

American Learners' Perceptions of the Pragmatics of German Interactions:  
What do Germans Really Mean?

By  
Ragnar Svare

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This dissertation is approved by the following members of the Final Oral Committee:  
Monika Chavez, Professor, German  
Mark Loudon, Professor, German  
Jeanne Schueller, Faculty Associate, German  
Francois Tochon, Professor, Curriculum & Instruction / French & Italian

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## 1.0 Introduction

This study seeks to shed light on how learners of German, native speakers (NSs) of German, and Americans unfamiliar with German reach decisions about the nature of speech acts that they witness NSs of German perform. I specifically focused my investigation on the role of the third-party observer of the interacting speakers due to this role's importance in the experience of language users and the role's concurrent lack of representation in the literature relative to the roles of the speaker or the direct addressee. Whereas speakers know their intent and addressees often have the benefit of knowing the context as well as recourse to conversational strategies, such as clarification requests, third-party observers need to rely on limited cues to assess the situations that they witness. Nevertheless, third-party observers usually draw conclusions about the interactions that they encounter. In the specific case of language learners, limited linguistic as well as cultural, including pragmatic, proficiency creates a particular potential for misreading the nature of observed interactions, even as learners are especially likely to take on the role of third-party observer. For example, learners may become sojourners without ready-made social roles within the target culture or act as consumers of authentic target-language audio- and video-materials. What is more, when the full array of target-language linguistic and/or cultural cues is not available to language learners, they likely will seek recourse to means of interpretation that may differ from those employed by native speakers. In an effort to make sense of what they observe, learners may also resort to biases about native speakers of the target language.

In short, the experiences of language learners as third-party observers are as relevant as they are under-researched. It is also unclear whether and how much learners rely on linguistic, extra-linguistic, and other forms of information (such as biases) when they interpret language events in which they themselves do not participate and how learners' interpretive tools compare

to those used by native speakers or fellow Americans who have no proficiency in the target language at all. This dissertation study seeks to address this gap by exploring how American learners of German experience interactions between German speakers and how the experiences of American learners compare to those of native speakers of German as well as those of Americans who do not know German at all.

## 2.0 Review of Literature

This Review of Literature begins by making a case for the importance of second language (L2) pragmatics generally and then focuses on the particular elements in the literature that pertain more directly to this dissertation study. To begin the general discussion of L2 pragmatics, this study is situated within language competence (see section 2.1). I go on to show the increased interest in L2 pragmatics in research and how that research has confirmed the effectiveness of classroom instruction of L2 pragmatics (see section 2.2). Section 2.3 details the applications of L2 pragmatics in an effort to show why it is important. Given that L2 pragmatic knowledge is beneficial to learners and classroom instruction can be effective, why has integration of L2 pragmatics into the curricula not kept pace with the increase in research? Section 2.4 attempts to answer that question by detailing the barriers to L2 pragmatics instruction. Knowledge of the barriers to instruction of L2 pragmatics also facilitates development of research that supports the inclusion of pragmatics in the foreign language (FL) classroom.

In section 2.5 I hone in on this dissertation study and explain why I focused my attention on receptive L2 pragmatics. I then focus on listener attitude and how it affects perception (see section 2.6). Section 2.7 deals with extra-linguistic features. Section 2.8 is devoted to implementations of L2 pragmatics instruction in the classroom; I discuss what has been done and

the gap that I hope to begin to fill with my own contributions. I then introduce my research questions (RQs) in section 2.9.

## 2.1 The place of pragmatics in language research and teaching

Pragmatics deals “with speakers’ assumptions, intentions, thoughts and feelings” (Wierzbicka, 1987, p. 111). The aforementioned elements can never be eliminated from natural language, which means that pragmatics always plays a role. In fact, although linguistic terminology enumerates and implicitly distinguishes between different areas, such as ‘grammar,’ ‘semantics,’ ‘phonology,’ and ‘pragmatics,’ these areas really interlock and pragmatics is part of all expressions of language. Wierzbicka notes that “consistent attempts to separate grammar from ‘pragmatic’ meanings lead to the paradoxical conclusion that much conversational English is ‘ungrammatical,’” (p. 111) giving the examples *Why don’t you be quiet?* and *Would you please be quiet?* as seemingly ungrammatical sentences that are in fact grammatical when pragmatics are considered. The conclusion is that “pragmatics pervades grammar, that the two intertwine at countless points” (Wierzbicka, 1987, p. 112).

Pragmatics intertwines especially closely with semantics as Wierzbicka (2002) asserted that “pragmatics cannot be divorced from semantics” (p. 1207). Wierzbicka (2002) used the methodology of Natural Semantic Metalanguage (NSM) to examine cultural scripts to avoid “the ethnocentric trap of absolutizing the linguistic practices of one society as universal principles of conversational behavior” (p. 1207), which is a goal shared by studies in cross-cultural pragmatics.

Due to its integral part in all forms and areas of language, pragmatics needs to be addressed in second language instruction. However, as will be shown, the fact that pragmatics permeates all areas of language has not guaranteed it a prominent role in either research into or the practice of teaching languages. That is, even though pragmatic aspects are always present,

they often are not made explicit even as other components of language, such as ‘the rules of grammar’ are. Despite its continuous presence, pragmatics has been neglected as an object of learning and largely absent in the language awareness of learners and even teachers or researchers.

However, there has been a gradual accommodation of pragmatics in conceptualizations of what it means to know and, by extension, to learn and teach a second language. The most prevalent approach to contemporary FL instruction in the United States is so-called communicative language teaching (Chen, 2017; VanPatten, Trego, & Hopkins, 2015). The stated objective of this approach is for learners to gain communicative competence. This term was originally proposed by Hymes (1972) in response to Chomsky’s (1965) conception of linguistic competence, which narrowly focused on syntax. Canale and Swain (1980) specified three sub-components of communicative competence, specifically for the purpose of FL instruction to include sociolinguistic (pragmatic) competence alongside grammatical competence and strategic competence (verbal and non-verbal strategies used to compensate for deficiencies in the other two competences). Even though nearly four decades have passed since then, pragmatics has not yet achieved an articulated and integrated role in either language teaching practices or the research that supports it.

Pragmatics is a crucial element of symbolic competence, a term associated with Kramsch and Whiteside (2008), who used the term “symbolic competence” (664) to refer to the ability to use and interpret language, describing it as a combination of “communicative and intercultural competence” (668). Because pragmatics is essential for both communication and cultural sensitivity, teaching for symbolic competence by necessity requires that pragmatics takes on a considerably larger role than it had in earlier representations of language and language teaching.

Kasper (1997) had defined pragmatics as “the study of communicative action in its sociocultural context” (para. 1). Kramsch and Whiteside (2008) then re-examined the terms “communicative competency” (646) and “context” (655). They pointed out that “context” in a FL classroom is far different than it is outside of the classroom due to the many assumptions generally made in the classroom. It is assumed, for instance, that the interlocutors all agree on the following points: (a) which language to use, (b) the point of the interaction, (c) pragmatic standards of appropriateness, and (d) that all interlocutors have equal status (645-646). In line with these fundamental conceptual shifts, researchers are increasingly concerning themselves with how best to address pragmatics in the FL classroom.

## 2.2 Increased interest in second language (L2) pragmatics in research

Although pragmatics is a relatively new area in L2 research when compared to more traditional linguistic areas, such as syntax, it has garnered a great deal of interest. Researchers have engaged in pragmatics research from multiple theoretical perspectives (Norouzian & Eslami, 2016), such as: 1) the cognitive perspective, 2) the socio-cultural perspective, 3) the psycholinguistic perspective, and 4) the pedagogical perspective. Several researchers conducted state-of-the-art reviews on research into L2 pragmatics, and the findings illustrated the growth of the field. Kasper and Schmidt’s review (1996) contained six articles, three of which focused on effects of instruction. Rose (2005) reviewed 25 such articles, and five years later, Takahashi (2010) reviewed 49 articles. Bardovi-Harlig (2015) reviewed 81 studies. Each of these authors concluded that there is merit to classroom instruction of L2 pragmatics, although there was no consensus on the best method of implementation. These numbers show that research on L2 pragmatics has grown rapidly in the sheer number of studies as well as in scope.

## 2.3 Applications for L2 pragmatics

The increased interest in research into L2 pragmatics reflects its importance in today's global society. Contemporary society offers abundant opportunities to interact with and interpret a wide array of media and work and collaborate with people from diverse cultural backgrounds. Effective interpretation and communication requires so much more than basic information transfer. For L2 learners to succeed at real-life, practical tasks, they need pragmatic skills. Technologically advanced sources enable L2 learners to encounter information that to them is as readily available as it often is also ambiguous in terms of meaning, including and especially the pragmatic messages that it contains. The goal to foster skills in the so-called new literacies, addresses the need for learners to come to terms with these challenges.

