

Evidentiality in L2 learners and native speakers of Japanese and English: Implications for the assessment of speaker certainty¹

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1. Introduction

Evidentiality is a semantic category that signals the source of the information given in our statements. The major dichotomy within this category is between first-hand information (directly witnessed) and second-hand information (indirectly, not personally witnessed but obtained from some other source or hearsay), although there are many other, more subtle distinctions that different languages of the world draw in this domain (<https://wals.info/chapter/77>). First-hand witnessing can happen via different senses, most often sight or hearing. For instance, if, on seeing John's keys on the mantel piece, we say 'John is at home', this would reflect first-hand albeit indirect evidence because we did not actually see John himself. We can also say 'John is at home' if somebody told us about it even though we have not seen John personally. This sentence is likely to be understood as an expression of direct evidence by the hearer (by implicature; see Section 2) even though it is in fact unspecified with regard to the source of information and can actually be based on second-hand source of evidence. We can specify that we personally saw John (e.g. by saying 'I saw John at home') and if we wanted to be precise about the fact that we did not actually see John but thought he was at home based on another (second-hand) source of information, we could say something like 'I heard from Mary that John was at home' or 'It seems that John is at home'. In Japanese, by contrast, different verb endings are used depending on whether we want to say that we actually saw John and know for a fact that he is at home or whether we got this information from another source (e.g. our own inference or a third party; though some cultural norms may affect the use of evidentials and lead to indirectness even when we know something for a fact; see Kamio 1997 and also further discussion in Section 2).

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In this paper, we focus on assessments of speaker statements and we ask two key questions: a) whether and how do Japanese evidentials and their English meaning equivalents or near-equivalents affect judgments about witness certainty and b) whether these judgments may be affected *differently* in these two languages because Japanese has a category that clearly and consistently marks the different sources of information (first-hand/more reliable vs. second-hand/less reliable) while English does not have such grammaticalised source marking but instead communicates related but not quite the same types of meanings (such as lack of commitment to the content of a statement) via specific words (e.g., modal verbs such as *may*) or constructions (*it looks/appears/seems*). Making estimates about the strength of inference or reliability of a source of information and relating it to judgments about speaker certainty is not a straightforward task. As an anonymous reviewer pointed out, both first-hand and second-hand markers in Japanese involve inference, and it is not necessarily the case that the first-hand marker indicates more certainty than the second-hand marker. For instance, if one heard news from a trusted source, one would use the second-hand marker, but the degree of certainty would nevertheless still be high. We entirely agree. However, hearers who hear second-hand marking uttered by a speaker they *do not know or trust* (for example in a witness testimony situation) may be more likely to assess the speaker as less reliable overall because he/she did not witness what is talked about in person. This is just one of the assumptions being tested here, i.e., whether the first- vs. second-hand source marking, and frequent expression of these distinctions, may lead to different judgments about speaker certainty in Japanese as well as enable Japanese speakers to make different (e.g. more precise or accurate) judgments from their English peers who do not have resources for such distinctions in their language.

Typological contrasts between languages as well as the ways they were learned (as L1s or L2s) have been shown to lead to differences in judgments and also memory (see Section 3; see also Fausey and Boroditsky 2010, 2011; Filipović 2011, 2013, 2016, 2017; Koster and Cadierno 2018). There has, however, been very little applied pragmatics research on evidentiality in use, and none about its practical implications for different social contexts (such as legal, medical or educational). A previous Turkish-Swedish study of evidentials in translation (Cszató 2009) showed that there can be a significant mismatch between evidential information in the original and the translated text. In an L2 context, there have been numerous studies showing that bilinguals habitually add evidentiality information in the L2 if their stronger (L1) language has it (Aikhenvald 2002; Heine and Kuteva 2005; Slobin 2016). Bilinguals can also “lose”

evidentiality from one of their languages if they reside in a majority language community that does not have grammaticalised evidentials (Arslan, Bastiaanse, and Felser 2015; Johanson 2003). But to date, there have been no studies in translation and judgments that probe for possible real-world effects of this typological difference in different monolingual and bilingual speakers, and it is our goal here to fill this gap in the literature.

2. Evidential meanings and speaker certainty in Japanese and English

2.1 Evidential forms and meanings in the two languages

English and Japanese are two typologically different languages with respect to the category of evidentiality – Japanese has it and English does not. This is why these two languages form an interesting pair for comparison in the study of both monolingual and bilingual language use and judgment. Different evidential meanings in Japanese are expressed by different verb markings², which are not obligatory in Japanese but are frequently used. The most frequent evidential marker is *yoo*, meaning “look like, look as if, be like, appear, seem (to the speaker)” (Makino and Tsutsui 1989: 547-552). *Yoo* is used to express first-hand, reliable information, usually based on what the speaker has seen. It can also signal that the speaker has engaged in inferencing based on first-hand, reliable, information and on his own knowledge. The colloquial version of *yoo* is *mitai*, and the uses are the same. By contrast, some other evidential markers, such as *rashi*, convey a certain level of distancing from the content of the statement. Hence, while *yoo* expresses the speaker’s own judgment, or a judgment based on evidence immediately available to her/him, *rashi* signals that there is a distance between the speaker and the content of the statement; that is, the information expressed is second-hand, or based on evidence not immediately available to the speaker, and it can also be unexpected (Hayatsu 1988; Kikuchi 2000, Narrog 2009; Narrog and Yang 2018). Narrog and Yang (2018) point out that only *yoo* and *rashi* can be clearly differentiated on semantic grounds while other evidentials, such as *mitai* and also *ppo* are best conceived of as stylistic variants of *yoo* (Narrog and Yang 2018).

