'You might want to tone down your advice.'

An experimental investigation of the speech act of advice in French

Emma Corbeau[1] and Gabriel Thiberge[1]

[1] *Université Paris Cité, CNRS, Laboratoire de linguistique formelle*

Abstract

We present experimental results from a web-based study on the speech act of giving advice in French. 86 L1 speakers of French had to continue short and written fictitious interactions we created, in which we manipulated the adviser's level of experience (explicitly experienced, explicitly inexperienced or no precision) and the hierarchical relationship between adviser and advisee (top-down, bottom-up, equals). Participants had to choose between four types of continuations, from indirect strategies to direct prototypical imperative strategies, with variations of the face-threatening value in some continuations, as per Brown & Levinson (1987)'s politeness theory. Main results from Bayesian regression analyses indicate an overall preference for indirect strategies in French, but also suggest influences from the level of experience and hierarchical relationship. These results will allow for a better understanding of advice as a speech act and contribute to a growing body of work in experimental pragmatics.

Keywords: French; advice; politeness theory; experimental pragmatics; sociolinguistics; quantitative data; Bayesian modeling

1. Introduction

This paper proposes a taxonomy of the strategies that are actually used in interaction to realize the speech act of advice by L1 adult French speakers, by way of an experimental procedure allowing for a quantitative and systematic approach. There is still a dearth of experimental studies on this specific topic, in line with a need for more experimental studies in pragmatics (Sperber & Noveck, 2004), and for quantitative experimental studies in the general area of language sciences (Gibson & Fedorenko, 2010). In their work, Sperber & Noveck (2004) give arguments in favor of approaching pragmatics from an experimental perspective, by doing a comparison with psycholinguistics. Their main argument is that experiments allow confirming or disconfirming hypotheses about language, when pragmatics have historically mainly relied on the researcher's own intuitions to establish theories, which has made it difficult to judge the validity of these theories in real communication. Sperber & Noveck (2004) argue that theories are often too vague, leading other linguists to deduce different ideas from the same theory, and they suggest combining experimental evidence to assess the validity of the researcher's intuitions and to refine them. Experimental methods developed in psychology also allow for the gathering of authentic linguistic data upon which better theoretical models of what language is can be built. Well-conceived paradigms can indeed enable researchers to see what can and what cannot be done in communication, in a systematic way with lots of data points. These methods open the door to understanding the view from the speakers of a given language themselves (on each of their individual scales combined), rather than by postulating an idealized theory about language (Locher, 2006).

With the present study, we aim to bring quantitative evidence shedding light on the diversity of forms that French speakers can and do use to give advice in a variety of communicative situations, to complete and refine what little work has been produced on that

matter. There has been much progress in the last decade on the study of the speech act of advice in English as a Second Language (ESL), and on its acquisition by adult learners (e.g. Farashaiyan & Muthusamy, 2016; Tsai & Kinginger, 2015), but also on the acquisition of advice in L2 for languages other than English (e.g. Vehviläinen, 2009 for Finnish; Widiana et al., 2018 for Javanese; Takahashi, 2017 and Hoshino, 2005 for Japanese). However, in French as a Second Language, there is still little to no work on the matter. We conducted the present study as a mean to build a typology of advice in French that could be used as reference in French as a Foreign Language (FFL) settings.

We will first give a summary of the general theoretical background regarding the speech act of advice, which we used as a foundation for choosing our experimental paradigm and conditions, and to build our materials. After presenting our methodology and protocol, and providing our reasoning on why we chose the Bayesian framework for the statistical analysis, we will present our main findings: a general preference for using indirect and non-imperative strategies to give advice in French (contrary to what one can often find in FFL teaching manuals), and influences on the preferred forms from both the hierarchical relationship between adviser and advisee and the level of experience of the adviser. Afterwards, we will discuss on the approach used, and then compare our experiment with another work done on this speech act (Farenkia, 2019).

2. Previous work on the speech act of advice

In this section, we present a short summary of some theoretical works that guided our investigation, alongside with previous works on the speech act of advice in English as well as in French that helped us refine our approach.

2.1 Theoretical background

Our approach is inspired by two major theoretical trends in pragmatics: Speech Act Theory (Austin, 1962; Searle, 1969) and Politeness Theory (Brown and Levinson, 1987). Regarding Speech Act Theory, Austin (1962) posits that an utterance can be analyzed on three different levels: the 'locutionary force' or '*what is actually said with words*'; the 'illocutionary force' or '*what is done with words by the speaker*'; and the 'perlocutionary force' or '*what action is performed by the hearer because of the words*'. Firstly, Austin (1962) introduces five macro-classes of illocutionary acts for which Searle (1976) later suggests the following alternative taxonomy: declaratives, representatives, commissives, directives and expressives. The speech act of advice falls into the 'directives' category, which comprises all the speech acts aiming to change the hearer's actions, along with other speech acts such as requests or orders. Martínez-Flor (2005) further distinguishes two sub-categories of directives: the ones that compel the hearer to do something, and the ones that do not and add another criterion to distinguish them by adding that the directives of the first sub-category only benefit the speaker, while the directives of the second sub-category benefit at least the hearer (sometimes both the hearer and the speaker). In this classification, orders and requests are instances of speech acts that fall into the first sub-category while advice belongs to the second. Such a categorization is important to understand how advice must be treated carefully, due to its intrinsic nature as a directive act (by nature occurring between two parties), and how it must be treated differently than requests for example, which is a speech act that has been studied more frequently.

For a speech act to be felicitous, Searle (1969) proposes four felicity conditions: a propositional content condition (1), a preparatory condition (2), a sincerity condition (3) and an essential condition (4). Regarding the speech act of advice, the first condition states that the speaker has a future action to suggest to the hearer. Secondly, the preparatory condition deals with the speaker having some reason to believe that the suggested action will benefit the hearer.

It also includes the uncertainty for both interactants that the hearer would have done the action if it would not have been advised. Thirdly, the speaker must sincerely think that their advice will benefit the hearer. Lastly, the advice given must be the best advice the speaker could give. In relation to the first preparatory condition, we argue that having expertise on the topic could give a valid reason for the speaker to give advice, as also mentioned in Goldsmith and MacGeorge (2000). As a consequence, we decided to take into account the adviser's expertise in the conception of our materials and made it one of our experimental conditions: we varied the degree to which the adviser is supposedly experienced – and thus legitimate – when giving advice.

From another angle, Brown and Levinson (1987) lays ground for their so-called Politeness Theory. It relies on the principle of 'face' which is anyone's own public image, and on how this principle is managed in communication. According to this body of work, each individual has two faces: a positive one and a negative one. The positive face is our need to be recognized and liked by others, while the negative face represents our independence and freedom of actions and choice. In daily communication, there are situations where both faces could be threatened, either individually or together. Brown and Levinson call these instances 'Face Threatening Acts' (FTAs). In their view, there are different ways to handle an FTA. The speaker can simply avoid it by refraining from accomplishing the speech act. If the speaker actually performs the FTA, they can do it 'off-record' or implicitly, in an indirect fashion. If the speaker chooses to perform the FTA directly, it is said to be 'on-record baldly'. However, the theory states that there are strategies to soften the FTA. In relation with each face, the speaker can use positive politeness strategies which enhance the positive face or/and negative politeness strategies which respect the negative face of the interlocutor. This theory is ultimately relevant to analyze the speech act of advice because it belongs to the directives of Austin (1962)'s classification. As discussed by Kerbrat-Orecchioni (1994), directives threaten the negative face of the hearer, and Goldsmith and MacGeorge (2000 : 236-7) even argue that advice can be an FTA to both faces: it may threaten the independence of the hearer (which touches upon the negative face) but it also could '[suggest] that the other would not act wisely on his or her own' (which touches upon the positive face). Banerjee and Carrell (1988) already stated that advice is an FTA for both the hearer's negative face and for their positive face, and they argue that giving advice too abruptly could render the speaker despised by the hearer.

2.2 Why the study?

Previous studies investigated the speech act of advice in English among L1 speakers and learners of English (e.g. Hinkel, 1994), or applied results of other studies to the field of teaching English as a Second Language (ESL) (e.g. Martínez-Flor, 2005). The underlying motivation for our study is similar, in that our findings are important to the didactics of French language teaching. Hinkel (1994) investigates English adult learners' realization of the speech act of advice in English, while theorizing that L2 speakers often use advice as a way to socialize in English. In French, the Larousse dictionary (n.d.) highlights the situation of giving advice to a friend in its example phrase for the definition of the word 'conseil' (*advice*). Also bearing in mind this social importance of the speech act of advice, our study aims to suggest a typology of strategies available to French L1 speakers and learners to realize it.

Other researchers have shown an interest in the quantitative study of speech acts. For instance, Blum-Kulka (1987) analyzed requests as a part of the CCSARP project (Cross-Cultural Speech Act Realization Patterns), whose purpose was to study requests and apologies cross-culturally in eight languages by using comparable methodologies across languages and speech act. In a previous article, Blum-Kulka (1985) provides two arguments in favor of speech act research: 'a) to provide us with a better understanding of how human communicative

interaction is carried out via linguistic realizations. b) to describe similarities and differences in the ways in which such interactions are carried out under similar circumstances across languages or cultures.' (Blum-Kulka, 1985: 17). Here, studying speech acts can help us deepen our understanding of how actual language is performed and how human linguistic interactions are carried out as a whole. These considerations can then be used, in class or in the making of pedagogical materials and textbooks, to improve foreign language teaching for example.

