typological contrast between English and Spanish led to a serious misunderstanding regarding what the speaker had originally said and what was rendered in translation. Filipović (2007a, 2021, 2022c) explains that the Spanish monolingual suspect in this specific case said *Se me cayó en las escaleras* (literally: ‘To me that she fell on the stairs’) when trying to explain to the police what had happened when he carried the victim down the stairs. The precise full meaning of this sentence when rendered into English would be ‘I dropped her on the stairs by accident’. However, the interpreter at the crime scene, who was actually a relative of the suspect, translated it simply as *I dropped her on the stairs*. Technically this is not incorrect since this English sentence is ambiguous, as we have seen, and can be used to describe both an intentional and an accidental act of dropping. However, what the Spanish-speaking suspect clearly meant was that the dropping was accidental. Instead the interrogating police officer at the crime scene apparently drew the conclusion that the dropping of the victim was intentional based on the English translation, and neither this police officer nor the officers and interpreters who subsequently interviewed this suspect further demonstrated any awareness of the fact that the suspect was actually denying intentionality. This was a particularly serious misunderstanding in this particular case since it took place in the state of California, which still exercises the death penalty, and was made all the more serious by the fact that the translation was understood to be a confession to a murder (an intentional act) instead of a manslaughter (a non-intentional act). Unfortunately, it was not possible to establish what the final outcome in this case was due to the fact that the data were anonymised, but the case remained a haunting presence for me and an inspiration for further empirical work that followed.

The main lesson to be learnt from this case was that if we know some languages have (and their speakers habitually use) distinct constructions for intentional vs. non-intentional events (Spanish) whilst others have the same construction for both (English), this means that event descriptions will be unambiguous in one language but ambiguous in the other with respect to intentionality. So how do we know what the speaker meant if we do not explicitly ask about the exact meaning? The answer is: we cannot know. If a speaker of English utters the sentences *X broke/spilled/dropped Y*, we cannot tell for sure whether the action described by the verb happened intentionally or not (see Filipović, 2019b for further discussion). So how do interpreters know which construction to use when translating this sentence into (or from) a language that has two clearly distinct constructions and usage preferences that habitually establish explicit distinctions between intentional and non-intentional events? The answer is: interpreters themselves cannot and should not make this decision and it is up to the investigating police officer to probe for further details and for clarification. If further explicit probing does not take place, we risk having some crucial pieces of information about witnessed events being given in one language and not the other, or worse, we risk having key information severely altered in translation. Information may be present in the original but missing in translation or not present in the original but added in transla-

tion. Research in cognitive linguistics and psycholinguistics has shown that this can happen simply because habitual lexicalisation patterns (whether they are grammatically constrained or pragmatically preferred ways of framing experience) in the target language make it easy to include certain information in some languages and more difficult in others (see Slobin, 1996, 1997, 2003, 2006; Filipović, 2007a, b, 2008, 2017a, b). Translators can employ a number of different strategies in order to deal with such lexical, grammatical and usage differences between two languages (see Ibarretxe-Antuñano & Filipović, 2013; Molés-Cases, 2016), such as the addition or reformulation of information. However, interpreters, especially those working in sensitive contexts like legal ones, are instructed not to add words in translation that the speaker did not use in the original. But adding adverbials such as *on purpose* vs. *by accident* in translation would be a way to clearly render the intentionality expressed in the original, and explaining to interlocutors what is being added in translation, and why, may be a way of solving such problems. This approach would involve sharing expertise within joint training initiatives that bring police officers and interpreters together so that both groups become aware of each other's knowledge base, and can clarify expectations and rules of interaction. Not making such rules explicit (e.g. when and how to stop the interpreting in order to add information or an explanation, etc.) has been something that has negatively affected working relationships between linguists and law practitioner groups (e.g. Wilson & Walsh, 2019). Remedies have been proposed recently in collaborative work between UK academics and language and law professionals, which resulted in the development of the first UK protocol for interpreter-mediated police interviews (Mayfield, 2017) and in joint training events (see tacit.org.uk). However, such initiatives are rare in most places around the world and take a long time to fully implement.