² We steer clear at present from a detailed analysis of the other means that languages have for expressing an epistemic stance (such as modal verbs in English). We acknowledge this here, namely that in both Japanese and English there are numerous other resources that are used for the same purpose. At present our focus is on the most common evidential morphemes in Japanese and their attested (published) equivalents in English (see Section 4.2: *Design*).

At the same time, there seems to be some semantic overlap between *yoo* and *rashi* because they both involve speakers' reasoning and furthermore, some other, "non-semantic factors" probably also play a role in selecting one or the other according to Narrog and Yang (2018), though they do not explain what these may be. They illustrate the difference in meaning between *yoo* and *rashi* with the following examples (which are included in our experimental stimuli; see Section 4):

1) Kao~iro=ga yo.ku na.i yoo=desu=na.
 face~colour-NOM good-ADV not.be.NPST EVDI=COP=FP.M
 You look pale.

2) Saru=ni=wa shikashi, saru=nari=no mokuteki=ga
 Monkey=DAT=TOP but monkey=COP=GEN goal=NOM
 ar.u=rashi.i.
 be.NPST=EVID.NPST

But monkeys appear to have their own goal.

Narrog and Yang (2018) argue that example (2) could be felicitous with *yoo* only if the speaker is an expert on monkeys and thus speaking based on first-hand experience, while in (1) *yoo* is the right ending because the experience reported in the statement is obviously first-hand and *rashi* would therefore not be appropriate. These authors also state that the *system with yoo vs. rashi functioning as distinct first- vs. second- hand evidential indicators appears to be in decline in the spoken language.*

There are no evidentials in English, but similar meanings to the ones in Japanese discussed above can be expressed by a number of different words or constructions such as *seems/looks like, apparently*, etc. When these verbs and constructions are not used, as in the unqualified sentence 'John is at home', we simply do not know whether the speaker witnessed it personally in some way (e.g., by seeing either John or his keys), or got the information from another

source. However, when indicative tenses are used there is an *implicature of certainty*, namely that the statement is something that we know and believe to be true, which is therefore understood as a statement of higher certainty than when a speaker says ‘John seems to be at home’, which implies lower certainty. These assumptions are in line with the Gricean rules of conversation, the Maxim of Quality in particular (“Do not say something you do not believe is true”; Grice 1957, 1989) and with Searle's (1969) presumption of truth. We hypothesise here that the same Gricean implicature and presumption of truth applies to Japanese as well: it is possible to use past tense non-evidential markers in Japanese and when evidentials are not used the interpretation will be that of higher certainty than when they are. Where Japanese differs from English is in the subtlety of the source marking distinctions drawn in the cases when evidentials *are* used, which results in three levels of certainty implicature for Japanese: the highest level is with sentences containing no evidential, then comes the level of certainty conveyed by first-hand source marking, and the lowest level is with the second-hand source marking. It is crucial to note even though both first-hand and second-hand Japanese evidentials differ in meaning according to the Japanese grammar, they are translated in exactly the same way into English.

It seems plausible, therefore, to expect that, since Japanese language, through both grammar and usage, instils it in its speakers to explicitly indicate the source of information, there may be more finely grained certainty judgments in Japanese than in English, where such distinctions are not explicitly or frequently drawn. What complicates matters further is the fact that evidentials in Japanese and the epistemic distancing markers in English have a dual function (as signallers of either uncertainty or indirectness-for-politeness purposes), and this is why we focus on usage patterns next.

2.2 L1 vs. L2 usage patterns: Similarities and differences

Contrasts in usage between Japanese and English in relation to evidential meanings have been reported extensively in previous literature, albeit not in connection to their relation to judgments about speaker certainty. Trent (1997, 1998) contrasted the use of evidentials in Japanese and their counterparts in English by monolingual native speakers of Japanese and English respectively and established that, when conveying second-hand (hearsay) information, Japanese speakers use approximately twice the number of evidential expressions than English speakers do. Further support for this difference in use is found in Mushin (2001), who showed

that Japanese speakers give explicit evidential information much more frequently in the retelling of narratives compared with English speakers. Furthermore, Mushin noticed, as did Trent (1998), that English speakers may start the retelling of information by marking it with an evidential phrase (e.g. 'I heard') and then continue without evidential markers.

Trent (1997) offers a plausible explanation for why there may be a higher frequency of overt indications of evidential meanings in Japanese than in English. Japanese sentences have an SOV structure in which a verbal constituent always comes at the end. With an SVO sentence structure, as in English, a speaker is not necessarily required to keep repeating the same verb phrase of hearsay (such as 'I heard/inferred/it seemed to me/ it appeared to be, etc.')

to tell a hearsay story, and moreover this would burden the narrative and make it sound awkward/atypical in English. It is possible that, if an English speaker is uttering five sentences of hearsay, the first mention of a hearsay evidential can be carried over to the whole discourse, though how far exactly and how precisely the hearer would interpret is yet to be experimentally confirmed (see discussion in Section 4.6). However, with an SOV sentence, the hearer will not know that the speech is about hearsay before much later, especially if the sentence is complex, and this would be misleading to the hearer. As explained by the processing theory of Hawkins (2004, 2014), this information is unassigned in parsing and an unintended evidential interpretation can be misassigned online. Therefore, SOV language speakers tend to repeat the evidential verbs (e.g. 'I heard') more often (Trent 1997).