Blum-Kulka (1987) aimed to gain an understanding of requests in English and in Hebrew in terms of indirectness and politeness. To do so, she conducted four experiments in the format of Discourse Completion Tests (DCTs) with a nine points scale. L1 speakers of Hebrew and L1 speakers of English were asked to rate the directness of utterances where certain types of strategies were used for requests, respectively in the first and the second experiments. In the other two experiments, other L1 speakers of Hebrew and English were asked to rate the politeness of the same utterances. In her results, both groups of L1 speakers chose the same strategies on both extreme sides. Indeed, regarding directness, both groups rated 'imperatives' as the most direct strategy and 'hints' as the least direct. With regards to politeness, 'query preparatory' (e.g. 'could you') was rated the most polite and 'imperatives' as the least polite strategy. However, there were some differences in the ranking of available strategies between languages. For instance, query preparatory was rated less direct in Hebrew than in English; want statements ('I want/would like') were rated less direct in English than in Hebrew. Other differences could be spotted in the politeness scale. Hints were perceived as more polite in English than in Hebrew, and hedged performatives ('I would like to ask you…') and performatives ('I'm asking you to move your car') were rated more polite than hints in Hebrew but it was the opposite in English. From her results, she highlighted the fact that the most indirect form was not always associated with the most polite strategy in every language, which is something we took into consideration when building our materials. A more recent literature has been developed on the work of Blum-Kulka (1987) (Lwanga-Lumu, 1999; Ogiermann, 2009; Tawalbeh and Al-Oqaily, 2012), bringing new insights on the relationship between directness and politeness. However, since all these studies deal with requests and not advice, we will not expand further on those and we will rather focus on studies related to advice specifically.

2.3 Previous studies on advice

Blum-Kulka (1985, 1987) are very inspirational quantitative work, which we took into account for our own study, but as for the specific act of advice, Banerjee and Carrell (1988) are, to our knowledge, the first to systematically study it, by investigating its realization in American English and by learners of English. Using Brown and Levinson (1987)'s politeness theory as their theoretical background, they studied the influence of the awkwardness of the situation on giving advice. Their experiment consisted of a discourse completion questionnaire (DCQ) with 60 situations where the participant was asked to write what they would answer. Participants were 28 L1 speakers of Chinese or Malay learners of English and 14 L1 speakers of American English. The results show that there was no difference in the proportion of direct and indirect advice between both groups; however, the authors noticed differences among the politeness strategies used with some 'clumsiness/faux-pas' in the learners' answers.

As previously mentioned, Hinkel (1994) conducted an experiment on English with L1 speakers and learners of ESL from different nationalities. Participants had to fill in a multiple-choice questionnaire (MCQ) with 16 situations in which the relation of power with the interlocutor was changed: half of them were with a 'social superior' (Hinkel's terminology) and the other half with a peer acquaintance. In the results, even though L2 speakers were more direct than L1 speakers with a 'social superior' addressee, they were aware of the social distance

between them and their addressee in both scenario (p.81). More recently, Goldsmith and MacGeorge (2000) also ran an experimental investigation on English. Their goal was to explore the reasons why advice can be perceived as an appropriate but also an inappropriate way to answer to someone's problem, based on Brown and Levinson (1987)'s politeness theory. We will further detail both experiments in the next section since they helped us design our own experiment.

Based on previous studies on English, Martínez-Flor (2005) provides a typology of some strategies used to realize the speech act of advice in that language. As many others, she also relies on Brown and Levinson (1987)'s politeness theory to present some factors to take in consideration when giving advice: the urgency of the situation, the degree of embarrassment in the situation, and the social distance and power between the speaker and the hearer. The typology she suggests presents three main strategies: direct, conventionalized forms and indirect. However, she does not address the issue of whether these strategies should be used differently according to who the addressee is, or if other elements from the context of interactions should be taken into account. Hosni (2020) also takes an interest in the relationship between directness of speech act and politeness from the perspective of Brown and Levinson. She suggests an influence of three parameters (social distance, social power and level of imposition) on the realization of advice giving in Egyptian Arabic and American English.

As far as we are aware, there is a general lack of studies on the speech act of advice in French, and even more so that are grounded in quantitative data. Furthermore, the existing works dealing with advice are not driven by pragmatics considerations. For example, *Un niveau seuil* (1976) is a book that aims at providing example sentences to realize all speech acts in French. However, no context is given to the listed sentences, so the reader cannot know who the sentences are being addressed to nor the topic of the conversation nor in which situation it is taking place. The reusability of these examples is thus very limited. A second work is specifically addressed to French teachers with an audience of Japanese learners of French. Delbarre, Nishimori and Miyazato (2017) list grammatical notions of French useful to beginners, and find equivalent structures in the grammar of Japanese. While the language specific aspects of this work are very well-thought, there is again no broader context to example sentences. Neither the importance of the interlocutor nor the situation are mentioned, and no pragmatic nor sociolinguistic nuances can thus be taken into account.

In a more recent work, Farenkia (2019) studies the speech act of advice in two varieties of French, namely the Canadian and the Cameroonian varieties. This study and ours, which focus on a more general variety of French spoken in France, are then slightly different in their scope. Furthermore, the aim of Farenkia's paper studies the differences of realization of a specific speech act in different varieties of a language to highlight the particularities of these sociolects, which is not our purpose. Even though our goal and methodology differ, there are however similarities in the strategies identified in our experiment and in Farenkia's participants' answers, which we will further discuss in the last section.

From all the elements presented above, it appears much work has already been done in English to analyze the speech act of advice, sometimes with the explicit goal of applying the findings to the didactics of ESL. Meanwhile, few studies have been done in French, and even less so with the purpose of applying it to French didactics. Our study tries to answer this void, with an experimental and quantitative investigation of how French speakers give advice in an interaction setting, while trying to take into account a variety of sociopragmatic factors, such as the social status of the adviser and advisee. Inspired by other studies, our study provides a first typology of grammatical forms and strategies used in French, following the different politeness strategies described in Brown and Levinson (1987). In the experiment we present in the next sections, we deliberately do not let the results from studies on the English language influence our methodological choices, in order to not miss potential differences between the

languages (for example, we did not exclude any strategies *a priori*). However, we did take some inspiration from this body of work to refine the design of our experiment and materials. Recent studies on the speech act of advice with ESL learners or L1 speakers of other language than English mainly use two methodologies. Some of them use an open discourse completion task where participants freely complete interactions (Farashaiyan & Muthusamy, 2016; Widiana et al., 2018) completed with interviews (Farashaiyan & Muthusamy, 2016), while others conduct more qualitative conversational analysis (Hoshino, 2005; Vehviläinen, 2009; Takahashi, 2017). In our experiment, we opted for a more straight-forward quantitative research method, with a closed-choice completion task where we provided participants six different strategies they had to choose from. This allowed for a more systematic approach to the data we gathered and to have a more robust analysis of the difference between the experimental conditions we manipulated (effect of some sociopragmatic variables on the choices made by participants).

3. Methodology

3.1 Protocol and procedure

Building upon the few previous experimental investigations on the speech act of advice, we designed a Multiple Choice Questionnaire (MCQ), similar to Hinkel (1994). During the task, participants had to complete a series of fictitious dialogues we created, by choosing between four possible answers we provided, which we varied in terms of grammatical form (here, mainly characterized by verbal mode) and politeness (positive or negative, direct injunction with an imperative form or indirect strategies).

In total we created 18 target items in which a character A gives advice to a character B. Each item was composed of six parts as laid out in Table 1. In Hinkel (1994), each question mentioned the social status of the interlocutor and the situation in a very short text of context. In our experiment, the first sentence gives information on where the conversation is taking place. Then the social dynamics of characters A and B are presented, which could vary between 'bottom-up', 'top-down' and 'equals'. Inspired by Hinkel (1994), who only included two relationships (bottom-up and peer acquaintances), we added a top-down level to this variable, to assess whether someone of a higher social status would give advice in a more direct fashion. Afterwards, more context is given, including the issue character B is facing and how they complain about it explicitly or simply mention it mindlessly. The fourth part consists of character A starting their turn by either explicitly mentioning their experience with the matter at hand, explicitly mentioning their inexperience, or not mentioning anything about it. After a reminder of the general instruction (fifth part, 'Choose the best sentence to continue the dialogue'), four different versions of the same advice are listed.

Context	A et B discutent pendant leur pause, devant la fontaine à eau de l'entreprise.		
	A and B are talking during their break, in front of the water fountain of their company.		
Relationship	*Bottom-up*	*Top-down*	*Equals*
	A est employé et B est son patron.	A est patron, B est son employé.	A et B sont collègues
	A is an employee and B is his boss.	*A is a boss and B is his employee.*	*A and B are colleagues.*
Context	Ils remarquent tous les deux le grand ficus au bout du couloir. B se demande s'il devrait acheter un ficus identique pour égayer son bureau.		
	They both notice the tall Ficus tree at the other end of the corridor. B is wondering if he should buy a similar Ficus tree to brighten up his office.		
	A veut donner son avis.		
	A wants to give his opinion.		
Experience	*Explicit experience*	*Explicit inexperience*	*No precision*
	Je m'occupe de plantes chez moi, notamment tous types de ficus et…	Je n'ai pas du tout la main verte mais…	Ø
	I take care of plants at home, especially all type of Ficus trees and…	*I really don't have a green thumb but…*	
Instruction	Choisissez la continuation qui vous semble la meilleure :		
	Choose the best sentence to continue the dialogue:		

Strategies	*Direct*		Mettez-en // **Mets-en*** un dans ton bureau.
			Put one in your office.
	1st version	*Positive politeness (conditional)*	Vous pourriez // **Tu pourrais** en mettre un dans votre // **ton** bureau, ça apporterait une touche de couleur.
			You could put one in your office, it would bring a touch of color.
		Negative politeness (indicative)	Ce n'est pas une mauvaise idée, d'en mettre un dans votre // **ton** bureau.
			It's not a bad idea to put one in your office.
	2nd version	*Positive politeness (indicative)*	Vous pouvez // **Tu peux** en mettre un dans votre // **ton** bureau, ça apporterait une touche de couleur.
			You can put one in your office, it would bring a touch of color.
		Negative politeness (conditional)	Ce ne serait pas une mauvaise idée, d'en mettre un dans votre // **ton** bureau.
			It wouldn't be a bad idea to put one in your office.
	Indirect		On dit que les ficus apprécient une pièce bien éclairée, comme nos bureaux.
			They say that Ficus trees like to be in a bright light room, like our offices.