### 2.3.1 New literacies

New literacies, a term coined by Buckingham (1993), refers to the ability to successfully interpret all types of new media, such as blogs, YouTube video clips, and video games. Skills in new literacies have become increasingly important as technology has become more mainstream in society. It is important for students to learn literacy skills that reflect the types of skills currently needed. Language users need strong receptive skills to develop competence in new literacies. Lacasa, Martínez, and Méndez (2008) maintained that “new literacies need to be acquired to participate actively in our society and contemporary culture” (p. 86). Tan and Guo (2009) posited that “new literacies may not simply spontaneously thrive in today's classrooms” (p. 316). They also point out that teachers often have limited experience teaching with multimodal texts. The researchers designed a framework of metalanguage pertaining to the multimodal texts for the instructor in order to help facilitate classroom talk and discussion. Goodwin-Jones (2015) categorized the many skills that fall under the umbrella of new literacies

as a “moving target” (p. 17), changing across contexts and years. New literacies allow learners to use language in formats that are relevant to them. These skills allow learners to consume content in the target language in meaningful ways. However, new literacies also require learners to recognize and deal with language that aims at more than the simple transmission of information. For example, being able to recognize or even generate jokes, language play, lies, and intentional rudeness are all essential to symbolic competence.

### 2.3.2 Face-threatening acts

Face-threatening acts (FTAs) are an example of an aspect of language that is not very pleasant but nevertheless integral to everyday communication. They therefore are highly relevant to language learners who seek to develop communicative and/or symbolic competence.

FTAs are an important part of this dissertation as four of the five speech acts that participants were asked to rate are potentially FTAs (command, complaint, refusal, and reprimand – but not declaration). Differences in pragmatics standards between the native and target languages engender far more emotional responses from learners than any other aspect of linguistics. Therefore, it makes sense to take a closer look at FTAs as they are likely to elicit strong emotional responses, even among NSs. FTAs share many features, which often makes it difficult to differentiate among them. Complaint generally overlaps with other FTAs (Laforest, 2002, p. 1597), meaning that a complaint can also function as a reprimand, for example. There exist no prototypes for complaint (Laforest, 2002, p. 1597) or threat (Limberg, 2009, p. 1378). Even the line between FTA and non-FTA can be blurry, as Laforest (2002) notes that “assertive utterances corresponding to the intention to complain can always be interpreted as simple comments” and vice versa (p. 1597).

Complaint is often broken down into two distinct types. Boxer (2010) categorized these types as: 1) direct complaints, which are generally FTAs and 2) indirect complaints, which are used to establish rapport (p. 163). This basic dichotomy seems insufficient to adequately describe the pragmatic aspects of FTAs. Laforest (2002) wrote of complaint that it “is one way of reminding a person that there are certain norms of behavior which must not be transgressed” (p. 1596). While these reminders can certainly be face-threatening, it can be argued that they also signify that the addressee is part of the in-group community as the speaker may not feel it worthwhile to criticize an outsider. Therefore, complaint can simultaneously threaten face and cement one’s position in the community. Cultural norms relating to the importance of the community vs the individual thus play an important role in the perception of the appropriateness of the speech act.

Speech acts with a high potential to threaten face, such as confronting one’s boss about a workplace grievance, are more difficult to master for anyone but particularly, for language learners. Taguchi (2012) confirmed this: “Due to their low-stake, informal nature, low-imposition speech acts were easier and faster to perform, and showed a steady, incremental development over time, but high-imposition speech acts did not develop as quickly, because of the greater degree of politeness required to counter the potential threat to face” (p. 246). Taguchi found that appropriateness was affected by the level of imposition of the speech act but fluency was not affected by the level of imposition (248). Even learners with a high degree of fluency still struggle to effectively implement high-imposition speech acts.

Despite the existence of a “widespread tendency to avoid **face-threatening acts**, or explicit requests, by means of indirect speech acts,” (Mauri & Sanso, 2011, p. 3516)(bold in original) FTAs are still very common due in part to their effectiveness in communication. Chang

and Haugh (2011) termed one usage “strategic embarrassment,” whereby the “speaker attempts to embarrass the addressee into doing what he or she wants by topicalizing unmet expectations” (p. 2948). Similarly, Limberg (2009) wrote that “[a]s competent members of a speech community we can employ strategies that are aimed at attacking the addressee’s face in order to bring about a certain goal” (p. 1392). Chang and Haugh (2011) also noted that strategic embarrassment is “treated as sociopragmatically allowable” (p. 2949). The scenarios in which strategic embarrassment is appropriate will, however, differ based on the sociocultural context of the interactions.

It is easy to spot the difficulties that even more advanced learners have with high-imposition speech acts. A common reaction is to focus instructional effort on helping learners be even more polite than they already are. Nevertheless, there is also merit to making learners aware of situations in which it could be beneficial to intentionally threaten face, such as the strategic embarrassment example outlined above. Learners will encounter FTAs as they use the target language, so they should also be exposed to them in instruction. Ignoring FTAs in instruction because they are unpleasant only serves to create unprepared learners and perhaps even set up false – and, one may argue, sanitized and uninspiring – expectations of language use by NSs. Strategies for dealing with FTAs directed at them as well as the production of FTAs can empower learners.

### 2.3.3 Workplace communication

Another real-world application of pragmatics that can empower learners is workplace communication. Riddiford and Joe (2010) showed the tremendous impact that gains in sociopragmatic skills can make in the workplace. They provide a particularly striking example in the case of Helen, who was a so-called “skilled migrant” from Hong Kong living in New

Zealand. She was used to managing people under a system where the boss was free to dictate to the secretary and other subordinates, which was inappropriate in New Zealand. In short, her subordinates found her style abrasive. As a result of her style, she had not been able to keep a job in New Zealand. She participated in the Workplace Communication Programme for Skilled Migrants at the Victoria University of Wellington, where her awareness of politeness strategies increased. Her usage of internal and external modifiers increased, and she reported positive effects due to using the phrase “I was wondering” in her requests. Through a slight modification in her style of speech, Helen was able to hold a job and utilize her professional skills. The attention paid to pragmatics made a huge difference in her life, and it has the potential to do so for other language users.

## 2.4 Barriers to L2 pragmatics instruction

For many language learners, the classroom is their only real chance to learn about pragmatics. The integration of pragmatics into classroom curricula has lagged behind the recent increase in pragmatics research (see section 2.2). The following sub-sections examine a variety of factors that hinder the widespread implementation of L2 pragmatics instruction.

### 2.4.1 Native speaker baseline

The difficulties in forming a NS baseline for pragmatics are fundamental to many barriers to L2 pragmatics instruction. A NS baseline for pragmatics is an imagined norm, which allows researchers and instructors to have a point of comparison to judge L2 pragmatics against. Such a NS baseline would allow L2 behaviors and utterances to be classified as right or wrong based on adherence or deviation from the NS baseline. However, pragmatics is made up of so many disparate, interacting components that it is difficult to form a NS baseline. There are pragmatic variations due to factors such as dialect, region, and individual differences (IDs).

The complexity of pragmatics and forming a NS baseline for it can be understood when seen through the lens of Dynamic Systems Theory (DST). DST has its roots in mathematics but is a useful way of thinking about phenomena involving complex, interacting systems. De Bot, Lowie, and Verspoor (2007) apply DST to SLA as a whole, calling it “a theory that does not regard real-life messy facts as “noise” but as part of the “sound” you get in real life” (p. 7). Taguchi (2012) cites DST as one of the theories that informed the “dynamic, complex systems perspective” (p. 248) used in her study. Looking at pragmatics as a set of interacting systems illustrates the difficulty of pinning down a NS baseline. DST helps explain why adding one or two additional measures in pragmatics studies is not enough to pin down general principles of pragmatic systems. Additional measures in that manner is very helpful in understanding more isolated situations and was done in this dissertation study. However, the complex and systematic nature of pragmatics means that much more work is needed to gain insights applicable to the way that the many interacting systems function together.

The complexities of creating an accurate NS baseline can be seen by looking more closely at individual differences (IDs). IDs are used here as an example to illustrate the issues with the creation of a NS baseline for pragmatics. IDs have proven particularly relevant with regards to pragmatics. This observation holds for both L2 and first language (L1) speakers. For L2 speakers, Kasper and Rose (2002) pointed out that learners often have affective reactions to pragmatic aspects of the target language, but that is rarely the case with grammatical features such as word order (p. 275). In the context of L1, one of the most thoroughly documented IDs in reading the pragmatic behavior of others is Autism Spectrum Disorders (ASD). ASD is used as an example ID in this case due to the large impact it has on pragmatics. Tesink et al. (2009) showed that even when the ASD and control groups did not perform significantly differently on

a pragmatic level, the “increased right hemisphere activity of the ASD group was interpreted as reflecting more effortful processing” (p. 1948). It seems possible that varying levels of processing effort – even when undetectable in production in the L1 – may present difficulties in acquiring and/or employing L2 pragmatics. Willey’s (1999) autobiographical case study *Pretending to be Normal: Living with Asperger’s Syndrome*, effectively showcased someone with ASD who pretended to be normal to the outside world but did not process information in the same way as neurotypical individuals (NTs). It is very possible that she would have scored normally on the L1 pragmatic tasks from Tesink et al.’s (2009) study, but the processing differences might affect the way in which she would learn L2 pragmatics. The line between NTs and those with ASD does not seem to be a definite one. When one considers that even the individuals who were all diagnosed as having ASD in the Tesink et al. study did not perform significantly differently than the control group on the pragmatic task, it is easy to see how individuals with very moderate forms of ASD or other pragmatic impairments could go undiagnosed by doctors. If doctors do not notice that these people are affected by ASD, it would be unreasonable to think that instructors would notice any difference between these individuals and NTs. These individuals may very well have a similarly heightened cognitive load when performing L1 pragmatic tasks and even further difficulties with L2 pragmatics. Kim et al. (2011) estimate that 2.64% of the general population is affected by ASD.