The language contrasts in the expression of intentionality and their real-life consequences inspired experimental laboratory work to probe for effects of this (and other) typological differences on how we conceptualise events in language and memory (Filipović, 2011, 2018, 2020, 2022a). Not all typological contrasts are relevant in all real-life circumstances. In other words, some features of language typology may be more relevant for witness memories of events than others. For example, we expect that differences in how much information is available about the source of our knowledge (as captured in the category of evidentiality in Turkish) or about the unintentionality of an actor in an event (as given explicitly in the affective dative construction in Spanish) will matter more than, for example, word order in a sentence (e.g. whether the object comes before or after the verb). Those typological contrasts that do matter more are studied within the context of the Applied Language Typology programme in Filipović (2017a, 2017b). In the present context we will continue with the discussion of intentionality and see how this contrast plays out in witness memory (but see Filipović, 2017a, 2017b, 2019b for other cognitive areas that need investigating and possible avenues of research related to them).

Language effects on memory for events were reported early in the seminal experimental work of Loftus and Palmer (1974). Participants in that experiment watched video clips that depicted car accidents accompanied by a variety of different descriptions for these events. The study showed that if words indicating a stronger impact, like *crash*, were used in the accompanying descriptions instead of the more neutral *collide*, witnesses exhibited false memories, saying that there was broken glass in the video when in fact there was none.

We also know from previous research in psycholinguistics that, while verbalisation improves memory performance (see Schooler & Engstler-Schooler, 1990 for an overview and critical discussion), the reverse can also happen – verbalisation can indeed impair memory. Schooler and Engstler-Schooler (1990) showed a negative effect of verbal labelling on face and colour recognition. They explained (Schooler & Engstler-Schooler, 1990: 62) that a verbally biased representation can interfere with subjects' ability to make use of their intact visual input, whereby the stronger source of information (verbal) becomes dominant over a weaker one (visual). This view is further supported by the dual-code theory of visual memory (Paivio, 1986), whereby if the verbal information is not helpful because it does not support the visual stimuli (e.g. the word *peach* presented with the image of an apple), then the verbal information is more likely to overshadow the visual.

Thus, if language can affect how we remember what we see, do different languages have different effects, and also what happens if we speak more than one language? There are very few studies that look at how memory for witnessed events may be affected by a specific language, though the results from the studies that do exist are very interesting and informative for the law. Filipović (2011, 2013a, b, 2016, 2018, 2020, 2019b, 2022a) has addressed the possibility that we may be able to detect language-specific effects on memory for witnessed events in both monolingual and bilingual speakers. One possible hypothesis is that the language-specific pattern used in the description of events will also be reflected in the kinds of details that are remembered better. The language used in the experimental task, on the other hand, need not be the guiding pattern. For instance, speakers can still perform in a memory task in line with their (stronger) language (L1) even though they are explicitly using their second (weaker) language (L2) in the task. We also know that the same bilinguals can and do behave differently depending on the situation they are in, i.e., depending on the level of activation of their respective languages under different conditions, or depending on who their interlocutors or on how formal the communicative occasion is (see Filipović & Hawkins, 2019 and Filipović 2019b for details). More specifically for our current purpose, we can say that experimental work on intentionality distinctions relevant for the law aimed at checking how often speakers of different languages distinguish between intentional and non-intentional events (Filipović, 2013b, 2018, 2020) has provided empirical confirmation that witness memories about intentionality can be impacted differently by different languages.

For example, in a study by Filipović (2013b), monolingual speakers of English and Spanish were presented with video clips depicting events in which a person was intentionally causing something (e.g. a girl pushing her Barbie doll off a bed on purpose) and clips in which people were involved in non-intentional causation (e.g. a woman looking for something on a messy desk pushes a water bottle off the desk inadvertently), and the participants were then asked to describe what they saw. It was shown that the native speakers of Spanish (and also fluent L1 Spanish bilinguals; see Filipović, 2018, 2020) gave explicit information about whether the action was non-intentional, by using the clearly and unambiguously non-intentional affective dative *se*-construction, or intentional, for which the SVO construction is generally (though not exclusively) ‘reserved’. Ibarretxe-Antuñano (2012) shows that the *se*-construction involves low intentionality whilst the SVO construction can involve different degrees of intentionality, depending on the force dynamics lexicalised in specific verbs (Ibarretxe-Antuñano, 2012: 138–140). Even if SVO structures can sometimes be used in Spanish to describe a non-intentional event, there is almost always an additional specification such as *rompió un vaso sin querer* (‘he broke a glass without wanting to’) or a gesture that accompanies the expression and signals that it was done non-intentionally (Ibarretxe-Antuñano, personal communication). The SVO structures in Spanish are significantly more likely to be used for descriptions of intentional events precisely because the *se*-construction is available for non-intentional events only. English speakers, by contrast, regularly use SVO constructions in descriptions of both intentional and non-intentional events (as Fausey & Boroditsky, 2011, and Filipović, 2013b, 2018 have shown; see further below), though, as mentioned earlier (cf. also Filipović, 2019b), some verbs in English may carry a stronger intentionality implication than others (e.g. *push* vs. *spill*).