*The words in bold signal an adaptation of the dialogues with 2-person-singular pronouns and verbal morphology, which we used in the 'equals' condition to better account for social proximity between characters A and B ('tutoiement' in French, as opposed to the use of 2-person-plural pronouns and morphology, 'vouvoiement', which is used in less informal interactions)

Table 1: Example of an item with all its possible variations (item #4)

In order to test the importance of the verbal mode while respecting our restrictions on some strategies, we chose to have two versions of each of the politeness strategies (positive and negative) one with indicative present and one with conditional present. As for the *bald on-record* strategy, following Brown and Levinson (1987), it was in imperative mode, and the indirect strategies had no specific grammatical form attached to it. To avoid having two identical sentences differing only by the verbal mode in the possible answers, we only presented 2 versions of the four possible positive/negative politeness strategies to participants, in the following manner: half of the participants saw the first combination for items 1-9: positive politeness with conditional mode and negative politeness with indicative mode, and the second combination for items 10-18: positive politeness with indicative and negative politeness with conditional. The other half of the participants saw the complement of this: second combination for items 1-9 and first combination for items 10-18. On top of these two strategies, all

participants saw the indirect and imperative strategies for all items. The order of presentation for the four possible answers was randomized across items and participants.

Our dependent variable was the form chosen by participants as the best continuation for each dialogue. Following the two different theoretical perspective we adopted, i.e. Speech Act Theory and Politeness Theory, we analyzed this dependent variable in two different directions. We first compared the different grammatical forms (imperative for the direct strategies, conditional, indicative and indirect formulations, see section 4). We also compared the different politeness strategies (direct with imperative verbs, negative politeness, positive politeness strategies, and indirect strategies, see section 5). Our two independent variables were the hierarchical relationship between adviser and advisee (3 levels: top-down, bottom-up, equals) and the adviser's level of experience (3 levels: explicit experience, explicit inexperience, no precision given).

As for the procedure, the experiment took place on an instance of the IbexFarm (Drummond, 2016), self-hosted on university servers. Participants were first invited to read general instructions describing both the general goal of the study and giving them explicit information about their rights. Explicit consent was collected by way of checking a consent box, which meant they were older-than-18-year-old L1 speakers of French and they had read and understood the information form. On a subsequent page, participants read more detailed instructions on what kind of items they would be presented with, and what was expected of them. They were reminded that there were no right or wrong answers and that we were only interested in their immediate instincts about their own way of using French.

Participants were then presented with two practice items built in the exact same way as the target items, to make it more straight-forward: characters A and B are discussing, A gives advice to B about something, 4 possibilities are available. Choosing one possibility over the others was as simple as clicking on it directly. Then the next dialogue popped up on the participants' screen. These two practice items did not vary across any experimental conditions, were set as interactions between equals (2 students, 2 colleagues), and no precision was given on the adviser's level of experience on the matter under discussion. Then, the 18 target items were presented in a randomized counterbalanced way across conditions and participants (latin square, 3x3 design). No filler items were incorporated, so as to not make the study any longer since we did not compensate participants (expected time of completion: 15 minutes), and because it seemed highly implausible that we could really mask the point of interest of the study (*i.e.* advice) to them.

After completion of the study, a short profiling questionnaire was provided, in which we collected the participants' age, the general location (French administrative *régions*) where they learned their first language (which had to be French to be included in the results), and information about their working position (management position, student, student with job, no employment). However, since we did not control for these variables, we could not include them in the analyses and we will not report on them in details. Then the experiment ended.

93 people completed the study. They were recruited from social networks and from the RISC newsletter (*Relais d'Information sur les Sciences de la Cognition*, CNRS, UMR 3352). 7 participants were excluded based on non-matching L1 requirements. 46 participants were 30 years old or less and 40 participants were older than 30 years old. In total, we collected 86*18=1548 continuations on target items and excluding practice items, which we analyzed within the Bayesian framework as described in subsection 3.3 below.

3.2. Item creation

The grammatical forms we included in this experiment result from our analysis of how advice was described in the *Niveau Seuil* (1976) and Delbarre et al. (2017) which we presented

earlier (cf. §2.3), and how it was introduced in French language textbooks. In particular, we analyzed *Alter Ego A1+* (2012) and *Grammaire en dialogue B1* (2018), two textbooks often used in the teaching of French as a Foreign Language. A1 and B1 are language levels defined in the CEFR (2001), a framework used to assess the proficiency in languages. The levels from beginner to advanced are as followed: A1, A2, B1, B2, C1 and C2. The A1+ textbook includes elements from A2 level. As a reminder, the findings of our experiment were meant to be reused in classroom to teach about pragmatic competence, which is why textbooks analysis was a useful way to understand how advice is usually introduced to students. In all these references, we looked for the grammatical forms that were most often used.

Both in *Niveau Seuil* (1976) and Delbarre el al. (2017), imperatives were used or mentioned to give advice. In the first year French textbook, the speech act of advice is introduced within the sequence that introduces the grammatical notion of imperative; thus making a direct link between advice and imperative sentences. Apart from imperatives, these sources also include some verbs in their indicative and/or conditional present forms. The *Niveau Seuil* presents sentences with verbs like 'devoir' (*must*), 'valoir mieux' (*it would be best to do*) and 'faire bien/mieux' (*you'd better do…*) in conditional present form, and with the verb 'pouvoir' (*can*) in indicative present form, to give advice. Delbarre et al. (2017) state that 'valoir mieux' can convey the meaning of advice in both indicative and conditional modes, while 'devoir', 'faire mieux' and 'falloir' (*you ought to*/expressing necessity) can only be used in conditional mode in order to give advice. In the second year French textbook (*Grammaire en dialogue B1*), some dialogues introduce some conditional present forms as a way to give advice. From this data, our experiment included the imperative mode as well as a contrast between indicative and conditional mode, especially since Delbarre et al. (2017) argue that only the conditional mode can convey the meaning of advice with certain verbs.

Since Brown and Levinson's politeness theory is part of our theoretical inspiration, we chose to use the imperative mode with no politeness strategy in order to be as straightforward as possible in capturing the strategy *bald on-record*; this is our 'direct strategy'. Then, we included advice with positive and negative politeness strategies. For this, we took some inspiration from Goldsmith and MacGeorge (2000 : 236), which listed examples for both categories. Firstly, for the positive politeness strategies, the sentences available to participants mentioned reasons or positive consequences, expressed understanding or sympathy towards the addressee, or talked about 'presupposing knowledge or common ground'. Secondly, for the negative politeness strategies, we depersonalized the advice by using the impersonal pronoun 'il' (third person singular). We also combined it with adverbs like 'facilement' (*easily*), 'juste' (*just*) or 'rapidement' (*quickly*) to make the action seems smaller or less intimidating; with adverbs like 'peut-être' (*maybe*); with questions or with a condition 'si vous avez le temps' (*if you have time*). Goldsmith and MacGeorge (2000: 236) also state that indirect strategies are 'utterance[s that] might be taken in more than one way' and give the example of mentioning the speaker's own past experiences, but, since a level of one of our independent variables explicitly addresses absence of expertise of the adviser, we could not use this. Thus, we came up with different types of indirect strategies, which are mostly indirect (the hearer has to infer the advice from the speaker's utterance) and non-shared knowledge where the adviser relays information they read in the newspaper or saw in a documentary; close family member experiences (namely, the adviser's father, mother, brother or sister); description of a fact; personal opinion (which can be understood as simply giving his opinion, not explicitly giving advice); or universally known truths/common wisdom expressed with 'on dit que' ('*they say that…*').

To summarize, the direct strategy states the action recommended to do through one sentence in the imperative mode. The positive politeness strategy, regardless of the relationship between adviser and advisee, always addresses the advisee directly by using 'vous/tu' (*you*) as the grammatical subject of the sentence giving advice. In the negative politeness strategy, verbs

with impersonal pronoun 'il' (which are 'valoir mieux', 'être préférable' (*it is better to do*)) were used in the main sentence. Sometimes, the subject pro-form 'ce/ça' (*it*) was also used. Here, we tried to create more distance between the characters, in order to appear less threatening to the negative face. Finally, in the indirect strategy, no specific grammatical form was used.

3.3 Analyses

Partly because of the exploratory nature of our experiment, we chose to analyze our data within the Bayesian framework. The 'Bayesian way' of modeling quantitative data is very similar in its core elements to frequentist methods (e.g. traditional linear regressions) in that it aims at evaluating the relationship between a dependent variable (here, the choice of continuation, a categorical variable) and one or several independent variables (here, the hierarchical relationship between advisor and advisee – 3 levels – and the degree of experience mentioned by the advisor – 3 levels). Bayesian modeling can also account, as is recommended in frequentist analyses, for variation across participants and items by integrating them as random factors in maximal models (Barr et al., 2013), with limited risks of convergence failure. From a more conceptual point of view, Bayesian analyses allow for a direct assessment of the relationship between two or more variables, by extrapolating from the observed data itself and not by trying to refute the null hypothesis that there is no difference between experimental conditions (which is what a frequentist approach does). This makes it more appropriate in particular to small datasets or to datasets wherein individual variation is expected. For a more complete view on why Bayesian modeling is a sound way to approach psychological data, see Sorensen et al. (2016).