Aside from theoretical difficulties in creating a NS baseline, there are also practical difficulties. For example, Su and Ren (2017) used a NS baseline to examine the use of request strategies by learners of Mandarin Chinese. To create their NS baseline, they needed to recruit, facilitate participation in their study (which involved participants roleplaying three scenarios), and analyze that additional data for 10 NSs of Mandarin Chinese. This time and effort was on top

of the same steps taken for 24 non-native speaker (NNS) learners. Not all studies would be adequately served with a NS baseline that contained fewer than half the participants of the target sample. This example shows how the creation of a NS baseline requires a large investment of resources, which can be a daunting challenge for many researchers.

I included NSs of German as a participant group in this study in order to have data to compare the data of American learners of German and American non-learners of German with. This also allowed me to avoid reliance on my own assumptions and intuition as to how NSs of German would perceive the interactions portrayed in the video clips.

#### 2.4.2 The ecology of the learning environment

The difficulties in creating a NS baseline for pragmatics contribute to a shortage of instructional materials. In addition, narrow (and, one may argue, misguided) student expectations, lacking teacher training, and misconstrued pragmatic similarities, especially among Indo-European languages all conspire to relegate pragmatics to a marginal role in many language classrooms.

First, pragmatics is difficult to capture in firm rules, which are the backbone of canonical instructional materials. This has led to a relative dearth of instructional materials in pragmatics when compared to grammar and lexicon. This lack of L2 pragmatics instructional materials means that the burden, in terms of time and effort, of material creation and integration is placed more squarely on instructors, which, in turn, often leads to the omission of pragmatics from the curriculum.

Second, students are generally not bothered by the omission of pragmatics from the curriculum – they neither notice nor care much. Conditioned by years of socialization into learning that emphasizes explicit knowledge in the form of rules and formulae, they want

concrete rules (Chavez, 2017). Explicit grammar instruction is familiar and comfortable to them (Moranski & Henery, 2017). While students routinely ask for more explicit grammar instruction, they do not know enough to recognize when pragmatics has not been integrated into the curriculum, much less demand that it be added. Students are also generally unaware of the importance of L2 pragmatics.

Third, an unawareness of the importance – or, more fundamentally, the nature – of pragmatics is not a problem that is isolated to students; it also extends to many teachers. Teacher training courses do not adequately address the integration of pragmatics into instruction. Many instructors, especially NNS instructors, lack target language (TL) pragmatic knowledge, which can make them feel uncomfortable attempting to integrate it into their teaching. Cohen (2016) found differences between NS and NNS teachers in the way they handled pragmatics instruction in the classroom, such as that NS teachers used more digital media and NNS teachers incorporated more instruction on swearing, and concluded that it is important to increase NNS teachers' familiarity with TL pragmatics (p. 583).

In addition, some instructors believe that pragmatics can only be learned first-hand, so it is useless to attempt to teach it in the classroom. These arguments resemble those that have been made against the integration of cultural information into the curriculum. Some instructors even have negative emotional views of L2 pragmatic conventions that cause them to shy away from including them in their instruction.

Language instructors sometimes artificially separate pragmatics from grammar and lexical choice. Pragmatics is a part of natural language that interacts closely with the other linguistic systems and cannot be separated cleanly unto itself. However, instructors sometimes view pragmatics as something “extra” for several reasons, such as 1) the lack of available

materials that integrate pragmatics into the curriculum, 2) the use of a sanitized version of the target language that more readily models grammatical topics and avoids uncomfortable or complicated themes, and 3) an emphasis on information transfer. Those teachers who view pragmatics as something “extra” can be reluctant to devote class time to the topic.

The belief that learners will be able to master L2 pragmatics via intuition is another barrier to the implementation of explicit pragmatics instruction in the classroom. Even highly proficient and pragmatically aware L2 language users experience pragmatic failures, such as Clyne (2006) with German introductions (p. 96) and Cohen (2016) with Japanese filler words (p. 564). It cannot be reasonably assumed that the average L2 learner will acquire full L2 pragmatic competency through exposure alone.

Fourth, the idea that pragmatic conventions are universal is one belief that can lead to this lack of recognition of the importance of teaching pragmatics. Although Brown and Levinson (1987) did important work in establishing fundamental ideas in politeness theory, much of what had been posited to be universal has since been shown not to be. Chinese service encounters do not neatly fit into the structures established by Brown and Levinson (Kong, 1998). Gagné (2010) observed that Brown and Levinson’s concept of negative face did not work in a Japanese context. The work of researchers such as Wierzbicka on Natural Semantic Metalanguage (NSM) to avoid this sort of ethnocentric thinking attempts to combat this viewpoint (see section 2.1).

A related belief embraces the assumption that pragmatic conventions are directly transferable from one language to another as long as the languages are considered to be ‘related,’ such as German and American English. Research has largely focused its attention on pairings of languages that are considered to be language-genetically, geographically, or broadly culturally distant, especially between “East” and “West,” such as the pairing of Japanese and American

English. At the same time, research has neglected to describe pragmatic differences or, for that matter, similarities, between languages that are – or at least, are considered to be – more closely related. With the notable exceptions of work by researchers such as Schleeff (2009), Huth (2007), and Golato (2002), pragmatic contrasts between German and American English have remained largely unexplored, while contrasts such as between Japanese and American English have been examined more thoroughly (Ishida, 2006; Ishihara, 2007; Takimoto, 2009). Nevertheless, when researchers paired German with other European languages, such as Spanish, important differences in pragmatic conventions were found. Siebold and Busch (2015) examined German and Iberian Spanish refusals, noting that German refusals exhibit a “great level of pragmatic clarity, especially with regard to the final outcome of the conversation” (53) whereas the Spanish refusals tended to favor face-saving at the expense of clarity. Their findings led them to conclude that the typical “East” vs. “West” divide in pragmatics is not the only important division in pragmatics.

## 2.5 Focus on receptive pragmatics in this study

This study focused on pragmatics from a receptive perspective. While productive language skills or lack thereof are generally the most noticeable, receptive skills play a large role in learning and using a language. Without receptive pragmatic skills, appropriate pragmatic production is little more than a happy accident. Language users need to actively focus on building receptive pragmatic skills to increase any facet of their pragmatic proficiency. Language users generally spend much more of their day using receptive language skills than productive language skills. People observe and listen to the other people around them almost constantly. Receptive skills are also necessary during production, as one needs to gauge reactions and take responses into account. L2 pragmatics research has focused primarily on how speakers convey social messages

and has failed to investigate how listeners ‘hear’ these messages. This focus on production can be seen, for example, in how Bardovi-Harlig (2013) gave multiple ways to evaluate pragmatic performance on productive tasks (p. 70) but did not discuss receptive measures of pragmatics at all. Common methods of data collection, such as roleplays, Discourse Completion Tasks (DCTs), and inventories contained in language corpora rely on production from participants. However, the full spectrum of interactions includes multiple occasions on which learners are listeners, either as direct addressees or as ‘onlookers,’ and need to interpret the pragmatics of what they hear. The onlooker role – when the listener has no access to the speaker for clarification – is particularly common, such as in crowds, public venues, or when watching TV, and shapes language learners’ perceptions and judgments of the speakers and, further, the culture, that surround them.

Despite the sheer quantity of time that people spend as onlookers, there has been very little research focused on that particular role. To-date, I have found only two studies that focused on the onlooker perspective. In a theory-based article, Padilla Cruz (2013) explored pragmatic failure from the onlooker perspective. Ishida (2006) created video clips of NSs of Japanese conversing and used segments of those conversations to examine how learners of Japanese and NSs of Japanese interpreted the back-channel que *Uun*<sup>1</sup>. Ishida recognized the benefits of using video clips for research into pragmatic perceptions. Specifically, interactions in the clips stay constant when employed repeatedly for different participant groups, data can be gathered from research participants in remote locations, and variables such as sound can be manipulated easily. I used video clips for these very same reasons in the present study.

While research has focused on what types of social messages speakers construct, what it has all but ignored are the questions of what specific features of language and, just as importantly, what

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<sup>1</sup> Ishida gives the translation of “yeah, I see” on page 1945.

extra-linguistic features (e.g., the interactants' demeanor, projected relationship, physical posture, etc.) contribute to how the message is perceived.