The experimental results from these studies on memory for intentionality also showed that Spanish monolinguals (and L1 Spanish bilinguals; Filipović, 2018, 2020) outperformed English monolinguals (and L2 Spanish speakers) when it came to remembering which events contained intentional actions and which contained non-intentional ones.

These insights from the language lab were subsequently incorporated into a training programme for legal interpreters and law enforcement professionals in the UK, European Union and United States (TACIT – *Translation and Communication in Training*, see tacit.org.uk for details). It is also worth pointing out that, although the research context here is police communication, raising awareness about the kinds of language contrasts that are difficult to render properly and accurately in translation is important in all contexts of communication within legal practice and within the interdisciplinary study of law and language.

4. Testing Insights from Professional Practice in Experiments

In this section we see how personal observations from practitioners that are shared with academic researchers have led to subsequent further exploration in the lab in order to better understand the issues identified in individual professional practice and in order to seek practical solutions for these issues.

In a study by Hijazo-Gascón, Gómez-Bedoya and Filipović (under review) the authors studied the challenges of interpreting insults in the context of a police interview. This research was motivated by an interdisciplinary collaboration between linguists, criminologists, interpreters and police officers during an interactive training session organised within the TACIT project. Police officers in attendance drew the attention of the researchers to the problem of mistranslation of insults and highlighted its relevance for their professional practice. Insults are of particular importance in cases involving vulnerable victims (e.g. hate crimes, domestic violence). Mistranslations of an insult can affect how the police officer perceives the severity of the offence and which further course of action is undertaken. In addition, interpreters also report numerous obstacles when interpreting insults because their meaning and context of use differ significantly across languages and cultures. Furthermore, the cross-linguistic and cross-cultural differences in meaning and use of insults are not taught in interpreting courses.

The research included two experiments that involved exposure of participants to different police interview scenarios with different types of victims (more vulnerable ones, such as women in a domestic violence situation or a gay man experiencing a homophobic attack vs. less vulnerable ones, a police officer being insulted upon arresting a suspect). As the authors explain, the perception and use of an insult by a victim or a suspect can be a very delicate matter modulated by multiple factors, which is further complicated in a cross-linguistic context such as interpreter-mediated communication. Interpreters tend to focus on the content of the message (Hijazo-Gascón, 2019), following the guidelines they are given in their training, rather than on the words and expressions that do not add much to the main content of the message but relate to speaker's attitude or belief in relation to the content (e.g. hedges, hesitations (Berk-Seligson, 2002) or empathy and emotional expressions; see e.g. Hijazo-Gascón, 2019). In a sensitive social context such as police interviews, however, expressions of emotions can provide important insights into the mental state of the event participants, of potentially crucial relevance for the investigation.

The first experiment involved students of English-Spanish interpreting as participants in the study, who were asked to provide translations for stimuli containing insults. This experiment revealed that the offensiveness of the swearwords tended to be altered or omitted altogether in translation. Alterations with respect to the force of the insult between the source and the target language were frequent, and included de-