Another reason for these differences in usage may be *cultural*: the same evidential forms are also used for the purpose of expressing *indirectness* in both languages. Avoidance of directness in communicative exchanges is generally considered to be an indicator of a more polite stance (Brown and Levinson 1987), though this may vary depending on different contexts (Rose 1996; Grainger and Mills 2016) or on types of indirectness (conventional vs. non-conventional; Blum-Kulka 1987). Ohta (1991) argues that what counts as inappropriate communication in Japanese includes a much broader range of actions than in English. In other words, Japanese cultural norms may demand more indirectness overall than those in other cultures like the American, for example, in relation to which most of the previous comparisons in the literature have been made. As Ohta (1991: 233) explains, "the simple act of keeping the floor to talk about one's own experiences may also be seen as an imposition on those listening" and that may be why interactive communication in Japanese requires constant mitigation through epistemic markers - mitigation which is necessary in order to maintain the positive and negative face needs of interlocutors." Therefore, even though in both Japanese and English-speaking

cultures indirectness is used as a pragmatic strategy for politeness, this may be done to different degrees (see Ohta 1991; Kamio 1994, 1995). This may also lead Japanese speakers to perceive evidentials not as indicators of speaker uncertainty but merely as indicators of communicative appropriateness.

In this way, we are brought to the use of evidentials as indicators of appropriate cultural behaviour and cultural norms. The greater overall “preference” for indirect sentences in Japanese than in Western languages and cultures reported in the literature could indeed be driven by cultural tendencies and *applied to contexts even when speakers are certain of the information given* (e.g., when they are communicating factual information that they are certain to be true; see Kamio 1994, 1995). While there may be some mileage in a cultural explanation for differences in the overall frequency of use for evidentials and semantically or functionally related forms in languages that do not grammaticalise them, this kind of argumentation can easily lead to over-generalisation and to misleading cultural stereotyping, which we need to avoid. Suffice it to say that a cultural comparison between Japanese and Anglo-American cultures and communication styles does not paint a picture of completely opposed contrasts: the picture is actually much more colourful, as Rose (1996) rightly argues, because there are situations where Americans seem to be very indirect and Japanese very direct.³ Crucially, there may also be a difference between the different “Western” speakers of English. Americans have been found to be more direct in comparison to the British and certain other European speakers of L2 English (Cenoz 1995). British English is certainly perceived to be the more polite version in comparison to American English, with more historical awareness about social hierarchy in British than American culture, so we can expect *more indirectness by British English users*, which makes British communication practices closer to Japanese. Thus, the dual function of Japanese evidentials and their corresponding elements in English, as well as their frequencies of use, may both be at play when it comes to how they are understood in the context of witness testimony: as markers of culturally appropriate face-saving/polite language use and as explicit indicators of uncertainty with regard to the content of the statement. Our study aims to probe

³ Ross (1996) discusses numerous studies (including his own) that paint a more complex picture about Japanese communication patterns. He reports that Japanese (speaking Japanese) are found to be more direct than Americans on an open-ended discourse completion test (DCT). Other studies with L1 Japanese/L2 English speakers found that L1 Japanese subjects can be too direct and even sounding rude in their L2 (a questionnaire study by Fukushima 1990) or more direct and less polite than English-speaking Australians (in Tanaka’s 1988 study based on role-play elicitation). Thus, the simplification that the Japanese are typically indirect is a stereotype to be avoided.

for outcomes of this interplay in both languages to which we return in our Data Analysis (Section 4.6).

With regard to bilingual speakers, previous research in this area has found that there are indeed effects of L1 on L2 with regard to how sources of information are marked. Kamada (1990) found that L1 English/ L2 Japanese speakers conveyed hearsay (second-hand) information differently from native speakers of Japanese at all levels of proficiency (low, medium and high). The learners' L2 production was grammatically well formed but inappropriate for the context. For instance, they would use the expression "according to X" at the beginning of their reporting but they would not add the necessary overt evidential particle. This is very much in line with the pattern in L1 English observed by many authors, as mentioned above, though L1 performance was not explicitly tested in Kamada (1990). A study by Ishida (2006) replicated Kamada's (1990) findings with advanced L1 English/L2 Japanese speakers and confirmed that it is indeed the L1 English usage patterns that are reflected in L2 Japanese. In particular, L1 English learners of L2 Japanese used overt evidentials in their L2 and their counterparts in their L1 English languages much less frequently than Japanese monolinguals do. This finding was further supported in the study by Matsumura (2017), who also found L1 English effects on the L2 Japanese use of evidentials. Thus, we can conclude here that English monolinguals and L1 English bilinguals differ from their Japanese peers in the production of evidential information both qualitatively and quantitatively, but this still does not mean that these groups necessarily differ with respect to *comprehension*, i.e., *how they interpret evidential meanings when they hear them or read them*.