Receptive skills are even more vital in the L2, where many learners are (a) less comfortable producing language than in their L1 and (b) often have limited physical access to L1 communities so that their primary sources may be observational (e.g., TV, internet, etc.). How learners perceive the speech behaviors of members of the L2 speech community can color their perceptions of the community as a whole in important ways.

### 2.5.1 The *World-Readiness Standards* and receptive skills

The *World-Readiness Standards for Learning Languages* (ACTFL, 2015) contain very important receptive components. The *World-Readiness Standards* offer a top-down national directive to steer the focus of researchers and instructors. While the average college teacher may feel little pressure from the *World-Readiness Standards*, the *World-Readiness Standards* directly impact teacher-training and thus quickly have a large impact on the field of foreign language education. Therefore, it is important to note that receptive skills are an integral part of the *World-Readiness Standards*. All of the five C's – *Communication*, *Cultures*, *Connections*, *Comparisons*, and *Communities* – reference the importance of receptive skills. Standard 1.2 under *Communication* emphasizes the user's ability to both "understand and interpret" language. Cultural understanding requires keen receptive skills that go beyond understanding linguistic content. Making *Connections* requires users to synthesize interpretations from various sources of input. *Comparisons* leading to insight are only possible when language users understand the target language and culture well. The *Communities* standard emphasizes life-long learning and using the language outside of school; receptive skills allow language users to participate in the target community of practice through various means, such as watching videos and reading blogs,

even when they are geographically isolated from the target community. Of the three modes proposed in the Standards, the interpretive mode of communication explicitly underscores receptive skills, but the interpersonal mode certainly incorporates them as well. Moreover, even the presentational mode requires knowledge of native speakers' receptive expectations.

The 2007 MLA ad-hoc committee report encourages language departments to go a step further than what is described in the Standards. The report emphasizes the importance of ensuring that students become translingual and transcultural. Pragmatic skills are critical to the development of the deep cultural understanding of the target culture as well as one's own culture that the report insists is necessary.

## 2.6 Listener attitude, familiarity, and perception

Existing attitudes towards a cultural group can have noticeable effects on listener perceptions and comprehension. The effect of participant attitude towards Germans was a crucial component in this dissertation study. An area of current research that has paid exemplary attention to the role of listener attitude is perceptual dialectology, particularly as presented in the work of Preston and collaborators. Preston (2000) showed the drastic effect that attitudes towards regional/cultural groups can have on perceptions of language use in the L1. He found that Michiganders believed that they speak the most correct English and that Southerners and New Yorkers speak the least correct English, whereas Southerners themselves believed that they spoke the most pleasant English (p. 401). Both groups ranked the correctness and pleasantness of New York City English very low (p. 401). Continuing in that vein, Plichta and Preston (2005), in an empirical study examining perceptions of regional accent relating to /ay/, found that gender stereotypes "clearly influence perception" (p. 127), noting that "it is not surprising that social information may overwhelm acoustic detail" (p. 127), hammering home the importance of extra-

linguistic factors. Respondents may not be able to explain their perceptions, as Plichta and Preston report that “it is clear that respondents have discriminatory abilities which far outstrip their conscious awareness” (p. 127).

Given the effects of attitude on L1 speaker perceptions of other L1 speaker groups, it is worth examining this phenomenon in an L2 context. Lindemann (2002) explored NS perceptions of L2 speakers. Because attitudes play such a large role in the perception of language use by NSs, it is not surprising that the effects are even more noticeable for NS perception of language use by NNSs. Lindemann found that NS actions towards L2 users who were part of a group towards which the NSs had a negative attitude, caused the NSs to use communication strategies which inhibited communication. There was also a relationship between NS attitudes and NS perception of interaction success, such that NSs who had a negative attitude towards the L2 user group believed the interactions to have gone poorly. Lindemann (2005) asked US undergraduate students to rate the English abilities of nations around the world, and countries with negative stigmas attached to them, such as China, Mexico, and Russia, were evaluated correspondingly poorly. Hu and Lindemann (2009) revealed that NNSs accurately listened to and described phonetic features from recordings they believed to be from other NNSs, but the NNSs generally failed to find fault with recordings they believed to be from NSs, even when there were errors in the recordings. Lindemann and Subtirelu (2013) established that social factors including “negative attitudes toward the L2 speaker, incorrect beliefs about the speaker or their language, failure to share responsibility for the success of communication, or use of listening strategies that are not helpful in comprehension of L2 speech” (p. 588) play a role in how L2 speech is perceived (p. 587).

It is clear that NS attitude towards L2 users can have dramatic effects on communication, so researchers have also investigated L2 user attitudes towards NSs. Chavez (2009) examined the perceptions of American learners of German from a folk linguistic perspective. She found that those learners' beliefs about German pronunciation that were formed before taking German were based on depictions in media and often negative, describing German as "a harsh, throaty, or "phlegmy" language" (p. 8). Wilkerson (2010) showed that learners of German and NSs of German were better at differentiating native German speech from non-native German speech. In a later study, Wilkerson (2013) went on to find that participants with higher familiarity with German (NSs of German and learners of German) were better able "to identify specific features of speech" (p. 113) than participants with low familiarity with German (Non-Learners of German). Learners of German who were better at recognizing specific features of speech were also better at differentiating between native and non-native German speech. Non-learner participants in Wilkerson's 2013 study exhibited beliefs very similar in nature to the ones of learners of German in Chavez (2009); the Non-Learners thought that German could be characterized as "throaty" or having a "guttural sound of voice" (p. 115). Without the ability to make sense linguistically of what they were hearing, the Non-Learners of German "may have called on preconceived notions of stereotypical beliefs about German" (p. 115). Therefore, in addition to the effect of the attitude of L2 users towards NSs, it is important to consider the familiarity of those users with the L2.

These studies show the power of pre-conceived attitudes when interpreting language use and serve as a reminder that listening comprehension is a complex phenomenon that has important connections to personal beliefs about the person or people who are (perceived to be) talking. To assess the importance for L2 listeners of attitude in addition to familiarity with the

language, I included American non-learners of German (Americans who had never studied or otherwise been in contact with German) in my dissertation study to compare their perceptive performance with those of NSs of German and American learners of German. Specifically, when observers are confronted with acoustic and visual representations of speech acts in another language and have no familiarity with that language, they need to process their impressions without recourse to the language itself. On such occasions, other considerations, including attitude and bias toward speakers of that language, their culture, or country, are likely to come into play.

### 2.6.1 Effect of attitude on study abroad outcomes

As discussed in section 2.4.2, the belief that students will be able to master L2 pragmatics through intuition is one of the justifications for not teaching L2 pragmatics explicitly. When examining the abilities of Spanish learners of English to mitigate requests in email during study abroad, Alcón-Soler (2015) found that the group that received instruction showed improvements that the control group did not. If learners were to develop optimal pragmatics through exposure alone, that year of study abroad should have been enough for the control group to make just as large of gains pragmatically as the experimental group. Thus, the findings are in keeping with the notion that exposure to the target culture alone is suboptimal for learners.

A case study about the development of terms of address in two Australian learners of Indonesian (Hassall, 2015) highlights the importance of L2 identity in the learning success of pragmatics. Hassall notes that “[s]tudy abroad learners tend to make modest but definite gains in L2 pragmatics” (p. 34). There is, however, a large amount of individual variance. One participant, Ross, made huge pragmatic leaps, while another participant, Amy, learned very little. Ross had traveled extensively previously to this study abroad experience, including a six month stay in a

small town in Germany, where he enjoyed learning the language and talking with locals. He was enthusiastic and open and sought out opportunities to use Indonesian outside of the classroom. While he experienced some “initial cultural unease” (p. 42) with the Indonesian way of using terms of address, he ultimately came to understand and embrace the system. That openness to allow himself to experience that unease and push forward to the next level of cultural understanding made a huge difference in his learning outcome. Amy, however, rarely used Indonesian outside of the classroom, despite being in Indonesia. She did not feel welcome or at home in the L2 cultural setting (p. 52) and closed herself off to experiences that would have allowed her to use the language. She lost interest in grappling with the language outside of the classroom and never noticed how the forms of address were used by NSs of Indonesian.

## 2.7 Extra-linguistic features

Extra-linguistic features can inform the listener about such factors as the attitude or emotional state of the speaker. While the utterances bear the main burden of communication, extra-linguistic features fill in the details. A wide variety of extra-linguistic features have been studied, such as attitude and language contact (Schüppert & Gooskens, 2012); interruptions, voice volume, and facial expressions (Koroshinadze, 2015); and language exposure (Gooskens & Swarte, 2017). See Hardison (2010) for an annotated bibliography including many studies on facial expression and gestures.

Extra linguistic features can have a large impact on communication. Schüppert and Gooskens (2012) examined why Danish speakers understand spoken Swedish better than vice versa. They tested young children to control for the extra-linguistic variables of attitude, contact, and literacy. There was no significant difference between the amount of Danish that the Swedish children understood and vice versa, so they concluded that extra-linguistic factors must be

hindering the comprehension of Danish by Swedish adults. More recently Gooskens and Swarte (2017) found that familiarity with the other Nordic language was the most important factor in comprehension.