creasing its offensiveness, e.g. by producing *gay* as a translation for *maricon* ('faggot'), as well as intensifying it, e.g. by adding *puto* or *fucking* in translation before the insulting word. These changes in translation seem to indicate a lack of awareness about the social and usage norms in one of the two languages. Another important finding is that the frequency of silence or no response was high, which is in line with previous research on insults and the challenges of their use in intercultural communication (Dewaele & Pavlenko, 2002; Dewaele, 2004, 2010, 2016; Mohammadi, 2020). In addition, Hijazo-Gascón, Gómez-Bedoya and Filipović (under review) show that even highly proficient L2 learners, who are at an advanced stage in their interpreting training, lack the knowledge about how insults are used in their L2 and about how to interpret them appropriately. The authors conclude that it is the absence of explicit training in this area that leads to this result, which can have important consequences for the professional practice of interpreters as well as consequences for the people they interpret for and for the relevant legal outcomes. The authors support the view expressed in Horan (2013), who argued in favour of including insults in the teaching of foreign languages, particularly in specialised contexts such as the training of legal interpreters where the correct rendering of an insult can be crucial, for real-life outcomes such as investigation related to hate crimes. Thus, this and similar empirical research can significantly inform both the education and the daily professional practice of interpreters and police officers.

The authors also note that the translation equivalents provided by the experimental participants were closer in their lexical semantic meaning (e.g. official dictionary definition) than in their pragmatic meaning, i.e. meaning in use, which would achieve an 'equal effect' instead, i.e. equate the level of offensiveness. This inspired a further, second experiment on cross-cultural differences with regard to insult perception. Hijazo-Gascón, Gómez-Bedoya and Filipović asked native speakers of British English and European Spanish to rate on a 5-point Likert scale the offensiveness of insults. The ratings of offensiveness were compared within each culture, according to the variables of gender and previous experiences of discrimination. The results showed that there were cross-linguistic and cross-cultural differences in the meaning, usage patterns and perceived offensiveness of insults even in cases of apparently close lexical equivalents in English and Spanish. The authors discovered that, overall, Spanish speakers tended to rate insults as more offensive in general and that some of the most common insults seemed to have an overall higher level of offensiveness in Spanish. As expected, and in agreement with previous research (Beers-Fägersten, 2007; Jay & Janschewitz, 2008), gender turned out to be a key variable in perceived offensiveness, but this was the case in British English only, with women rating swearwords as higher in all contexts. Experience of discrimination or past abuse also led to higher ratings of offensiveness in the British data only. It is interesting to note that gender and discrimination/past abuse factors did not lead to differences in offensiveness rating in the Spanish contexts, but it is worth remembering that the offensiveness ratings in Spanish were overall general-

ly higher than the ratings in a British context. Such observations can be pertinent in cases where jury members from different cultures and with different personal experiences are being selected to serve on cases where these factors matter. For instance, the legitimacy of a recent real-life court case involving a juror who was a victim of abuse was questioned because the information about the abuse was not disclosed and was shared with other jury members². Hijazo-Gascón, Gómez-Bedoya and Filipović (under review) conclude that there is still more research to be done in this area, starting with more awareness-raising about the relevance of insults in communication and in translation within educational and professional development courses on policing, advocacy and interpreting.

Another empirical study that illustrates the pathway from professional practice to the lab and back into professional training comes from the educational context of linguistics and translation. Filipović (2016) noticed that patterns of English modal verb usage among students, and reasoning about their meanings, varied substantially between those who spoke English as an L1 in comparison with those whose L1 was not English. She carried out an experiment in order to investigate this observed contrast properly. Native speakers of English as well as speakers of English as a second language (with different first languages including, e.g. Serbian/Croatian, Italian, Spanish, Hungarian, Chinese and German) were presented with mock witness written testimony and asked to give a rating on a 5-point Likert scale for witness certainty and testimony reliability. The focus was on the difference between the modal verbs *may* and *might*. The experimental results confirmed that there was indeed a significant difference in how these different groups of speakers understand English modal verbs and make judgements based on that understanding. The native speakers of English in the study did not make a distinction between the meanings of *may* and *might* when it comes to the level of certainty expressed using those two verbs. They would judge mock witness statements with either verb as equally reliable. By contrast, speakers of English as a second language made different judgements: they believed that statements using *may* (as in: *The man may have dropped the bag by the bushes.*) were more reliable than statements containing *might* (as in: *The man might have dropped the bag by the bushes.*). As a result, for some speakers in a society where English is the language of the law, witnesses using *may* are seen as more reliable than those using *might* in their statements, which is a finding that has potentially important consequences for decision-making in legal contexts, such as jury or judicial judgements.