3. Effects of language(s) on judgments

It has been widely known in the literature from various fields such as linguistics, the law, psychology, politics, and business and economics that language impacts judgments: both what is said and how it is said. For instance, in a mock legal judgment experiment, Trujillo (2003) showed that the use of semantically richer manner verbs in English rather than of verbs neutral to manner in descriptions of crimes led to an understanding of these events as being more severe and consequently it led to more severe judgments in relation to the crimes perpetrated. Of particular relevance for the current study is the extensive research on courtroom discourse by Berk-Seligson (1990), who showed that the use of hedges, such as "sort of", "I guess", "it

seems”, etc. gives the impression of the witness being less convincing, less truthful, less competent, less intelligent and less trustworthy. These very linguistic elements are the ones which are most likely to be modified (either added or omitted) by interpreters, who are focused on conveying the key content of the message. This, in turn results in a loss of potentially relevant information and in a difference in the degree of witness certainty and reliability, which can be increased if these words and phrases are omitted by interpreters or diminished if they are added in the translated version (see also Hijazo-Gascón 2019 for further examples and discussion).

It is important to point out that second language speakers need to be included in any study of this kind. People who speak the relevant language of the country they are in as an L2 or even an L3 may have a very different understanding of certain meanings compared to L1 speakers, which can lead in turn to differences in the judgments they make. This was demonstrated in a recent study on English modal verbs by Filipović (2016), whereby a difference was observed between judgments about witness certainty between speakers of English as a first language and those that spoke English as an L2, driven by both L2 English pedagogical materials and learners’ one form-one meaning mapping preference.

The possibility that different languages impact speakers in different ways follows the well-known linguistic relativity hypothesis, (Whorf 1956), whereby different ways of carving up the continuum of reality via language may result in different views about the world, in this case differences in the understanding of the certainty conveyed by a speaker. Studies across different disciplines have shown that there are language effects on how witnessed events are remembered (Fausey and Boroditsky 2011; Filipović 2011, 2013, 2018, 2021). In the domain of evidentiality however, studies in relation to linguistic relativity have been scarce. One notable exception is the study by Tosun, Vaid and Geraci (2013) in Turkish, which shows differences in attitude towards previously given information depending on the source that was indicated for that information. Turkish is another language like Japanese with grammaticalised evidentiality and Turkish monolingual speakers and competent Turkish-English bilinguals in the Tosun et al. (2013) study tended to disregard (and not remember as well) information that was second-hand, whereas English speakers did not discard the information content that was marked as second-hand. Another recent study (Tosun and Filipović in press) on Turkish-English evidential meanings finds that different types of bilingualism have different effects on the way evidentials are understood in Turkish as an L1 and an L2. The authors explain that the strict distinction in meaning between first-vs. second-hand source of information in the Turkish

evidential system seems to be disappearing in heritage Turkish-English bilingualism and evidentials appear to assume more politeness-related meanings (i.e. distancing from the content of the statement) similar to the functionally comparable forms (e.g. modal verbs and adverbs), meanings, and usage patterns in the overall dominant language, English.

We can briefly conclude here that, according to the literature discussed in this section, grammaticalised evidentiality and its habitual and frequent use in Japanese could have led native speakers and learners of that language to develop a heightened sense of the different, more subtle categorisations of speaker certainty than speakers of languages like English have, where the different sources of information are not indicated as frequently or in the same amount of detail. However, grammaticalisation in one but not the other language need not automatically lead to linguistic relativity effects, there are many reasons for the effects not being there or not being strong enough to register under all circumstances (see Filipović 2019). This reasoning has led us to the hypotheses in our study and to the study design, which we introduce next.

4. Current study

4.1 Hypotheses

Based on the discussion in the previous sections we formulate the following hypotheses:

- i. speakers will make judgments of higher certainty overall for witness statements that do not contain evidentials in Japanese or their counterparts in English in comparison to statements that contain them, though the other function of these forms (indirectness-for-politeness) may detract from the strength of this effect
- ii. there is a three-way distinction between zero evidentials and first- and second-hand forms in Japanese *grammar*, while no such distinction is available in English, and thus it is plausible to expect cross-linguistic differences in judgments on speaker certainty depending on the reported source of evidence; however, studies of *usage* of evidentials in both monolingual and bilingual contexts leads us to hypothesise otherwise: the current erosion in the distinction between first-vs. second-hand evidentials in monolingual use (Narrog and Yang 2018) and the bilingualism-specific tendency to rely on shared meanings, structures or usage patterns whenever possible) (Filipović

and Hawkins 2019)⁴ leads us to hypothesise that the bilingual speakers of Japanese and English will *make similar judgments with regard to witness certainty*.

4.2 Design

The data collection for this study took place on-line using Microsoft Forms. There were 14 experimental items in total, 7 targets and 7 fillers. The target items all contained one of the relevant evidential particles (*yoo*, *rashi*, *mitai* or *ppo*) and they were taken from the Narrog and Yang (2018) chapter on Japanese evidentiality along with translations into English. The fillers were created for the purpose of this experiment and they do not contain these evidential morphemes but rather simple past tense markers in Japanese and the English version of the experiment had corresponding English translations with different uncertainty markers (seem to/look like/apparently). The dataset for analysis consisted of elicited participant judgments on a Likert scale for both target and filler items and of their translations by bilinguals. All the stimuli with target items in bold are given in Table 1 below:

	English	Japanese
i)	He always drank milk for breakfast.	彼はいつも朝食に牛乳を飲んでいました。 <i>Kare wa itsumo chooshoku ni gyuunyuu o nonde imashita.</i>
ii)	My mum went to a shop and bought me a new bike.	母はお店に行って、私に新しい自転車を買ってくれました <i>Haha wa omise ni itte, watashi ni atarashii jitensha o katte kuremashita.</i>
iii)	She was apparently not here.	彼女はここにいないようでした。 <i>Kanojo wa koko ni inai yoodeshita.</i>
iv)	He seemed to have some sort of complex.	彼は明らかにコンプレックスのようなものがあるようだった。 <i>Kare wa akiraka ni konpurekkusu no yoona mono ga aru yoodatta.</i>
v)	She liked travelling by train.	彼女は列車で旅をするのが好きでした。 <i>Kanojo wa ressha de tabi o suru no ga suki deshita.</i>

⁴ For further details about the relevant aspects of bilingual processing in this context see the model *CASP* (*Complex Adaptive System Principles*) for *Bilingualism*, which explains bilingual language acquisition, processing and use for different bilinguals under different conditions; see Filipović and Hawkins 2013, 2019; see also Filipović 2019 for multiple examples of *CASP* for Bilingual principles at work, including discussions on evidentiality.

vi)	The horses on that farm were very old.	あの牧場の馬は、とても年老いていました。 <i>Ano bokujo no uma wa, totemo toshioite imashita.</i>
vii)	But monkeys appeared to have their own goals.	猿にはしかし猿なりの目的があるらしかった。 <i>Saru niwa shikashi saru nari no mokuteki ga aru rashikatta.</i>
viii)	It seemed like he was worried about something.	なんか気にしてるっぽかった。 <i>Nanka ki ni shiteru ppokatta.</i>
ix)	There were not many good films to watch last week.	先週は良い映画があまりありませんでした。 <i>Senshuu wa yoi eiga ga amari arimasen deshita.</i>
x)	There seemed to be something there.	そこに何かいるようでした。 <i>Soko ni nani ka iru yoodeshita.</i>
xi)	It looked like they were checking the soil.	なにか土を調べてるみたいでした。 <i>Nanika tuchi o shirabeteru mitaideshita.</i>
xii)	I could not believe what she has just said.	私は彼女が今言ったことが信じられません。 <i>Watashi wa kanojo ga ima itta koto ga shinjiraremasen.</i>
xiii)	He looked pale.	彼は顔色が良くなかったらしいですな。 <i>Kare wa kaoiro ga yokunakatta rashiidesu na⁵.</i>
xiv)	I heard that she had gone to work abroad.	彼女は外国に働きに行ったと聞きました。 <i>Kanojo wa gaikoku ni hataraki ni itta to kikimashita.</i>

Table 1: Experimental stimuli (target items in bold)

4.3 Participants

We recruited monolingual native speakers in Japan and the UK for the monolingual tasks in Japanese and English respectively, and bilingual speakers in the UK for the bilingual task. We did not have enough bilingual participants who were residents in Japan to include in our analysis, but we comment on the importance of the country of residence in *Data Analysis* section. One of our bilingual groups consisted of Japanese L1 speakers who learned English as an L2 from the average age of 14 and were all UK residents. Our second bilingual group consisted of students of translation and interpreting at a UK university who were all native

⁵ We used *rashi* here instead of *yoo* (see example 1 in Section 2.1) because we wanted to see how the second-hand information would be rendered into English. We realised it was not rendered at all. All translations were the same: “he looked pale”. This is important to note because relevant piece of information (i.e., that the speaker was definitely not witnessing the state of somebody personally) may be lost in this way.

speakers of English (or bilinguals in English and another European language) and who had had a similar amount of instruction in Japanese (4th year finalists). The total number of participants was 100. However, only data from 76 was included in the analysis. The reason for excluding the 24 was the significant difference in the metadata that could have seriously skewed the necessary uniformity of our populations. The excluded participants were from the two bilingual groups. They differed from the majority in that they were in a different country of residence from the rest of the group (e.g. Hong Kong, Singapore or USA) or because they acquired the L2 significantly earlier (or later) than the majority. These are factors that are known to impact L2 language and processing, but we did nonetheless look at the performance of some of these excluded participants and report some relevant insights in the Data Analysis (Section 4.6). We ended up with 26 monolingual Japanese speakers, 21 English monolinguals, 16 L1 Japanese/L2 English bilinguals and 13 L1 English/L2 Japanese bilinguals.

4.4 Procedure

Before the start of the experiment the participants provided the relevant metadata that enabled us to ensure we had uniform populations with comparable language and experience backgrounds, namely age, age of acquisition for their language(s), country of residence and the daily amount of usage for each language. This was followed by the task instructions, which informed participants that they would see brief statements from witness interviews⁶ and that their task was to judge how certain the speaker is based on the statement given on a scale from 1 (very uncertain) to 5 (very certain). The two bilingual groups were also asked to translate each statement as well as making judgments on the certainty scale. The items were presented sequentially: the next item would appear only after the previous one had been completed. Both bilingual groups translated from their weaker (L2) language (either English or Japanese) into their stronger (L1) language (Japanese or English respectively).