The implementation of extra-linguistic features differs by culture. For example, gestures for motion events have been shown to differ between English and Turkish (Özyürek et al., 2008). When familiarity with the language is lacking, other extra-linguistic factors increase in importance.

Gesture is an extra-linguistic feature that is both widely recognized for its importance and often ignored in the classroom. Similar to pragmatics, many instructors believe that gesture “cannot be studied in a structured way” (Gullberg, 2006). As this study will show, gesture played a large role in how NSs of German determined speech act; it was found, specifically, that NSs of German relied significantly more on gesture than Non-Learners of German to determine that Clip A, Tractor depicted a declaration when the clip was seen with sound (see Results, especially 4.3.1).

## 2.8 Implementations of L2 pragmatics instruction in the classroom

While there is certainly a lack of widespread integration of L2 pragmatics into classroom curricula, some initial steps have already been taken in this area. In the following sub-sections, I will recognize the work that has already been done, particularly in the use of video materials and corpora in language instruction. However, I will also examine how these new approaches largely are limited to instruction with regard to routinized speech acts and what areas of pragmatics consequently remain unexplored.

Both researchers and textbook authors have recognized the potential of video materials in teaching language toward a definition of competence that includes pragmatics. Abrams (2014)

utilized the film *The Edukators* to examine the effect of a variety of pragmatics-focused tasks. A control group watched the film and answered comprehension questions, while the experimental group worked through a variety of tasks based on the film that were designed to expand their awareness and understanding of pragmatics. Abrams concluded that the experimental group showed pragmatic development that the control group did not. These results indicate that it is possible to teach L2 pragmatics through film.

The textbook *Cineplex: Intermediate German language and culture through film* (Schueller, Zachau, & Collenberg-Gonzalez, 2014) integrates materials for L2 pragmatics instruction into each chapter. Each chapter deals with a modern German-language film and includes a section on speech acts, such as giving thanks and apologizing. Materials such as this textbook help remove one of the barriers to L2 pragmatic instruction in the classroom.

Another promising direction in the implementation of L2 pragmatics instruction in the classroom are corpora-based materials. Bardovi-Harlig and Mossman (2016) provided a guide for instructors to create their own corpora-based materials. They cited the “well-known lack of pragmatic authenticity in commonly available materials” (p. 251) as their motivation. They gave advice for instructors on how to identify pragmatic routines, exact examples, and develop noticing exercises for students. This sort of guide helps to ease the burden on instructors by making it easier to create their own authentic materials for L2 pragmatics instruction.

These new approaches to teaching pragmatics target routinized speech acts, i.e., speech acts with scripted formulae such as thanking someone in a service encounter by saying “thank you.” However, there are fundamental differences between learning how to recognize or execute routinized speech acts and doing the same with non-routinized speech acts. Kasper (1984) suggested that while a top-down processing strategy suffices for routinized speech acts, a

bottom-up processing strategy is more appropriate for non-routinized speech acts. Padilla Cruz (2013) elucidated why a different processing approach would be beneficial for routinized vs non-routinized speech acts, writing that the hearer “will search for the interpretation that yields the largest amount of cognitive effect for the lowest level of cognitive effort” (p. 33). That indicates that in their analyses of non-routinized speech acts, learners are likely to use familiar and efficient processing strategies from their L1, even if they are not appropriate for the L2 context. To address the unique situation of non-routinized speech acts, this dissertation study examined non-routinized speech acts.

## 2.9 Research questions

Although the amount of pragmatics-related research has increased recently, the field is still relatively young and lacks depth in certain respects. Bardovi-Harlig (2017) suggested three directions for future research (239-240): 1) replication, 2) isolating variables/factors, and 3) exploring interaction of variables/factors.

While there was no existing study similar enough for me to replicate, I did aim to isolate variables and explore their interactions as shown in clips taken from reality TV shows. The variables I investigated in this manner were (a) the identification of a speech act as being of a certain type, as perceived by respondents; (b) respondents’ extra-linguistic reasoning with which they explained their designation of a speech act to be of a certain type; (c) the role of sound when respondents saw the clip with and without sound; and (d) the role of language proficiency, as those with at least some German proficiency (learners of German; NSs of German) were also able to draw on linguistic cues whereas Non-Learners of German were not.

My research questions are as follows:

**Part I: Exploring the group-internal agreement on pragmatic perception**

- RQ(1/2/3)(A/B/C).a To what extent did (1 NSs of German/2 American learners of German/3 American non-learners of German) agree on what speech act they saw in (A Clip A, Tractor/B Clip B, Zoo/C Clip C, Big Brother) when they saw it without sound?
- RQ1(1/2/3)(A/B/C).b To what extent did (1 NSs of German/2 American learners of German/3 American non-learners of German) agree on what speech act they saw in (A Clip A, Tractor/B Clip B, Zoo/C Clip C, Big Brother) when they saw it with sound?
- RQ1(1/2/3)(A/B/C).c Was the presence or absence of sound associated with differences in (1 NSs'/2 learners'/3 Non-Learners') perceptions of what speech act they saw in (A Clip A, Tractor/B Clip B, Zoo/C Clip C, Big Brother)?
- RQ(1/2/3)(A/C).d: Was the presence or absence of sound associated with differences in the rankings of the extra-linguistic features of (1 NSs of German/2 American learners of German/3 American non-learners of German) that those (1 NSs of German/2 American learners of German/3 American non-learners of German) relied on to arrive at their determination of (A Clip A, Tractor/C Clip C, Big Brother) as a (A declaration/C complaint)?
- RQ(1/2/3)(A/C).e: What extra-linguistic reasons did (1 NSs of German/2 American learners of German/3 American non-learners of German) cite in explaining how they had arrived at the designation of (A Clip A, Tractor/C Clip C, Big Brother) as a (A declaration/C complaint) when they saw it without sound?

RQ(1/2/3)(A/C).f: What extra-linguistic reasons did (1 NSs of German/2 American learners of German/3 American non-learners of German) cite in explaining how they had arrived at the designation of (A Clip A, Tractor/ C Clip C, Big Brother) as a (A declaration/C complaint) when they saw it with sound?

## **Part II: Overview of RQ1 – RQ3**

### **Part III: Exploring between-group agreement on pragmatic perception**

RQ4a How do the three participant groups compare in the extent to which they agree that Clip A, Tractor depicted a declaration and Clip C, Big Brother depicted a complaint when they saw each clip without sound and with sound? If differences existed, where did they lie?

RQ4b How do the three participant groups compare in the extent to which they relied on each of the four extra-linguistic features? If there were differences, where did they lie?

## 3.0 Methodology

The design of the dissertation study followed from a pilot study in which the original instrument was tested and subsequently improved. I will first describe the pilot study, then the changes made to its design so as to create the dissertation study, and finally the dissertation study itself.

### 3.1 The Pilot Study

I designed the pilot study during the spring semester of 2011. I created an original instrument to examine respondents' perceptions of interactions shown in English- and German-language video clips. These perceptions were to be taken as representing the concept of 'pragmatic perception' in the dissertation study. The IRB protocol for the pilot as well as the dissertation study that followed is SE-2011-0158. The approval form can be seen in Appendix 1.

#### 3.1.1 Participants in pilot study

The pilot study involved 15 native speakers of American English who were also learners of German (referred to as Learners) enrolled in first-semester German at a large Midwestern research university and five native speakers of German (four of German German and one of Austrian German; referred to as NSs).

#### 3.1.2 Recruitment for the pilot study

I recruited Learners by going to their classes to introduce the project and let them know the time and location where they could participate. I recruited the NSs from my graduate student colleagues and their friends.

#### 3.1.3 Materials for the pilot study

I utilized video clips, surveys, and follow-up interviews to collect data for the pilot study. These will be described below.

### 3.1.4 Clips used in the pilot study

Ten video clips were shown to participants. The clips ranged from six to 61 seconds in duration (see Table 1) and depicted various social interactions. As shown in Table 1, clips were taken from reality TV and news shows. The clips were selected to represent naturalistic speech. I read online forums to see which German reality TV shows are more heavily scripted and proceeded to exclude those. I used the information gained from the online forums as well as my own experience watching American, German, and Swedish reality TV shows to eliminate shows and clips in which the depicted interactions felt inauthentic for a variety of reasons, including being too heavily scripted and conveying a lack of emotional investment on the part of someone in the show. I also enlisted the help of my dissertation advisor as well as colleagues and friends who are NSs of German to ensure that I selected clips that depicted speech acts that appeared naturalistic to trained language pedagogues.