Filipović (2016) found that the detected contrast probably stems from pedagogical materials for teaching and learning English as a foreign language and from the natural L2 language learner preference for one-to-one form-meaning mappings (see Filipović, 2016 for further details). In standard grammars of English the *may/might* distinction is mentioned as being restricted only to certain speakers or contexts, if it is mentioned at

² URL: [bbc.co.uk/news/world-us-canada-60666414](https://www.bbc.co.uk/news/world-us-canada-60666414) (accessed 20 December 2022).

all (e.g., as a footnote in Quirk et al., 1985). We can conclude that this is not a very salient meaning distinction for native speakers (see also Whitaker, 1987 for a discussion). By contrast, English L2 grammars and textbooks often highlight that *might* is more tentative than *may* and more likely to express a weaker possibility. L2 speakers, who prefer one-to-one form-meaning mappings rather than one to many or many to one (see Filipović, 2019b: Chapter 2 for a detailed discussion), may then latch onto the convenience of remembering that the two distinct forms, *may* and *might* express two distinct possibility levels. This is not a surprising strategy for L2 learners to adopt, since the overlap in meaning and use between any two distinct forms is uncomfortable for learners in general, so fossilising the *may/might* distinction based on degree of possibility provides some welcome relief. It is also important to mention here that, understandably, second-language tuition cannot possibly cover all the minutiae of an L2 grammar and usage, but certain aspects certainly deserve more attention than they are currently receiving, on account of their relevance and practical significance for real-world interactions, as advocated in the Applied Language Typology Programme (Filipović, 2017a, 2017b). Modal meanings in L2 English are one such area. The affective dative construction in L2 Spanish is another, as we saw in the previous section. Further research along the lines illustrated here will undoubtedly uncover more features that are important for the law and that need to be given a more dedicated focus in the teaching and training of language and law professionals.

5. Conclusions

This paper has presented findings from a selection of empirical studies within a larger research program that I and my colleagues have been engaged in for a number of years and that I have been invited by the editors of this volume to summarise here. The studies selected illustrate a number of ways in which large data sets and experimental elicitation can lead to both scholarly and professional advancements in the area of language and the law. The key tenet of the present discussion is the clear need for academics and practitioners to work together towards informing each other of their work in a way that makes research agendas driven by practice, and practice informed by research.

The analysis of corpus data consisting of authentic materials and the experimental work presented in Section 3 showed that the study of intentionality and its representation in linguistic expression, translation and memory is of relevance for matters of the law, such as whether the action that was performed, witnessed and described occurred on purpose or not. It also showed that insights obtained in this way enable us to determine in advance the exact points at which translation and communication problems may occur between speakers of any two languages (see Filipović & Hijazo-Gascón, 2018, and also Hijazo-Gascón, 2019 for more examples) so that we can raise awareness

of these in interpreter and police officer training. We can also implement these findings further, in other domains, in the training of language professionals and legal practitioners more generally, and in other fields involving high-risk contexts, such as air transportation, and the medical and pharmaceutical industries (see Trbojević, 2012), to ensure that potentially catastrophic consequences of miscommunication due to mistranslation are avoided.

Furthermore, we can see that collaborative efforts by academics and practitioners offer new avenues in terms of research topics, such as translation and the cross-cultural perception of insults and language effects on judgments driven by different ways in which a language has been acquired (as an L1 or an L2). Extensive empirical data is essential for testing the hypotheses that arise based on individuals' professional daily experiences in order to assess the extent of the issues observed, the size of possible negative effects and their potential consequences under different circumstances.

Problems detected in corpora consisting of real-life materials, lab experiments inspired by these real-life cases and individual practice-led observations all offer a fruitful line for further interdisciplinary research that can include other cognitive and linguistic domains and many more bilingual language combinations (e.g. see further examples in the work on translation of evidentiality and related judgments in English and Turkish by Tosun & Filipović, 2022 and English and Japanese in Filipović et al., in press. This effort will result in gathering better quality evidence and processing it more efficiently (see Filipović, 2019a), as well as ensuring better public service provision for those members of society who need it most.

In sum, interdisciplinary research at the intersection of language(s) and the law, involving multiple empirical methods and different types of data, is of fundamental importance for raising awareness about which linguistic, cultural and personal factors (such as being a vulnerable victim or having a minority status) may influence the ways in which the law, law enforcement, language professionals and general public contribute to legal or judicial processes and how these processes can be safe-guarded or improved.

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