⁶ We acknowledge here that our stimuli contain single sentences, not full witness narratives, and that judgments about witness certainty may be difficult to make based on a single statement of this kind. We are aware of this issue but we still think that our stimuli helped us address the key research questions at hand, i.e., whether the evidentials still refer primarily to information source or just indicate distancing from the content in the statement (and thus appear the speaker less committed) and whether the same judgments about speakers are elicited in the two different languages. Based on the results obtained, we are confident that our elicitation tools served this specific, albeit narrow purpose well. None of our participants had a problem with the request for judgment in the experiment or expressed difficulty in performing the task. One advantage of the present experimental elicitation set-up is that it enabled us to recruit significant numbers of participants in challenging (pandemic) times.

4.5 Results

Prior to the inferential analyses, the data were examined for potential outliers and skew. There were no data points (for each group) falling more than 3 standard deviations from the mean. The means for the critical (Japanese evidentials or English uncertainty markers) and filler (no evidentials or respective uncertainty markers) items for each of the four groups is shown below (see Figure 1).

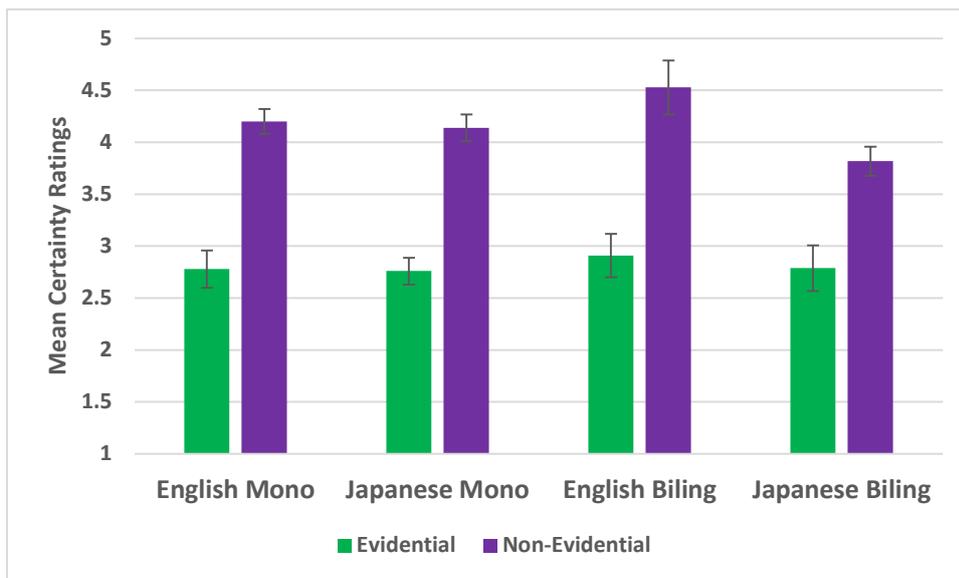


Figure 1: Mean ratings for speaker certainty

As can be seen in the figure, the means for critical items (containing evidentials in the Japanese version and their counterparts in the English version) were below 3 (i.e. the mid-point of the Likert scale). In contrast, the means for the filler items were all critically above 3, indicating a good degree of certainty. A 4×2 (group \times evidentiality) mixed model ANOVA showed a significant main effect of evidential $F(1,69) = 243.39, p < .001, \eta^2 = .78$. The main effect of group $F(3,69) = 1.11, p = .35, \eta^2 = .05$ and the interaction $F(3,69) = 1.51, p = .22, \eta^2 = .06$ were not significant. In addition, there were no changes in these results when controlling for age.

We followed up this analysis in two ways. The first was that we conducted four paired samples t -tests to ensure significant differences in each group, especially given the lower number of participants in the bilingual groups. Results showed that each t -test was significant (English monolinguals: $t(20) = -13.63, p < .001$, Japanese monolinguals: $t(25) = -7.91, p < .01$, English

bilinguals: $t(12) = -13.54, p < .001$, Japanese bilinguals: $t(12) = -4.45, p < .01$). The second was that we conducted one-sample t -tests using a test value of 3. This indicates whether the mean value is significantly above or below 3. Results showed that the filler (no evidential) trials were all rated significantly above 3, suggesting that participants believed the speaker to be “certain” (English monolinguals: $t(20) = 10.36, p < .001$, Japanese monolinguals: $t(25) = 11.47, p < .001$, English bilinguals: $t(12) = 11.18, p < .001$, Japanese bilinguals: $t(12) = 3.17, p < .01$). In contrast, the critical trials which contained evidential or uncertainty information, participants' mean ratings were not significantly different from 3 (English monolinguals: $t(20) = -1.21, p = .24$, Japanese monolinguals: $t(25) = -1.80, p = .08$, English bilinguals: $t(12) = -.395, p = .70$, Japanese bilinguals: $t(12) = -.991, p = .34$). This indicates that speakers in all groups did not believe that the speaker was certain or necessarily uncertain if these markers were used, but instead, somewhere in the middle. We discuss why such a ‘middle-level certainty’ finding may be the case and why a clearly lower certainty rating was apparently not triggered by evidential meanings (see the next section).

Overall, the certainty ratings were *significantly lower* if an evidential form in Japanese or its translation equivalent in English was present than if bare past tense/no evidential was given in both languages and across all the groups. There was no statistically significant difference between the ratings for *yoo* (first-hand) vs. *rashi* (second-hand) in either of our two groups who did the Japanese version of the experiment (Japanese monolinguals and L1 English-L2 Japanese bilinguals). These results give support to both of our hypotheses. We explain below (Section 4.6) the rationale for this confirmation.