The relatively large number of ten clips was required for initial testing as, due to the novel design of the study, it was anticipated that several of the clips would need to be dismissed from the dissertation study because they would yield unviable data. However, individual volunteer study participants clearly could not be overburdened with lengthy viewing sessions. Therefore, the ten video clips were broken into two sets, A and B. Each set consisted of four German-language and one English-language clip. The clips were originally labeled numerically, one through ten, in the order they were found. The clips were arranged into two sets of five clips each that were balanced for language and content; for example, the two clips from Big Brother Germany were in different sets. I also purposefully positioned the English-language distractor clips in the middle of each set, though I was careful not to put them both in the same exact

position in each set. I wanted to make sure that the ordering of the clips did not give away their respective origins.

Set	Clip	Language	Length (s)	Source	Show
A	1	German	24	news show	Heute-Show (Today Show), ZDF
	4	German	28	reality TV	Big Brother Germany, season 10, episode 5
	9	English	7	reality TV	Sex Rehab with Dr. Drew, season 1, episode 2
	2	German	61	reality TV	Auf und davon: Mein Auslandstagebuch (My Travel Diary)
	3	German	17	reality TV	Bauer sucht Frau (Farmer Wants a Wife), season 2, episode 2
B	5	German	12	comedy show	Erkan und Stefan (Erkan and Stefan)
	10	English	6	reality TV	Celebrity Rehab with Dr. Drew, season 4, episode 4
	7	German	18	reality TV	Mitem im Leben, RTL
	6	German	57	reality TV	Auf und davon: Mein Auslandstagebuch (My Travel Diary)
	8	German	29	reality TV	Big Brother Germany, season 10, episode 5

### 3.1.5 Survey used in the pilot study

As described earlier, the survey used in the pilot study served as the basis from which the survey for the dissertation study was developed. The pilot study will be described only in overview and the final form of the survey as used in the dissertation study will be described in greater detail further below.

The survey contained two sections. The first section of the survey was a background questionnaire. The background questionnaire asked participants to provide basic demographic information, such as gender and age, as well as information about language use, media use and familiarity, learners' beliefs about their German proficiency, and a selection of questions used to

determine a person's place on the Autism spectrum taken from Baron-Cohen (2001)<sup>2</sup>. The second section consisted of eight questions without sound and nine questions with sound that asked participants to share their perceptions of each interaction as shown in the individual clips; rate the likelihood with which a clip depicted each of five speech acts; rate, respectively, how positive and how intense the depicted interaction was; and rate the behavior of a specified interactant on a number of different indices. Five questions asked for multi-part numerical answers. One question asked for open-ended impressions of the tone of the conversation in the clip. One question asked for open-ended justification of the answer given to the question asking for open-ended impressions of the tone. One question had both an open-ended and numerical rating component. The final question to be filled out after watching each clip that had been shown with sound, asked participants if they recognized anyone from the video and instructed them to identify that person<sup>3</sup>; this question did not appear when clips were seen without sound. Clips were shown first without sound so that participants had to answer the survey questions once before being certain of the country of origin of the interactants in each clip. This also allowed participants to answer those survey questions without being influenced by any preconceived notions about the way that German sounds.

### 3.1.6 Interviews in the pilot study

Interviews were conducted by the researcher in a classroom on the campus of a large Midwestern research university in the L1 of the participant. Prior to the interviews, I had

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<sup>2</sup> The questions concerning the Autism spectrum were intended for later analysis to assess whether certain personality traits facilitate or hinder pragmatic perception. The resulting data will not be considered in the context of the dissertation study.

<sup>3</sup> The worry was that if participants recognized certain B-list celebrities (such as Kari Ann Peniche in Clip 9 or Carolin Wosnitza, who died during plastic surgery weeks before data collection began for the pilot study and appeared in Clip 8, later renamed Clip C, Big Brother for the dissertation study) or people associated with specific shows, such as Shelly Sprague, who worked as a counselor on Celebrity Rehab with Dr. Drew (Clip 10), those participants would know the language being spoken in the clip before viewing the version with sound and without having to rely on any other cues. This concern was later deemed to be unfounded.

analyzed the responses that the interviewees had given on the surveys. I asked the interviewees about responses that followed a trend and responses that differed from those given by other participants. Interviewees had access to their survey responses during the interviews. In order to refresh their memories of the contents of each clip, they were first shown each clip and then asked the questions pertaining to that clip. The audio of each interview was digitally recorded. The length of the interviews ranged from approximately 15 to 30 minutes.

During the interviews, I asked participants to elaborate on their descriptions of the tone and mood of the interactions depicted in the clips, especially if they had given different answers when viewing the clip without sound versus with sound. I asked participants to elaborate on their selections and ratings of speech acts, emotions, relationship judgements, and nationality judgements. The interviews provided an additional measure to look for differences in thought process and perception between groups.

### 3.1.7 Procedures for the pilot study

Of the 15 Learners, five filled out the survey for Set A, eight filled out the survey for Set B, and two completed both sets. Pizza was provided as an incentive. There were three sessions during which the survey was administered to Learners. Set A was administered twice, and Set B was administered once. The sessions took place in classrooms on the campus of a large Midwestern research university. Each rating session took approximately 45 minutes. Participants first filled out the first part of the survey, the background questionnaire, and ate pizza for approximately 15 minutes. Once participants had finished eating, they moved on to part two of the survey, the content questions. Participants were shown the first clip twice in a row without sound. They were instructed to just watch the clip the first time it was shown and then answer the corresponding survey questions once the clip was shown the second time; some participants

began answering the questions during the second showing of each clip with others waited until both showings had finished. The clip was shown a third time without sound if requested by a participant. The same procedure then repeated for the first clip, this time with sound. Then the other four clips were played one by one following the same procedure that had been applied to the first clip. At each session, the clips were shown in the order presented in Table 1 (above) with the version of the clip without sound being shown before the version with sound.

A total of five native speakers of German participated in the survey phase of the pilot study. For the native speakers of German, there was one group administration ( $n = 3$ ) of the survey in a classroom on the campus of a large Midwestern research university. Pizza was not offered. The session began with the researcher administering Set A followed by the administration of Set B. The session lasted about one hour. One participant stayed for the full hour to complete both Sets A and B. One participant completed Set A and the first clip of Set B before leaving for work. The other participant completed Set A at that administration and completed Set B at a later date at an individual administration, i.e., one-on-one with the researcher. There was one individual administration of Sets A and B, and one individual administration of just Set A. Instructions and materials were presented in German, as opposed to those for the Learners, which were presented in American English. Other than the differences outlined above, the procedure for the experiment with the NSs of German remained the same as for the Learners.

Five participants from the pilot study (four Learners and one NS of German) also participated in the interview portion of the pilot study after they had completed the video ratings.

## 3.2 Changes made to the pilot study to create the dissertation study

### 3.2.1 Changes to the instrument

The pilot study led to a number of refinements in the survey. Participants were asked to rate eight speech acts in the pilot study for survey question 3, but only five in the dissertation study.

speech act	Included in pilot?	Included in dissertation?
command	YES	YES
complaint	YES	YES
inquiry	YES	NO
apology	YES	NO
request	YES	NO
compliment	YES	NO
refusal	NO	YES
declaration	YES	YES
reprimand	YES	YES

As Table 2 shows, for the dissertation survey<sup>4</sup>, the speech act response options of *inquiry*, *apology*, *request*, and *compliment* were dropped from the pilot survey; in contrast, the speech act response option of *refusal* had been absent from the pilot survey but was added to the version used in the dissertation.

A question was added (Survey Question 4, see Figure 1 below) for the dissertation study that asked respondents to rank four extra-linguistic features according to their importance in respondents' decision-making processes about what type of speech act they were witnessing. This constrained question was introduced in lieu of the open-ended question that had been used in the pilot study, which had yielded ambiguous responses. Because in Survey Question 3, respondents had to rate the likelihood of each of five types of speech acts representing the

<sup>4</sup> See Appendix 2 for an extensive excerpt from the dissertation survey.

interaction depicted in the clip, respondents had to repeat their rankings of explanations for all five types of speech acts, regardless of their ratings in the previous question. In other words, they had to explain all of their ratings, regardless of how likely they considered the speech act to be.

Figure 1: Survey Question 4

C3o4

Please rank order the importance of following criteria in informing your answers to the previous question from 1 to 4, where 1 is the most important criteria and 4 is the least important criteria. Every number (1, 2, 3, and 4) should be used exactly once in each line.

	I believe this because of the gestures the people are using.	I believe this because of the way people are looking at each other.	I believe this because of the facial expressions that the people are using.	I believe this because of the way people positions themselves (stand/sit).
command	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
complaint	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
refusal	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
declaration	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
reprimand	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### 3.2.2 Changes to the clips

The number of clips was reduced from ten in the pilot study to six in the dissertation study. Pilot clips 1, 5, and 7 were cut because the speech portrayed was not natural enough for the purposes of the study. Pilot clip 2 was cut because it was too long and contained little action or movement.

One of the remaining six clips (pilot clip 6) was shortened for the dissertation study. However, even as six clips were presented to respondents, only three of them (pilot clips 3, 6, and 8; dissertation naming conventions corresponded to Clip A, Tractor; Clip B, Zoo; and Clip C, Big Brother) were used for further analysis. Responses associated with three clips were excluded for the following reasons: Two clips (pilot clips 9 and 10) had been taken from American reality

TV shows and were used as distractors<sup>5</sup>, and a third clip (pilot clip 4) was excluded because one of the speakers shown in it was a non-native speaker of German.