Another advantage of Bayesian models is that there is no binary decision threshold where something is either significant or not. Instead, a more fine-grained take on the data can be presented and rather, an estimated coefficient (β, mean effect of the independent variable on the dependent variable) is yielded in association with a credible interval (95% CrI) and the probability that the real value of this coefficient be different from 0 (greater: $P(\beta>0)$, or lesser: $P(\beta<0)$). The credibility interval (see Morey et al. 2016 for the advantages over so-called 'confidence intervals') is the values between which there is a 95% chance that the real value of β lie. Here, inspired by works such as Engelmann et al. (2019), Pozniak and Burnett (2021) or Lelandais and Thiberge (2023), we define a result as giving either 'robust' evidence for an effect of a variable on the dependent variable ($P(\beta>0)$ or $P(\beta<0) > 0.90$), or 'weak' evidence for an effect ($0.80 < P(\beta>0)$ or $P(\beta<0) < 0.90$). We will not report on effects with probabilities smaller than 0.80.

The models we ran were all Bayesian multinomial regressions with a maximal random effect structure. The dependent variable was either the grammatical form selected by participants (4 levels: direct/imperative, conditional, indicative, indirect) or the politeness strategy (4 levels: direct/imperative, negative politeness, positive politeness, indirect), with the 'indirect' level as reference in both cases. The independent variables were the two experimental conditions (adviser experience, 3 levels with 'no experience' as reference, and adviser-advisee relationship, 3 levels with 'equals' as reference) and their interaction. Mean-center coding was used for all predictors (for the advantages of this in the interpretation of results, see Brehm and Alday, 2020). We added 2 random variables for participants and items, with the experience*relationship interaction as random slopes. The models were run with 4 Marko Chain Monte Carlo (MCMC) chains with 6000 iterations by chain, half of which were discarded as warm-up. Convergence was checked by making sure all Rhats = 1.00 for all parameters, and that Bulk and Tail Effect Sample Sizes (ESS) were big enough. Given the exploratory nature of the experiment, the priors were generic weakly informative ones. The whole data for these

models can be accessed via the OSF repository at the following address: .

Analyses were run using the R 4.2.1 statistical programming language (R Core Team, 2022) and the brms 2.17.0 package (Carpenter et al., 2017; Bürkner, 2021). We also made use of the tidyverse 1.3.1 (Wickham et al., 2019), dplyr 1.0.9 (Wickham et al., 2022), shinystan 2.6.0 (Stan Development Team, 2017), and sjPlot 2.8.10 (Lüdecke, 2021) packages for data processing and visualization. The ggplot2 3.3.6 (Wickham, 2016), ggridges 0.5.3 (Wilke, 2021), and ggstance 0.3.5 (Henry, 2020) packages were used to plot density ridges for posterior distributions and to build violin plots for the response variable. A pseudo-random seed was set for each model for replicability, for which we arbitrarily chose to use the time of day when the model was run.

4. Results - Grammatical contrasts

The first series of analyses aimed at disentangling French L1 speakers' preferences with regards to the grammatical form they rated best suited in the different experimental conditions. To assess this, we ran a global model with the 3x3 levels of manipulated conditions. As a reminder, our reference level for the dependent variable consisted of the choice for indirect strategies. For the independent variables, the reference levels were the absence of precision concerning experience level by the adviser, and a relationship between equals. In this section, we are doing a phased presentation of the effects found in both conditions first, and then their interactions.

4.1 Effects of adviser's experience

Firstly, we are presenting the model's results for the influence of adviser's experience on the choice of grammatical forms. Figure 1 illustrates the percentages of answers for each grammatical forms, namely from top to bottom: direct/imperative, conditional, indicative and indirect.
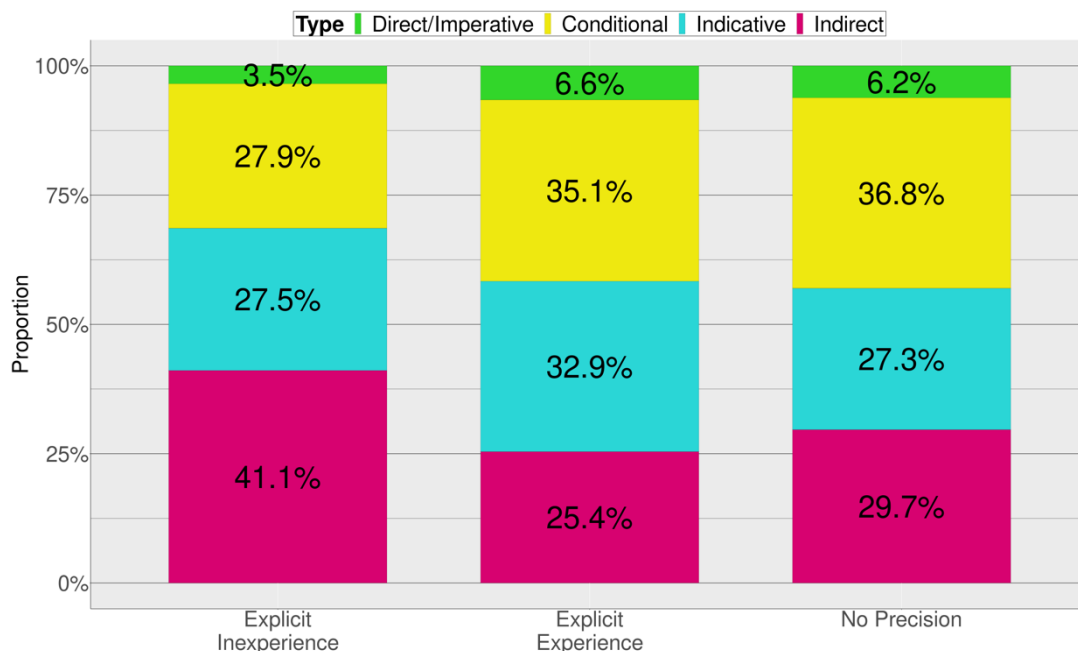

Figure 1: Choices of grammatical form given Adviser Experience

In the 'explicit inexperience' condition, the proportion of indirect formulations is higher than in the 'no precision' condition (41.1% vs 29.7%). When comparing to this evolution, the model yields robust evidence that direct/imperative forms (β = -2.30 , 95% Crl = [-4.68 , -0.57],

P (β)<0 = 0.998), conditional forms (β = -0.68 , 95% Crl = [-1.18 , -0.18], P (β)<0 = 0.995) and indicative forms (β = -0.30 , 95% Crl = [-0.74 , -0.14], P (β)<0 = 0.913) are less chosen than indirect. Conversely, in the 'explicit experience condition', the proportion of indirect formulations is lower than in the 'no precision' condition (25.4% vs 29.7%). When comparing to this, our model yields robust evidence that the proportion of indicative forms (β = 0.34 , 95% Crl = [-0.13 , 0.80], P (β)>0 = 0.927) is higher than indirect.

In other words, when the speaker mentions explicitly his lack of experience, the indirect seems to be a preferred choice in general. On the other hand, if the speaker mentions explicitly his experience, indicative forms appear to be more chosen than indirect forms, allowing the speaker to give advice more directly.

4.2 Effects of hierarchical relationship

Secondly, we are presenting the model's results for the influence of hierarchical status on the choice of grammatical forms. Figure 2 illustrates the percentages of answers for each grammatical forms in the three experimental conditions.
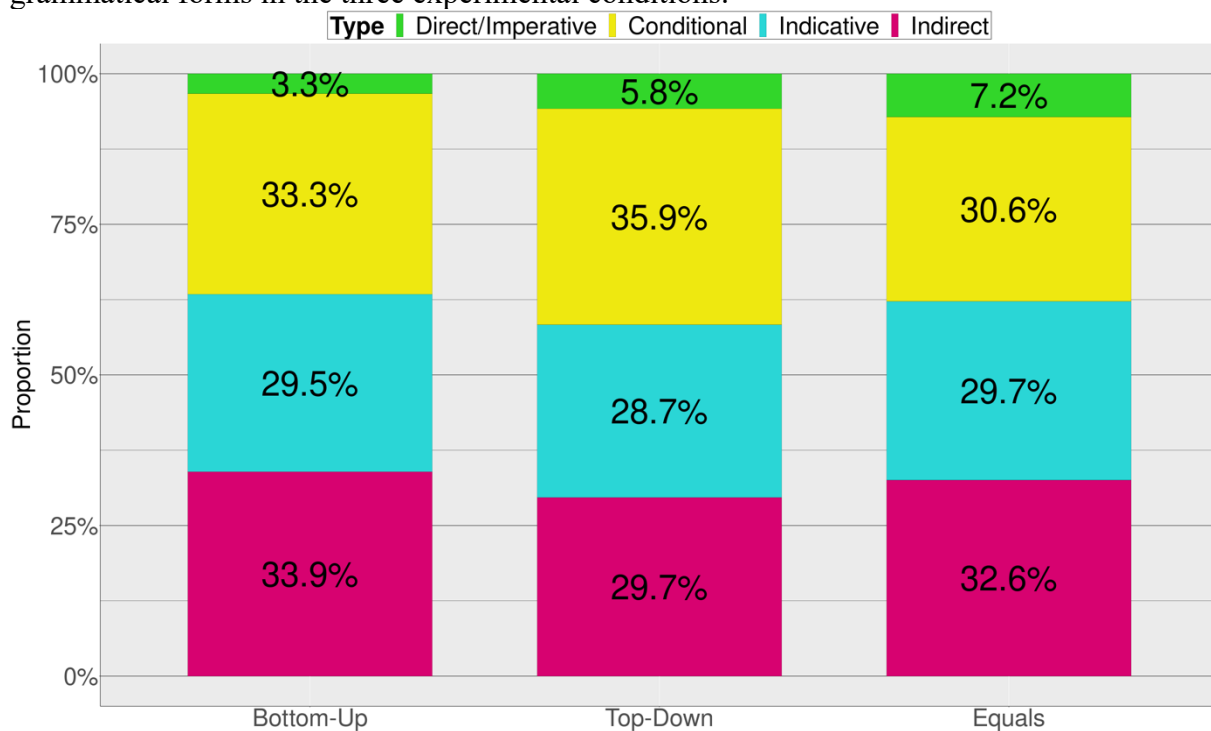

Figure 2: Choices of grammatical form given Hierarchical Relationship

In the 'top-down' condition, the proportion of indirect formulations is lower than in the 'equals' condition (29.7% vs 32.6%). By comparison to this, the model yields robust evidence that direct/imperative forms (β = -1.08 , 95% Crl = [-2.84 , -0.27], P (β)<0 = 0.935) is even less chosen. Meanwhile, in the same condition, the proportion of conditional forms is higher (35.9% vs 30.6%), which the model yields robust evidence for (β = 0.28 , 95% Crl = [-0.11 , 0.67], P (β)>0 = 0.920).