4.6 Data Analysis

In this paper, we had two main goals, related to our two hypotheses: i) to determine whether the presence of evidential forms in Japanese and the corresponding counterparts in English can have a significant effect on judgments about certainty, and ii) to see whether, despite the differences in the related meanings and forms between the two languages, judgments about degrees of certainty would be similar in the two languages because of usage factors in both monolingual and bilingual contexts.

It is clear that, when it comes to the comprehension of evidentials, the monolinguals and bilinguals in our study are equally affected by the presence of the evidentials and their counterparts in both languages respectively. Although the evidential morphemes of Japanese

and the corresponding words and constructions of English can be, and often are, used in both cultures as pragmatic signals of distancing for politeness and not necessarily indicators of uncertainty (as we saw in Section 2), the majority of our participants judges a witness who expresses evidential meanings to be less certain.

However, there was still a significant percentage of responses in all groups who rated the witnesses statements with evidentials (Japanese) or with uncertainty words or phrases (English) to be either quite certain (rating 4) or very certain (rating 5). The fact that the numbers of such participants are not negligible and comparable across all 4 participant groups (between 22% and 32%) indicates that there may be *some cultural parallel tendencies in understanding indirectness-as-politeness (or as discourse practice) rather than as indicator of (un)certainty*. This finding is similar to the finding of the shift in the meaning of evidentials in the use by some English-Turkish bilinguals (Tosun and Filipović in press) and it offers an intriguing line of investigation for the future. Both Turkish evidentials and their respective English equivalents seem to be increasingly used for distancing-for-politeness by different bilingual speakers, and this overlap in function in both languages, as well as the social environment (US/UK) in which evidentiality is not grammaticalised in the dominant language, may together drive the shared meaning and usage preferences for bilinguals (as per CASP for Bilingualism model predictions; see Filipović and Hawkins 2019). It need not be just bilinguals whose use of two languages is changing one or both of them. In the current study we see that at least some monolingual Japanese speakers do not seem to draw certainty distinctions between statements with vs. without evidentials (though the majority still does).

Furthermore, it may be the case that some speakers of some other languages and in other environments would find an even bigger gap in speaker certainty levels between expressions with vs. without evidentials or their equivalents. It will be intriguing to explore this sociolinguistic factor further as well as cross-cultural and cross-linguistic discourse practices in L1 and L2 environments, and to study the linguistic behaviour of speakers of some other languages such as Russian or German, who do not habitually use indirectness for politeness (or use it much less than British English speakers do; Ogiermann 2009). Perhaps their ratings for witness uncertainty in the cases where *seems/looks like/appear to be* will be more uniform, whereby there will be no, or hardly any, outlier participants (that we had in our study) who think that such expressions *do not* indicate uncertainty. In other words, we would predict that speakers of the languages where indirectness is not used for politeness would see indirectness as a clearer and stronger indication of uncertainty.

Our second hypothesis was also confirmed: we got the same effect on judgments in both Japanese and English in spite of the explicit, consistent and frequent expression of grammaticalised evidentiality in Japanese and lexical/constructional rendering of evidentiality-related meanings in English. We believe there are two main reasons for this, one that accounts the results in each (monolingual vs. bilingual) cohort. In monolingual Japanese usage we seem to have a confirmation that the marked distinction between first-hand sources such as *yoo* and those that indicate second-hand sources of evidence such as *rashi* are becoming blurred in current Japanese usage, as Narrog and Yang (2018) indicated, so any potential to rely on this system for subtle judgments on speaker certainty does not seem to be there. With regard to our bilingual results, we seem to have a confirmation that all bilinguals (heritage speakers and L2 learners) tend to be very aware of the evidential meanings in question⁷. First, evidentials are consistently translated in both directions by our participants- omissions of evidential information from the original are only rarely and sporadically encountered in the elicited data. Our main finding in this regard is that *all Japanese evidentials are mostly translated in the same way*, by “seem” or “seem like”. In the other direction, the different English phrases expressing less certainty are mainly translated by *yoo*, by a large majority of the subjects. Here are some examples:

3) 猿にはしかし猿なりの目的があるらしかった。

Saru niwa shikashi saru nari no mokuteki ga aru rashikatta.

It seems that monkeys have a purpose which only they know about.

4) そこに何かいるようでした。

Soko ni nani ka iru yoodeshita.

It seemed something was there.

5) It seemed like he was worried about something.

彼は何かを心配しているようだった。

Kare wa nanika o shinpai shiteiru yoodatta.

6) It looked like they were checking the soil.

彼らは土を調べているようだった。

Karera wa tsuchi o shirabete iru yoodatta.

Even though the use of *yoo* vs. *rashi* does not seem to effect judgments about the level of witness certainty or information source reliability, we can potentially make other important inferences about the reported events depending on which one is used by the speaker. For example, if a witness of crime uses *yoo*, we may infer that he/she saw something in person, which implies that he/she was at the scene of the crime. By contrast, if *rashi*, is used we are more likely to infer that the person found out the information from a third party, without being at the scene of the crime. This assumption needs empirical testing, especially since erosion in the distinction of meaning between *yoo* and *rashi* in both native Japanese has been reported (Narrog and Yang 2018).