To summarize, responses associated with three of the initial ten clips were used in the analysis in this study. These three clips were taken from German-language reality TV shows and were between 17 and 29 seconds in length. All 10 clips except pilot clip 1 had two main interactants (pilot clip 1 had three), which the survey questions pointed out when asking about speech acts. The total number of speakers in each clip ranged from two to five and can be seen in Table 3 below. Clip A, Tractor was from *Bauer sucht Frau*<sup>6</sup> and showed a man picking a woman up at a German train station on a tractor. Clip B, Zoo came from *Auf und davon: Mein Auslandsstagebuch*<sup>7</sup> and showed an exchange between an employee and her boss at a zoo. Clip C, Big Brother was taken from Big Brother Germany and shows an interaction between some of the housemates relating to domestic organization and tidiness. Although it is impossible to determine conclusively, it may be argued that the speech act depicted in Clip A, Tractor holds a lesser face-threatening potential than either one of the other two clips, since the interactants are meeting 1) for the first time, 2) under romantic auspices, whereas Clip B, Zoo is an employee-employer interaction where the boss wishes to change the behavior of his employee and Clip C, Big Brother involves housemates essentially trapped together in a less than ideal living situation trying to deal with all the annoyances and frustrations that that entails.

Table 3 shows the details of each clip and what set it was in for both the Pilot and Dissertations studies.

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<sup>5</sup> The English-language clips were distractor items that made it so that participants could not simply assume that all clips were of German-language interactions.

<sup>6</sup> German version of the British reality TV show Farmer Wants a Wife

<sup>7</sup> My Travel Diary

Table 3: Clip organization in pilot and dissertation

Pilot set	Diss set	Pilot clip	Diss clip	Lang <sup>8</sup>	Length (s)	New Diss length (s)	Total number of speakers	Source	Show
A	N/A	1	cut	DE	24	N/A	5	news show	Heute-Show (Today Show), ZDF
	B	4	not analyzed	DE	28	N/A	4	reality TV	Big Brother Germany, season 10, episode 5
	B	9	distractor	EN	7	N/A	3	reality TV	Sex Rehab with Dr. Drew, season 1, episode 2
	N/A	2	cut	DE	61	N/A	2	reality TV	Auf und davon: Mein Auslandstagebuch (My Travel Diary)
	A	3	Clip A	DE	17	N/A	2	reality TV	Bauer sucht Frau (Farmer Wants a Wife), season 2, episode 2
B	N/A	5	cut	DE	12	N/A	2	comedy show	Erkan und Stefan (Erkan and Stefan)
	A	10	distractor	EN	6	N/A	2	reality TV	Celebrity Rehab with Dr. Drew, season 4, episode 4
	N/A	7	cut	DE	18	N/A	3	reality TV	Mittem im Leben (In the Middle of Life), RTL
	B	6	Clip B	DE	57	25	2	reality TV	Auf und davon: Mein Auslandstagebuch (My Travel Diary)
	A	8	Clip C	DE	29	N/A	4	reality TV	Big Brother Germany, season 10, episode 5

<sup>8</sup>“Lang” is an abbreviation for language here. In the column, “DE” is an abbreviation for German, and “EN” is an abbreviation for English.

### 3.2.3 Changes to the participants

While only first-semester learners of German were included in the pilot study, Learners enrolled in first- through fifth-semester German courses were included in the dissertation study. The pilot study included one NS of Austrian German, but the dissertation study was limited to NSs of German German. The American non-learners of German participant group was added to the dissertation study in the hope that the addition would help examine the role that attitude towards German, Germany, and the Germans plays in perceiving German-language interactions.

## 3.3 Dissertation Study

### 3.3.1 Participants in dissertation study

Three groups participated in the dissertation study: 1) native speakers of German (NSs, GER), 2) learners of German (Learners, DaF<sup>9</sup>), and 3) Non-Learners of German (Non-Learners, USA). Note that the shortened forms of referring to the participant groups that came first in the parentheses in the previous sentence (NSs, Learners, and Non-Learners) are used in the body of the text, where space is not an issue, and the three-letter abbreviations (GER, DaF, and USA) are used in tables and figures due to space and formatting concerns. NSs were limited to native speakers of the German variety of German. While many varieties of German exist within German and national borders do not pair up exactly with linguistic borders, the decision was made to include data from participants whose native language was German German. Data from native speakers of other varieties of German as well as those who considered themselves to have more than one native language were not used. Learners of German were all enrolled in a first- through fifth-semester German course at a large Midwestern research university at the time of their responses. Only data from students whose only native language was American English was

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<sup>9</sup> DaF stands for *Deutsch als Fremdsprache*, which means “German as a foreign language” in English.

used. Non-Learners of German had minimal contact with German language and culture and no formal instruction in German. Only data from Non-Learners whose only native language was American English were used. The numbers of participants broken down by survey question, clip, sound condition, and participant group are shown in Table 4. .

### 3.3.2 Recruitment for the dissertation study

Participants were recruited from my personal contacts as well as from classes at a large Midwestern research university. To recruit Non-leaners, I reached out to personal friends via email and Facebook messenger and visited non-German classes at a large Midwestern University to introduce my project and have the instructor send their class an email from me that contained a link to the survey. For Learners, I visited German classes at a large Midwestern University to introduce my project and have the instructor send their class an email from me that contained a link to the survey. NSs were recruited initially through personal contacts in Germany and then through a trip to Germany during the summer of 2011 where I talked about the project with friends of friends and distributed the link to the survey to them. Further data was then collected as I encouraged my contacts in Germany to share the link to the survey with their friends.

Survey Question	Clip	Sound	GER	DaF	USA
3	A	no	21	40	44
		yes	17	33	32
	B	no	35	34	21
		yes	25	23	17
	C	no	18	40	50
		yes	17	33	31
4	A	no	21	41	45
		yes	15	34	31
	C	no	18	39	49
		yes	15	33	32

### 3.3.3 Materials in Dissertation Study

A survey that consisted of 21 background questions; 13 questions for each of the six clips when first seen without sound to 15 for each of six video clips when subsequently seen again with sound, was distributed to participants online via Qualtrics. Survey Questions 3 and 4, shown below in Figure 2, were used in the final analyses.

Figure 2: Survey Questions 3 and 4

C3o3

How likely is it that the interaction between the man and the woman is a \_\_\_\_\_?

	definitely not	probably not	probably yes	certainly
command	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
complaint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
refusal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
declaration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
reprimand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C3o4

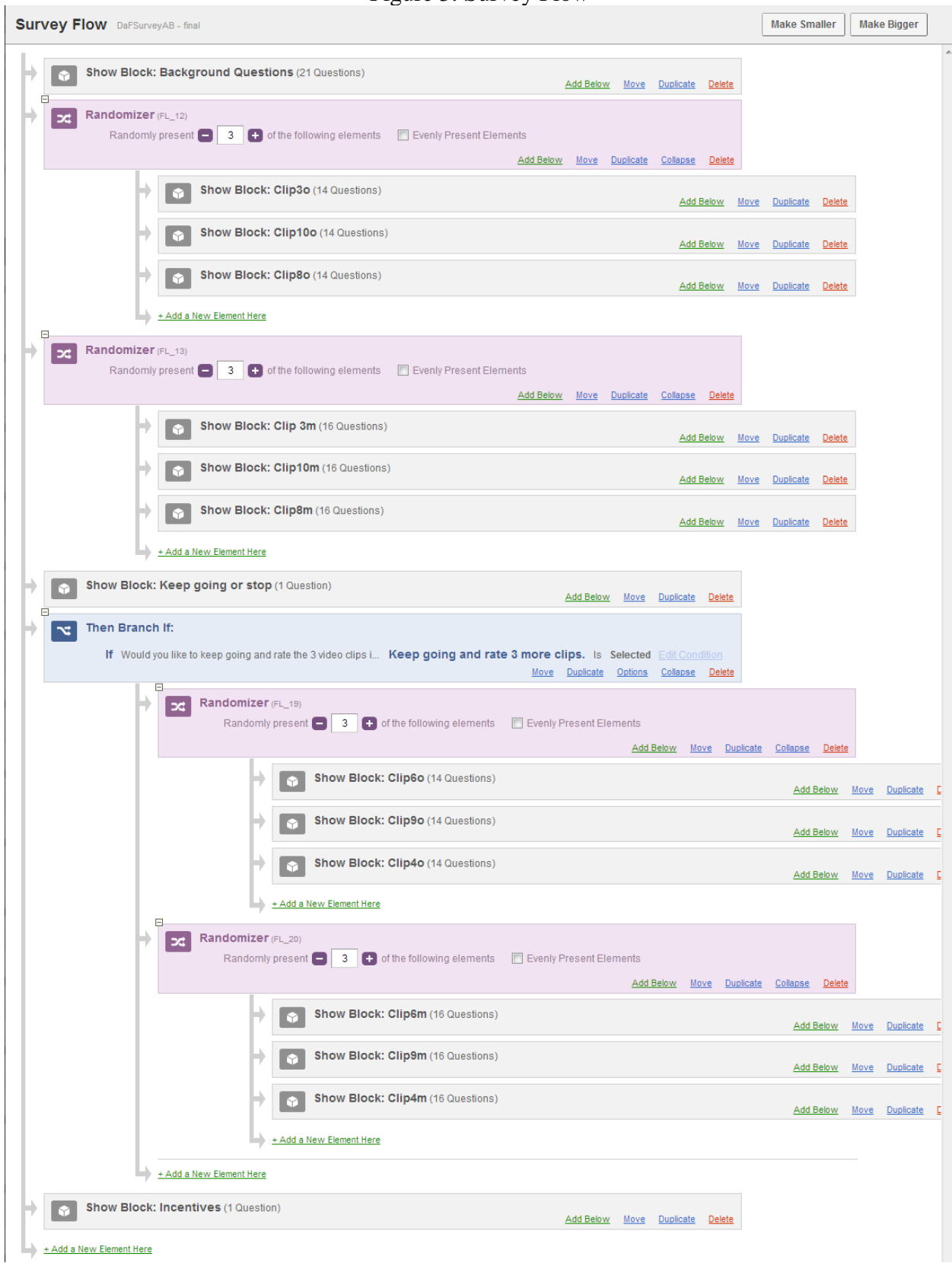
Please rank order the importance of following criteria in informing your answers to the previous question from 1 to 4, where 1 is the most important criteria and 4 is the least important criteria. Every number (1, 2, 3, and 4) should be used exactly once in each line.