In the 'bottom-up' condition, the proportion of indirect formulations does not change much when comparing to the 'equals' condition (33.9% vs 32.6%). By comparison, the proportion of direct/imperative formulations diminishes (3.3% vs 7.2%), which the model yields robust evidence for (β = -2.97 , 95% Crl = [-5.70 , -0.99], P (β)<0 = 0.999).

In other words, it seems that the imperative formulations are less compatible with a bottom-up relationship and that, in top-down relationships, forms with conditional mode become a preferred alternative to indirect forms.

4.3 Interactions

As a reminder, the full output of the model is available in the OSF repository; we will only discuss statistically meaningful interactions here. Figure 3 offers a global view on the choices while considering the two independent variables at the same time: hierarchical relationship and adviser's experience level.
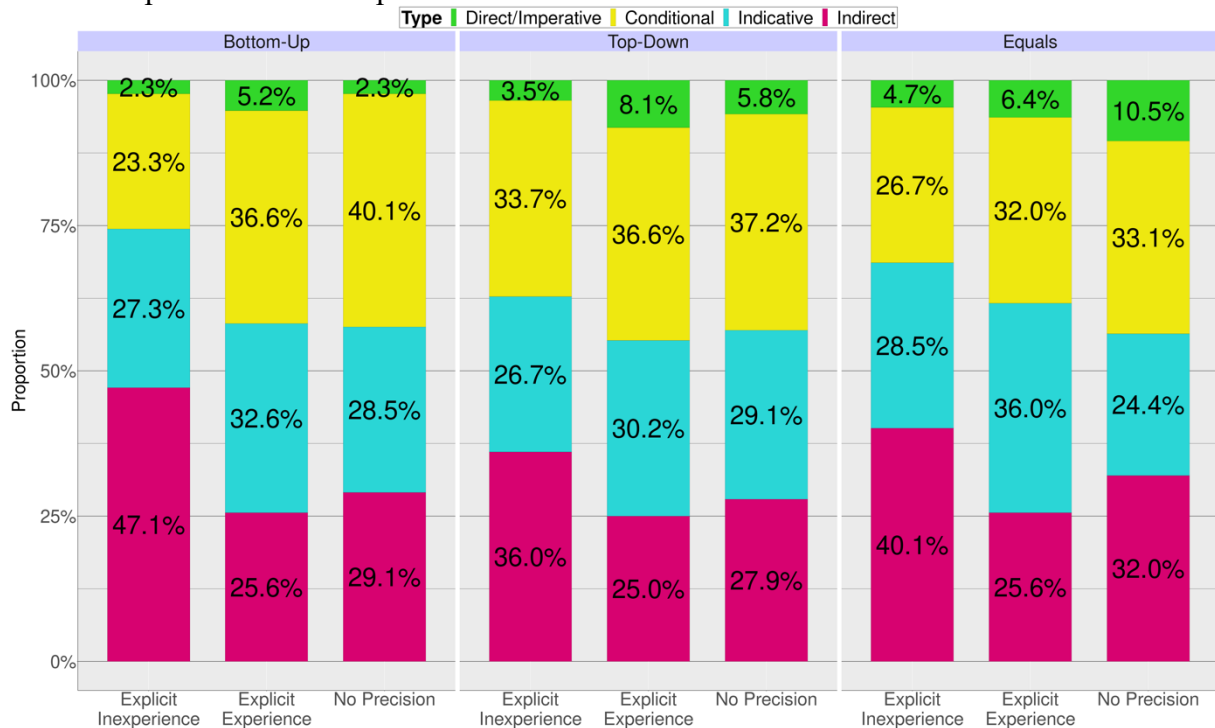

Figure 3: Choices of grammatical form given Hierarchical Relationship and Adviser's Experience

When contrasting direct/imperative formulations to indirect formulations, the model yields weak evidence for a positive interaction between the two conditions of adviser's experience level (explicit experience) and hierarchical relationship (bottom-up) ($\beta = 1.42$, 95% Crl = [-1.72 , 4.55], P (β)>0 = 0.828). This interaction corresponds to the fact that, when comparing the 'explicit experience' and the 'no precision' experience conditions in the 'equals' relationship, there is a decrease of the proportion of direct/imperative choices relative to the indirect choices (from 10.5% vs. 32.0% to 6.4% vs. 25.6%), while when comparing the same two experience conditions in the 'bottom-up' relationship, there is an increase of the proportion of direct/imperatives choices relative to the indirect choices (from 2.3% vs. 29.1% to 5.2% vs. 25.6%).

For the conditional formulations, the model yields robust evidence for a negative interaction between adviser's experience level ('explicit inexperience') and hierarchical relationship (bottom-up) ($\beta = -0.79$, 95% Crl = [-1.90 , 0.27], P (β)<0 = 0.932). This interaction corresponds to the fact that, when comparing the 'explicit inexperience' and the 'no precision' experience conditions in the 'equals' relationship, there is a decrease of the proportion of conditional choices relative to the indirect choices (from 33.1% vs. 32.0% to 26.7% vs. 40.1%), while when comparing the same two experience conditions in the 'bottom-up' relationship,

there is an even bigger decrease of the proportion of conditional choices relative to the indirect choices (from 40.1% vs. 29.1% to 23.3% vs. 47.1%).

For the indicative formulations, the model yields weak evidence for three negative interactions between the experience and relationship variables. The first interaction (explicit adviser's experience and bottom-up relationship, β = -0.46 , 95% Crl = [-1.48 , 0.54], P (β)<0 = 0.816) corresponds to the fact that, when comparing the 'explicit experience' and the 'no precision' experience conditions in the 'equals' relationship, there is an increase of the proportion of indicative choices relative to the indirect choices (from 24.4% vs. 32.0% to 36.0% vs. 25.6%), while when comparing the same two experience conditions in the 'bottom-up' relationship, this increase is reduced (from 28.5% vs. 29.1% to 32.6% vs. 25.6%). The same goes for the second interaction (explicit adviser's experience and top-down relationship, β = -0.49 , 95% Crl = [-1.63 , 0.67], P (β)<0 = 0.803), which corresponds to the fact that, while there is this increase of the proportion of indicative choices relative to the indirect choices when comparing the 'explicit experience' and the 'no precision' experience conditions in the 'equals' relationship, this increase is reduced in the top-down relationship (from 29.1% vs. 27.9% to 30.2% vs. 25%). The third interaction (explicit adviser's inexperience and bottom-up relationship, β = -0.53 , 95% Crl = [-1.55 , 0.48], P (β)<0 = 0.852) corresponds to the fact that, when comparing the 'explicit inexperience' and the 'no precision' experience conditions in the 'equals' relationship, there is an increase of the proportion of indicative choices relative to the indirect choices (from 24.4% vs. 32.0% to 28.5% vs. 40.1%), while when comparing the same two experience conditions in the 'bottom-up' relationship, there is a decrease of the proportion of indicative choices relative to the indirect choices (from 28.5% vs. 29.1% to 27.3% vs. 47.1%).

To sum up these results, the positive interaction for direct/imperative formulations suggests that it is more 'okay' to use them in a bottom-up relationship when the adviser mentions their explicit experience with the problem at hands. Two of the negative interactions suggest that both conditional and indicative formulations are dispreferred in the bottom-up relationship when the adviser explicitly mentions their inexperience in the matter that is discussed (where the indirect formulations are more used). The last two interactions suggest that while there is an increase of indicative forms when adviser and advisee are in an equal relationship and the adviser mentions their experience, there is less of a preference gap in other relationships (both top-down and bottom-up), even when the adviser still explicitly states their experience of the matter.

5. Results - Politeness strategies

In this section, we are doing a phased presentation of the effects of the two independent variables (adviser's experience and hierarchical relationship), and then their interactions for the four different levels of politeness strategies for the dependent variable (direct/imperative, negative politeness, positive politeness, indirect). The reference level for this variable is still the indirect strategies.