5. Implications for practical contexts

We have shown in this study that the presence of certain linguistic features such as evidentials impacts judgments that language users make; this can be very important especially in some sensitive social contexts, such as legal or medical communication, and thus awareness should be raised about such judgments in education contexts such as translator and interpreter training. We showed that speakers in our mock witness statement experimental context can be judged to be less certain and less reliable when their statements contained evidential meanings, namely evidential morphemes in Japanese and their lexical/constructional counterparts in English. The main finding of our study is that there is a significant difference, in both languages, between the absence of these features, which leads to judgments of greater certainty, and their presence,

which leads to less certainty. This finding contributes to our understanding of how witness testimony is interpreted by potential juries and further confirms previous findings in the applied linguistics literature about language and judgments in real-life courtrooms and in experimental courtroom scenarios (Berk-Seligson 1990, Trujillo 2003, Filipović 2016). Crucially, we showed it is very important to keep evidential meanings cross-linguistically, when interpreting and translating. Explicit instruction in this regard, especially in the training of language professionals such as translators and interpreters, is likely to be beneficial, evidential meanings have been shown to be omitted in translation before (Tosun and Filipović in press). As Berk-Seligson (1990) has pointed out, linguistic elements that are low in semantic content (such as hedges or distancing expressions including evidentials) are most often either omitted in translation or else added when they are not actually given in the original text. In both cases, the overall meaning is affected, and that in turn can have real-life consequences, potentially serious ones in contexts such as the law or medicine. Explicit instruction would also facilitate the acquisition of this complex semantic and pragmatic category for speakers who do not reside in the L2 environment and who find it harder to acquire the lexical equivalents for the grammatical categories of their L1 (see Ishida 2006). Trainee translators and interpreters may benefit from being taught explicitly about the correspondences in meaning across languages in order to facilitate acquisition and to heighten awareness about the effects that evidentials and their cross-linguistic counterparts have on understanding what is said and in order to ensure exact translations on all occasions, especially in highly sensitive social contexts of communication such as legal and medical.

6. Caveats, Conclusions and Future Directions

In this paper we have shown that, overall, grammatical evidentials in Japanese and their lexical/constructional counterparts in English do significantly impact judgments about witness certainty across different languages in an apparently similar way even though they do not convey different kinds of information. Further, we detected that for some speakers (roughly a quarter of participants in each group) the presence of Japanese evidentials and English uncertainty markers in witness statements does not seem to signal lower certainty (See Section 5, Discussion). This possible variability in judgments is important to bear in mind and it is therefore advisable to *explicitly elicit more precise estimates of certainty* when interviewing

witnesses (e.g. by asking for judgments on a scale or requiring a more precise description). In addition, it would be useful to include post-hoc research participant interviews in order to obtain explicit information about how exactly evidential and other certainty indicators are understood. For instance, it may be the case that even though judgments about witness certainty are the same in a language with evidentials and in one without, the language with evidentials could still reveal more, namely whether the speaker was actually present at the crime scene and obtained information visually or whether he/she was not there but obtained information through a third party. It may be important for law enforcement purposes to know precisely how the witness obtained the information, which, if evidential meanings have not completely merged into one another, would still be conveyed in Japanese, but less readily when the interview language is English or a translation from Japanese into English. This is another promising line of research for the future.

We also need to mention another caveat that will be evident in this study. One is the low number of experimental items, of which we are well-aware. At the time we were beginning our study we were constrained by the Covid-19-related lockdowns worldwide. We had to create stimuli that could be completed in the shortest possible time (20 minutes total) and that people were willing to carry out on-line under very difficult circumstances and with unremunerated participation.

The use and understanding of evidentials and corresponding indicators of uncertainty in languages without evidentials should also be examined further in a full discourse setting and with a focus on *comprehension* as was done here. Production studies from the previous literature discussed in Section 2 have found differences in usage patterns, both between English and Japanese monolinguals and between monolinguals and L2 learners. However, in comprehension, our study has shown that there was no difference. Further research, using larger portions of witness narratives as stimuli instead of single sentences needs to confirm this finding. If, in spite of the reported higher frequency of evidential information in Japanese production (within each sentence of a discourse chunk) than in English production (at the beginning of the relevant discourse portion), we obtain the same judgments about witness certainty levels, the results of our study would be reinforced. Otherwise, they will hold for sentence level processing only, which would still be informative and useful in practice.

Further research should also include different bilingual populations as well, in particular second-generation heritage speakers as well as L2 learners who are still resident in an L1

country in addition to first generation migrants and L2 learners, as in our study, because different bilinguals use and process languages differently. It does appear that residence in the L2 country, or explicit university-level specialisation in the L2 as is the case with our bilingual groups, establishes a competence in the use and understanding of evidentials in both languages and in the patterns of equivalence between them, but the same may not be the case with other, different bilingual populations (see Filipović 2019, 2021 for a recent critical overview of, and details on, multiple factors in SLA and future research). It is also important that we encourage investigation of the effects that different language contrasts may have on different practical contexts of use (e.g. legal, medical, and), as envisaged within the Applied Language Typology research programme (Filipović 2017a, 2017b). Numerous studies, some of which we referenced here, have shown that certain language contrasts lead to significant cognitive effects on memory, categorisation and judgments. In this present study our language pair has shown, perhaps surprisingly, more similarities than differences in the real-world consequences of typological contrasts, though subsequent research may indeed show differences, as we indicated. Crucially, we show there can be mismatches in predictions about linguistic behaviour that stem from the contrast of grammar vs. usage, which is an interesting avenue to explore in applied pragmatics research in general.

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