5.1 Effects of adviser's experience

Figure 4 presents the choices of politeness strategy for each level of the 'experience' condition. The graph illustrates the proportion of politeness strategy that were chosen, namely from top to bottom: direct/imperative, negative politeness, positive politeness and indirect.
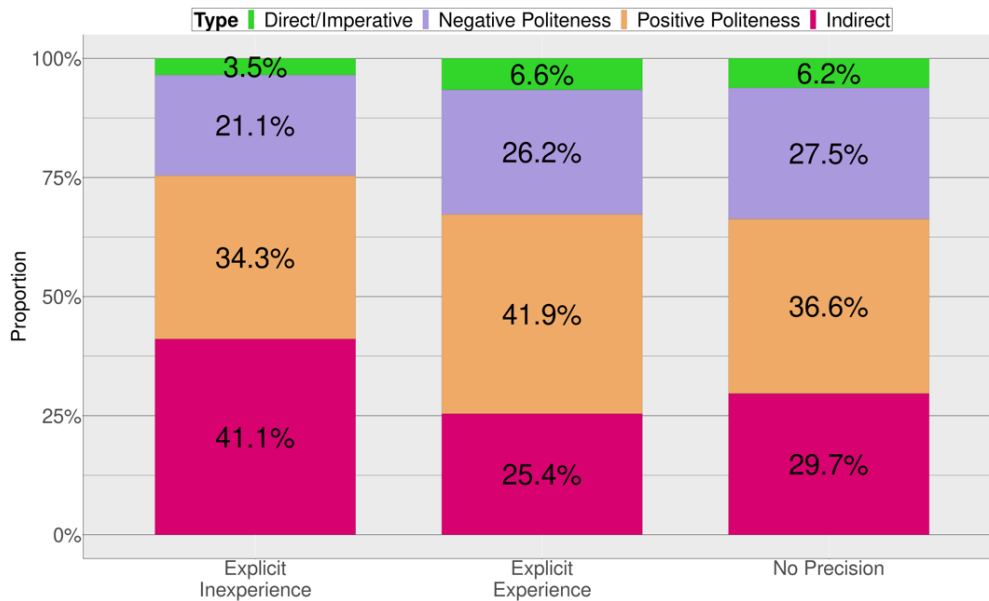
Figure 4: Choices of politeness strategy given Adviser Experience

In the 'explicit inexperience' condition, the proportion of indirect formulations is higher than in the 'no precision' condition (41.1% vs 29.7%). When comparing to this evolution, the model yields robust evidence that direct/imperative strategies (β = -2.22 , 95% Crl = [-4.54 , -0.53], P (β)<0 = 0.997), negative politeness strategies (β = -0.67 , 95% Crl = [-1.09 , -0.24], P (β)<0 = 0.998) and positive politeness strategies (β = -0.40 , 95% Crl = [-0.82 , -0.01], P (β)<0 = 0.971) are less chosen than indirect. In accordance with previous results described in 4.1 for speaker experience, the model's results for politeness strategies shows that indirect is also the more compatible strategy to give advice when the speaker explicitly mentions their inexperience.

In the 'explicit experience' condition, the proportion of indirect formulations is lower than in the 'no precision' condition (25.4% vs 29.7%). By comparison, the model yields weak evidence that the proportion of positive politeness (β = 0.29 , 95% Crl = [-0.25 , 0.80], P (β)>0 = 0.875) is higher than indirect. In other words, an acceptable alternative strategy to indirect strategies when mentioning one's own experience seems to be the positive politeness strategies.

5.2 Effects of hierarchical relationship

Figure 5 gives a visual illustration of the influence of the hierarchical relationship between adviser and advisee on the politeness strategies that were chosen by participants.
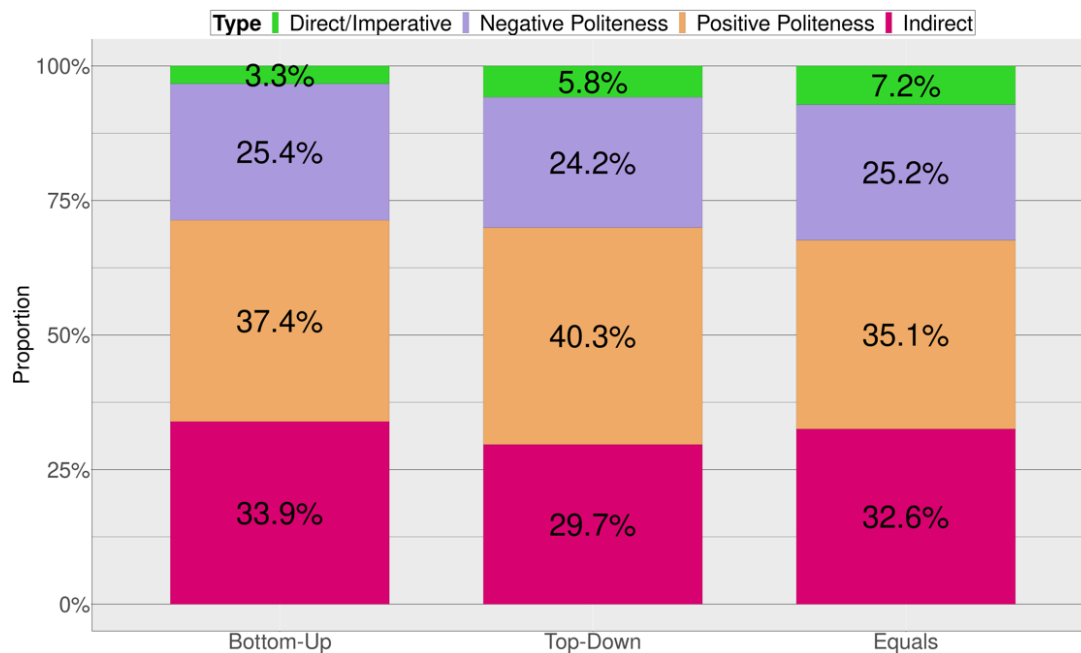
Figure 5: Choices of politeness strategy given Hierarchical Relationship

In the 'top-down' condition, the proportion of indirect strategies is lower than in the 'equals' condition (29.7% vs 32.6%). By comparison, and similarly to the results regarding grammatical forms, the models yields robust evidence that direct/imperative strategies (β = -1.09 , 95% CrI = [-2.86 , 0.29], P (β)<0 = 0.937) is less chosen than indirect. In the 'bottom-up' condition, the proportion of indirect formulations does not change much from the 'equals' condition (33.9% vs 32.6%). By comparison, on one hand the proportion of direct/imperative strategies diminishes, which the model yields robust evidence for (β = -3.04 , 95% CrI = [-5.95 , -1.09], P (β)<0 = 0.999), while on the other hand the proportion of positive politeness strategies is higher (37.4% vs 35.1%) in this condition, for which the model yields weak evidence (β = 0.30 , 95% CrI = [-0.22 , 0.82], P (β)<0 = 0.886).

Based on these observations, direct/imperative strategies appear to be less chosen than indirect strategies in relationships where the participants are not on the same social level, which is in contrary to our analysis of French textbook (cf. §3.2). This will be further discussed in section 6.

5.3 Interactions

We will not report again on the interactions for direct/imperative strategies compared to indirect forms, as the contrasts are the same as in Section 4 above. Instead, we will focus on the contrasts between both negative and positive politeness strategies and indirect formulations.
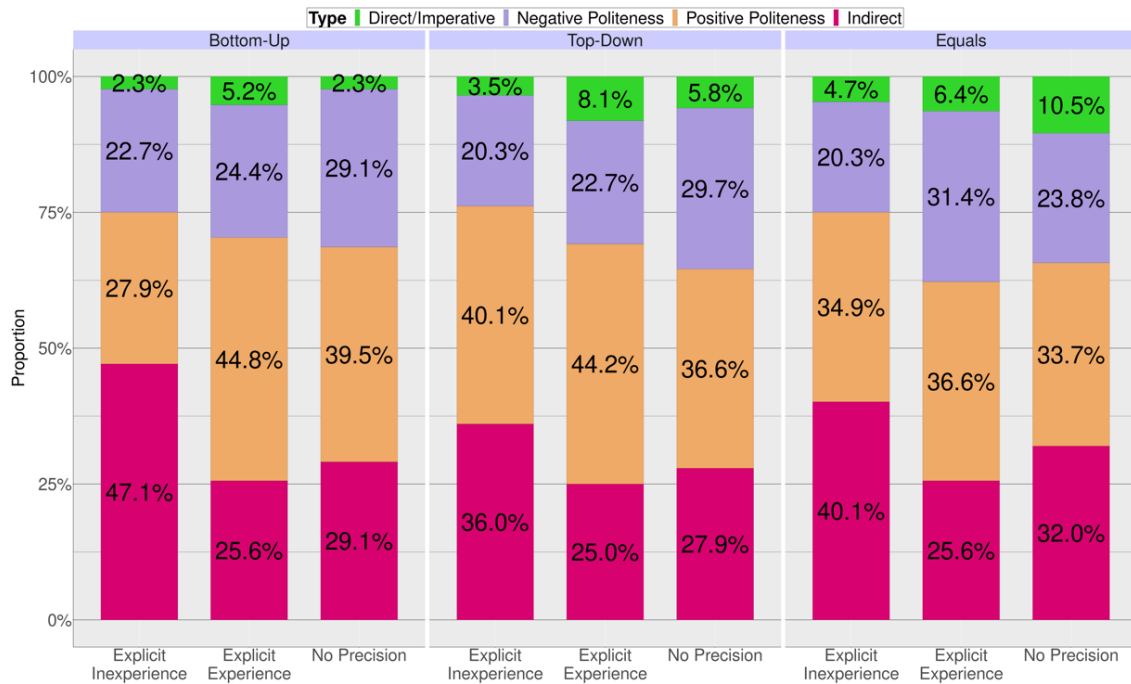
Figure 6: Choices of politeness strategy given Hierarchical Relationship and Adviser's Experience

For the positive politeness uses, the model yields robust evidence for a negative interaction between adviser's inexperience ('explicit inexperience') and hierarchical relationship (bottom-up) ($\beta = -0.73$, 95% Crl = [-1.63, 0.17], P (β)<0 = 0.943). This interaction corresponds to the fact that, when comparing the 'explicit inexperience' and the 'no precision' experience conditions in the 'equals' relationship, there is a decrease of the proportion of positive politeness uses relative to the indirect choices (from 33.7% vs. 32.0% to 34.9% vs. 40.1%), while when comparing the same two experience conditions in the 'bottom-up' relationship, there is an even bigger decrease of the proportion of positive politeness choices relative to the indirect choices (from 39.5% vs. 29.1% to 27.9% vs. 47.1%).

For the negative politeness uses, the model yields robust evidence for two negative interactions between the experience and relationship variables. The first interaction (explicit adviser's experience and bottom-up relationship, $\beta = -0.68$, 95% Crl = [-1.64, 0.30], P (β)<0 = 0.916) corresponds to the fact that, when comparing the 'explicit experience' and the 'no precision' experience conditions in the 'equals' relationship, there is an increase of the proportion of negative politeness choices relative to the indirect choices (from 23.8% vs. 32.0% to 31.4% vs. 25.6%), while when comparing the same two experience conditions in the 'bottom-up' relationship, there is rather a decrease of the proportion of negative politeness strategies (from an equal 29.1% vs. 29.1% to 24.4% vs. 25.6%). For the second interaction (explicit adviser's experience and top-down relationship, $\beta = -0.85$, 95% Crl = [-2.08, 0.35], P (β)<0 = 0.918), while there is this increase of the proportion of negative politeness choices relative to the indirect choices when comparing the 'explicit experience' and the 'no precision' experience conditions in the 'equals' relationship, there is rather a decrease of the proportion of negative politeness strategies in the top-down relationship (from 29.7% vs. 27.9% to 22.7% vs. 25%). The model also yields weak evidence for a third interaction (explicit adviser's inexperience and bottom-up relationship, $\beta = -0.42$, 95% Crl = [-1.38, 0.51], P (β)<0 = 0.807) that corresponds to the fact that, when comparing the 'explicit inexperience' and the 'no precision' experience conditions in the 'equals' relationship, there is a decrease of the proportion of negative politeness choices relative to the indirect choices (from 23.8% vs. 32.0% to 20.3% vs. 40.1%),

while when comparing the same two experience conditions in the 'bottom-up' relationship, there is a bigger decrease (from an equal 29.1% vs. 29.1% to 22.7% vs. 47.1%).

To sum up these results, two of the negative interactions suggest that, in a similar fashion to what is observed with conditional and indicative forms, both positive and negative politeness strategies are dispreferred in the bottom-up relationship when the adviser explicitly mentions their inexperience in the matter that is discussed (where the indirect formulations are, on the contrary, preferred). The last two interactions suggest that, while there is an increase of negative politeness uses when adviser and advisee are in an equal relationship and the adviser mentions their experience, these strategies are less used in other relationships (both top-down and bottom-up), even when the adviser still explicitly states their experience of the matter.

6. Conclusion

In this section, we provide a short summary of the effects found in our experiment. For our first independent variable, the adviser's experience, we found that indirect formulations (both in terms of grammatical formulation and of politeness strategy) seem to be the preferred choice when there is a lack of experience from the adviser. An alternative to indirect formulations seems to be positive politeness, when the adviser explicitly mentions their experience. As for our second independent variable, the hierarchical relationship between adviser and advisee, we found that the direct strategies using the imperative form are less compatible with bottom-up and top-down relationships than with equal relationships.

Regarding interactions, we found robust evidence for an interaction between bottom-up relationship and explicit experience of the adviser for the direct/imperative forms, suggesting that these are best used, even if still rarely preferred in bottom-up relationships, when the adviser explicitly mentions their experience. We also found robust evidence for some interactions of adviser's experience and hierarchical relationship for the politeness strategies. These interactions suggest that the indirect strategies are preferred over both negative/positive politeness strategies in a bottom-up relationship when the adviser explicitly states their inexperience. We also found robust evidence for an effect regarding the explicit experience variable: there seems to be a preference for negative politeness over indirect strategies in the 'equals' relationship; whereas in the other two relationships, the opposite effect can be found.

In Section 3.2, we presented the grammatical forms associated with giving advice in French according to part of the literature (Delbarre et al. 2017; Niveau Seuil, 1976) and to French textbooks. There, imperative mode was used to introduce advice in the first year textbook, and was also represented in some examples in the literature. However, our experiment show that imperative is not the preferred choice, and is in fact rarely preferred by participants. This form is in particular not preferred even when adviser and advisee are not equals. The analyses, both of simple effects and of interactions of the two manipulated variables, emphasize the importance of the social status, as well as that of the adviser's experience, which are both elements from the sociopragmatic context where the interaction is taking place. These various influences from contextual information on the realization of the speech act of advice are as of yet not taken into account, either in the literature or in teaching materials.

As much as we tried, our experiment contains some shortcomings. Firstly, we could not use some strategies described in the literature because of the way we devised our independent variables and because we needed to imagine strategies which would be compatible with all three types of relationship between adviser and advisee (for example, the use of in-group language or describing one's own experience). Secondly, we found that the indirect strategies were often the preferred choice and, as explained in Section 3.2, we tried to diversify this kind of strategy. Hence, more research would be needed to better understand whether there exist different preferences among these 'sub-strategies' within the 'general indirect strategy'.

As mentioned in Section 2.3, Farenkia (2019) also recently studied the speech act of advice in French. Even though the perspective of this study was different from ours, both in terms of methodology (the data was collected through an open Discourse Continuation Test) and of research question (the author compared two varieties of French, namely Canadian and Cameroonian), similar strategies partly emerge from the results of both works. Farenkia suggests a category of 'direct advice', in which both participants groups partially used imperative forms to give advice. Furthermore, some of the strategies emerging from his data also involved minimizing the action suggested in the advice, which is very similar to our negative politeness strategies with adverbs like 'maybe' or 'only'. Regarding grammatical forms, Farenkia also finds that conditional forms as well as indicative forms can be used with 'devoir' and 'pouvoir' verbs for Canadians, but only 'pouvoir' among Cameroonians.

From a broader perspective, our work completes previous research on speech acts. Not much work has been carried out in order to analyze the speech act of advice systematically using a quantitative experimental approach. Blum-Kulka (1987) studied requests in a way similar to our experiments, in the sense that she suggested a gradient of strategies based on speakers' perception of (in)directness and used Brown and Levinson's politeness theory to analyze it. Making our materials and scripts available to the community also stems from the wish they be modified and reused in the study of other languages and for other speech acts. The combination of this body of work with future studies can only better our understanding of human interactions, and in particular of the influence of contextual settings on the building of specific interaction sequences, such as action where one speaker wants their interlocutor to do something (directive speech acts).

These findings are in turn useful to the field of foreign language teaching. Martínez-Flor (2005) establishes a link between the results of experimental studies and the teaching of the speech act of advice in ESL, which we only wish could grow deeper. In par with other studies investigating the strategies for giving advice in English (Banerjee and Carrell, 1988; Hinkel, 1994) we now propose a taxonomy of the strategies available to French speakers, which could help refine teaching materials and a general inclusion of pragmatics aspects in the field of didactics. To illustrate this, Corbeau (2023) investigates how advice is depicted in French textbooks used in university classes of FFL (French as a Foreign Language) in Japan. In these textbooks, the linguistic forms and strategies mostly focus on imperative and sometimes conditional forms and they mainly disregard other strategies available to French L1 speakers. Especially, the forms that are mostly preferred in our experiment (i.e. indirect formulations) are completely left out in these textbooks. Based on this investigation, Corbeau (2023) also describes a pedagogical experiment with Japanese learners of French, in which activities meant to develop language learners' pragmatic competence are implemented, using the results from the MCQ experiment described in the present paper. Overall, this further illustrates the need for future linguistic studies on the topic of both the realization of the speech act of advice in French and the teaching of pragmatics in language classes.

Competing interests
The authors declare none.

Supplementary Materials
All supplementary materials can be found at ttps://osf.io/6vcmn/. This repository includes detailed statistical analyses, R scripts and the materials used in the experiment.

References

Austin, J.L. (1962). *How to do things with words,* Oxford: Oxford University Press.

Banerjee, J., & Carrell, P. L. (1988). Tuck in your shirt, you squid: Suggestions in ESL. *Language Learning, 38*(3), 313-364. https://doi.org/10.1111/j.1467-1770.1988.tb00416.x

Barr, D. J., Levy, R., Scheepers, C., & Tily, H. J. (2013). Random effects structure for confirmatory hypothesis testing: Keep it maximal. *Journal of memory and language, 68*(3), 255–278. https://doi.org/10.1016/j.jml.2012.11.001

Blum-Kulka, S. (1987). Indirectness and politeness in requests: Same or different?. *Journal of pragmatics, 11(*2), 131-146. https://doi.org/10.1016/0378-2166(87)90192-5

Brehm, L., & Alday, P. M. (2020). A decade of mixed models: It's past time to set your contrasts. In *the 26th Architectures and Mechanisms for Language Processing Conference (amlap 2020).* https://amlap2020.github.io/a/131.pdf

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language use*, Cambridge: Cambridge University Press.

Burkner, P.-C. (2018). Advanced Bayesian multilevel modeling with the R package brms. *The R journal,* 10 (1), 395–411.

Bürkner, P.-C. (2017). brms: An R Package for Bayesian Multilevel Models Using Stan. *Journal of statistical software*, *80*(1), 1–28. https://doi.org/10.18637/jss.v080.i01

Carpenter, B., Gelman, A., Hoffman, M. D., Lee, D., Goodrich, B., Betancourt, M., Brubaker, M., Guo, J., Li, P., & Riddell, A. (2017). Stan: A probabilistic programming language. *Journal of statistical software*, *76*(1). https://www.osti.gov/servlets/purl/1430202

Corbeau, E. (2023). Activités pédagogiques pour l'enseignement de l'acte de conseil en classe de FLE au Japon. *Revue japonaise de didactique du français*, *18*(1-2), 92-103.

Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment.* New York: Cambridge University Press.

Council of Europe. (1976). *Un niveau-seuil : systèmes d'apprentissage des langues vivantes par les adultes*. [A threshold level: system for modern language learning by adults] Strasbourg: Conseil de l'Europe.

Gibson, E., & Fedorenko, E. (2010). The Need for Quantitative Methods in Syntax and Semantics Research. *Language and Cognitive Processes, 28*(1-2), 88-124. https://doi.org/10.1080/01690965.2010.515080

Delbarre, F., Miyazato, A., & Nishimori, K. (2017). *Mémento de grammaire contextualisée / adaptée du FLE pour les japonophones niveau débutant* [Memento of contextualised/adjusted grammar from FFL for beginner-level Japanese speakers]. https://bop.fipf.org/wp-content/uploads/2017/09/Memento-de-grammaire-contextualisee-pour-japonophones.pdf

Drummond, A. (2016). "Ibexfarm (version 0.3.9)"

Engelmann, F., Granlund, S., Kolak, J., Szreder, M., Ambridge, B., Pine, J., Theakston, A., & Lieven, E. (2019). How the input shapes the acquisition of verb morphology: Elicited production and computational modelling in two highly inflected languages. *Cognitive psychology, 110,* 30–69. https://doi.org/10.1016/j.cogpsych.2019.02.001

Farashaiyan, A., & Muthusamy, P. (2016). Pragmatic Variations in Giving Advice in L2 by Malaysian Postgraduate Students: The Situational Effects. *English Language Teaching,*

9(5), 179-191. http://doi.org/10.5539/elt.v9n5p179

Farenkia, B. M. (2019). La formulation du conseil en français canadien (québécois) et en français camerounais [Formulation of advice in Canadian French (Quebec) and Cameroonian French]. *Linguistica Atlantica, 37*(2).

Goldsmith, D. J., & MacGeorge, E. L. (2000). The Impact of Politeness and Relationship on Perceived Quality of Advice about a Problem. *Human Communication Research, 26*(2), 234-263. https://doi.org/10.1111/j.1468-2958.2000.tb00757.x

Henry, L. (2020). ggstance: Horizontal ggplot2 Components. https://github.com/lionel-/ggstance

Hinkel, E. (1994). Appropriateness of Advice as L2 Solidarity Strategy. *RELC Journal, 25*(2), 71-93. https://doi.org/10.1177/003368829402500205

Hoshino, Y. (2005). Nihongo sôdanbamen ni okeru pojitibu poraitonesu [Positive politeness in Japanese Advise Giving]. *Ningen bunka ronsô, 8,* 317-326.

Hosni, H. R. (2020). Advice giving in Egyptian Arabic and American English: A cross-linguistic, cross-cultural study. *Journal of Pragmatics*, *155*, 193-212. https://doi.org/10.1016/j.pragma.2019.11.001.

Larousse Dictionary. (n.d.). Conseil [Advise]. In *Larousse.fr dictionary.* Retrieved September 26, 2023, from https://www.larousse.fr/dictionnaires/francais/conseil/18348#:~:text=1.,un%20conseil%20à%20un%20ami.&text=2.,les%20conseils%20de%20l%27expérience

Lelandais, M., & Thiberge, G. (2023). The role of prosody and hand gestures in the perception of boundaries in speech. *Speech Communication, 150,* 41-65. https://doi.org/10.1016/j.specom.2023.05.001

Locher, M. (2006). Polite behavior within relational work: The discursive approach to politeness. *25*(3), 249-267. https://doi.org/10.1515/MULTI.2006.015

Lüdecke, D. (2021). sjPlot: data visualization for statistics in social science. https://cran.r-project.org/package=sjPlot

Lwanga-Lumu, J. C. (1999). Politeness and indirectness revisited. *South African Journal of African Languages*, *19*(2), 83-92. doi: 10.1080/02572117.1999.10587385

Martínez-Flor, A. (2005). A Theoretical Review of the Speech Act of Suggesting: Towards a Taxonomy for Its Use in FLT. *Revista Alicantina de Estudios Ingleses,* 18, 167-187. https://doi.org/10.14198/raei.2005.18.08

Morey, R. D., Hoekstra, R., Rouder, J. N., Lee, M. D., & Wagenmakers, E.-J. (2016). The fallacy of placing confidence in confidence intervals. *Psychonomic Bulletin & Review, 23*(1), 103–123. https://doi.org/10.3758/s13423-015-0947-8

Ogiermann, E. (2009). Politeness and in-directness across cultures: A comparison of English, German, Polish and Russian requests. *Journal of Politeness Research*, *5*(2), 189-216. https://doi.org/10.1515/JPLR.2009.011

Olshtain, E., & Blum-Kulka, S. (1985). Crosscultural pragmatics and the testing of communicative competence. *Language testing, 2*(1), 16-30. https://doi.org/10.1177/026553228500200103

Pozniak, C., & Burnett, H. (2021). Failures of Gricean reasoning and the role of stereotypes in the production of gender marking in French. *Glossa: a journal of general linguistics, 6*(1), 50. https://doi.org/10.5334/gjgl.1310

R Core Team, 2022. A Language and Environment For Statistical Computing. R Foundation for Statistical Computing Website. Retrieved 29 June 2022, from. http://www.r-project.org/

Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language*. (Vol. 626). Cambridge University Press.

Sorensen, T., Hohenstein, S., & Vasishth, S. (2016). Bayesian linear mixed models using stan: A tutorial for psychologists, linguists, and cognitive scientists. *The Quantitative Methods*

for Psychology, 12(3), 175-200. https://doi.org/10.20982/tqmp.12.3.p175

Sperber, D., & Noveck, I. (2004). Introduction. In I. Noveck & D. Sperber (eds.), *Experimental Pragmatics*. London: Palgrave Macmillan.

Stan Development Team. (2017). shinystan: interactive visual and numerical diagnostics and posterior analysis for Bayesian models. Retrieved 29 June 2022 from http://mc-stan.org/

Takahashi, Chiyoe. (2017). *Hatsuwakôi toshite no jôgen nitsuite no takakuteki kenkyû – hatsuwakôiriron ni yoru tokuchô no kijutsu to kaiwa bunseki ni yoru nihongo no jôgen sôgokôi no kijutsu –* [A Multifaceted Study of Advice as a speech act – description of characteristics by speech act theory and conversation analysis of Japanese advise mutual acts –]. [Doctoral dissertation, Kyoto University of Foreign Studies]. CORE. https://core.ac.uk/reader/236421867

Tawalbeh, A., & Al-Oqaily, E. (2012). In-directness and politeness in American English and Saudi Arabic requests: A cross-cultural comparison. *Asian Social Science*, *8*(10), 85.

Tsai, M. H., & Kinginger, C. (2015). Giving and receiving advice in computer-mediated peer response activities. *Calico Journal, 32*(1), 82-112. https://doi.org/10.1558/calico.v32i1.25959

Vehviläinen, S. (2009). Student-initiated advice in academic supervision. *Research on language and social interaction, 42*(2), 163-190. https://doi.org/10.1080/08351810902864560

Wickham, H., François, R., Henry, L., & Müller, K. (2022). dplyr: a grammar of data manipulation. https://dplyr.tidyverse.org

Wickham, H., Averick, M., Bryan, J., Chang, W., McGowan, L.D., François, R., Grolemund, G., Hayes, A., Henry, L., Hester, J., Kuhn, M., Pedersen, T.L., Miller, E., Bache, S.M., Müller, K., Ooms, J., Robinson, D., Seidel, D.P., Spinu, V., Takahashi, K., Vaughan, D., Wilke, C., Woo, K., & Yutani, H. (2019). Welcome to the tidyverse. J. Open Source Softw. 4 (43), 1686. https://doi.org/10.21105/joss.01686

Wickham, H. (2016). ggplot2: Elegant Graphics For Data Analysis. Springer Verlag, New York. https://ggplot2.tidyverse.org/

Widiana, Y., Sumarlam, S., Marmanto, S., & Purnanto, D. (2018). Phatic Advice Giving of Javanese Youngsters in Friendship Domain as A Politeness Strategy to Tie a Union. In *Fourth Prasasti International Seminar on Linguistics (Prasasti 2018)*. 449-454. Atlantis Press. https://doi.org/10.2991/prasasti-18.2018.83

Wilke, O. (2021). ggridges: ridgeline plots in ggplot2. https://cloud.r-project.org/package=ggridges

Zanuttini, R., Pak, M., & Portner, P. (2012). A Syntactic Analysis of Interpretive Restrictions on Imperative, Promissive, and Exhortative Subjects. *Natural Language & Linguistic Theory, 30*, 1231-1274. https://doi.org/10.1007/s11049-012-9176-2

Zanuttini, R., & Portner, P. (2003). Exclamative Clauses: At the Syntax-Semantics Interface. *Language, 79*(1), 39-81. https://doi.org/10.1353/lan.2003.0105

Textbooks.

Kizirian, V. M., Daill, E., Berthet, A., Hugot, C., Waendendries, M. (2012) *Alter ego + 1 : méthode de français A1* [Alter ego +1: A1 French method]. Paris: Hachette.

Leroy-Miquel, C., & Foissy. J. P. (2018). *Grammaire en dialogues : niveau intermédiaire B1* [Grammar in dialogues: B1 intermediate level]. (2nd ed.). Paris: CLE international.