	I believe this because of the gestures the people are using.	I believe this because of the way people are looking at each other.	I believe this because of the facial expressions that the people are using.	I believe this because of the way people positions themselves (stand/sit).
command	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
complaint	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
refusal	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
declaration	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
reprimand	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### 3.3.4 Procedures for the dissertation study

Due to the length of the survey and time considerations on the part of participants, the survey was broken into two sets of video clips (Set A and Set B) as shown above in Table 3. Participants had the option to stop after completing one set or continue and complete both sets. There were two versions of the survey for each participant group, which alternated the set of video clips that was presented first, to spread participant responses out more evenly across all video clips. The order in which clips in each set were shown was randomized, but each clip was always shown first without sound and then again with sound. Figure 3 (below) shows the flow of the sets in the survey.

Figure 3: Survey Flow



A limited number of in-person sessions were held in a computer lab at a large Midwestern research university for participants to complete the survey. Regardless of where the survey was completed, all surveys were distributed online via Qualtrics. I pulled up the assigned version of the survey in the browser of each computer at the in-person sessions. All other participants were sent a link to the survey via email. I was easily available for technical support for those who participated in the in-person sessions in the computer lab, and those participants also received \$5 for each set that they completed. All participants were eligible to enter (one entry per set completed) to win one of twelve randomly selected \$20 prizes that were distributed either with cash in person or via PayPal to participants outside of my immediate geographical area.

### 3.3.5 Statistical analysis of dissertation data

I compiled participant survey data in Excel and used SPSS for data analysis. To examine agreement on speech act ratings given in response to Survey Question 3 within each participant group (sub-questions (a) and (b) for RQ1-3), I performed one-way within-subjects ANOVA tests. ANOVAs with significant findings were followed-up by post-hoc t-tests. Comparisons between sound conditions were also carried out via t-tests. This applied to both sound conditions and all three participant groups. Because Survey Question 4 deals with rankings, I utilized non-parametric tests to analyze responses. I utilized the Friedman test as an omnibus test within each participant group and followed up significant omnibus testing with Wilcoxon signed-rank tests. Comparisons between sound conditions were also carried out via Wilcoxon signed-rank tests.

To analyze the parametric data from Survey Question 3 between groups (RQ4a), I performed one-way ANOVA tests followed by post-hoc Tukey tests when significance had been found in the ANOVA test. To analyze the non-parametric data from Survey Question 4 between

groups (RQ4b), I performed Kruskal-Wallis tests followed by Dunn-Bonferroni post-hoc tests where significant differences among groups had been found.

## 4.0 Results

### 4.1 Part I: Exploring the group-internal agreement on pragmatic perception

A total of four consecutively numbered umbrella research questions (RQs) were posed in this study. Each umbrella RQ was comprised of a set of sub-questions that will be indicated by letters. Part I of Results dealt with the first three umbrella questions (RQ1, RQ2, and RQ3), which respectively explored internal agreement on pragmatic perception, i.e., respondents' interpretation of what type of speech act was being represented in a given video clip, within each of three participant groups, namely, (1) NSs of German (RQ1; NSs, GER), (2) American learners of German (RQ2; Learners, DaF), and (3) American non-learners of German (RQ3; Non-Learners, USA). As a reminder, a total of three video clips were used in this study. For each of the three clips, the three respondent groups were presented with five possible speech acts, i.e., command, complaint, refusal, declaration, and reprimand. Respondents had to rate each speech act on a four-point scale to indicate the likelihood with which a given clip represented the specific speech act. The three clips were: (1) Clip A, Tractor: a 17-second clip from the German TV show *Bauer sucht Frau*<sup>10</sup>, season 2, episode 2, in which a man meets a woman for the first time under romantic auspices, picking her up from the train station on a tractor; (2) Clip B, Zoo, 25-second clip from *Auf und davon: Mein Auslandstagebuch*<sup>11</sup>, in which the boss tells an employee that she needs to remove a piercing; and (3) Clip C, Big Brother, 29-second clip from

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<sup>10</sup> German version of the British reality TV show Farmer Wants a Wife

<sup>11</sup> My Travel Diary

*Big Brother Germany*, season 10, episode 5, in which housemates discuss domestic organization and tidiness.

Each of the first three umbrella RQs consisted of the same six sub-questions. The first three sub-questions examined (a) speech-act perception (ratings of the likelihood with which a clip showed each of five speech acts) when the clip was shown without sound; (b) speech-act perception when the clip was shown with sound; and (c) differences between speech-act perception described in (a) and described in (b). Please know that the RQ pertaining to the absence of sound preceded the RQ pertaining to the presence of sound because participants had seen each clip first without sound, then with sound.

The final three sub-questions dealt only with Clip A, Tractor and Clip C, Big Brother (and not Clip B, Zoo) because their ratings both showed discernable agreement on what speech act they showed. For Clip A, Tractor, the speech act declaration was the speech act that all three participant groups (represented in RQ1, RQ2, and RQ3, respectively) identified as the most likely to be depicted when Clip A, Tractor was shown without as well as with sound. For Clip C, Big Brother, complaint was generally identified as the most likely speech act depicted (Non-Learners without sound agreeing instead that they had not seen a declaration were the only exception). Specifically, the three final sub-questions concerned (d) the interaction between the absence or presence of sound and participants' reliance on each of four extra-linguistic features when selecting *declaration*<sup>12</sup> for Clip A, Tractor, and *complaint* for Clip C, Big Brother; (e) participants' reliance on each of four extra-linguistic features when selecting *declaration* for Clip A, Tractor and *complaint* for Clip C, Big Brother without sound; and (f) participants' reliance on

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<sup>12</sup> The variable *declaration* is italicized here and throughout the dissertation when referred to explicitly as a variable (generally when lacking a preceding article). The same was done for all variables. When a variable still functions normally in the sentence, i.e., the sentence is grammatical outside of the context of this study, or when a variable is part of a list, then that variable is not italicized.

each of four extra-linguistic features when selecting *declaration* for Clip A, Tractor and *complaint* for Clip C, Big Brother with sound.

#### 4.1.1 RQ naming conventions for RQ1 – RQ3

Each of the first three umbrella RQs is labeled with a number that represents the participant group (1 = NSs of German, 2 = American learners of German, and 3 = American non-learners of German). Sub-questions carry a capital letter representing the video clip (A = Tractor, B = Zoo, and C = Big Brother) and a lower-case letter representing the sub-questions enumerated above. Table 5 shows this information.

Symbol Type	Specific Symbol	Category Meaning	Specific Meaning
Number	1	participant group	NSs of German
	2		American learners of German
	3		American non-learners of German
Capital Letter	A	video clip	Clip A, Tractor
	B		Clip B, Zoo
	C		Clip C, Big Brother
Lower-case Letter	a - c	sub-questions	Applied to all three clips, shown above
	d - f		Applied only to Clip A, Tractor and Clip C, Big Brother; shown above

#### 4.1.2 Color conventions in figures

Throughout this chapter, in the representation of data in figures, blue was used to represent results that pertained to NSs of German, green to represent American learners of German, and red to indicate responses from American non-learners of German. A darker, opaquer version of each color was used to display data gathered when clips were shown without sound, as the meaning was thought to be more opaque without sound; and a lighter, clearer version of each color was used to display data gathered when clips were shown with sound.

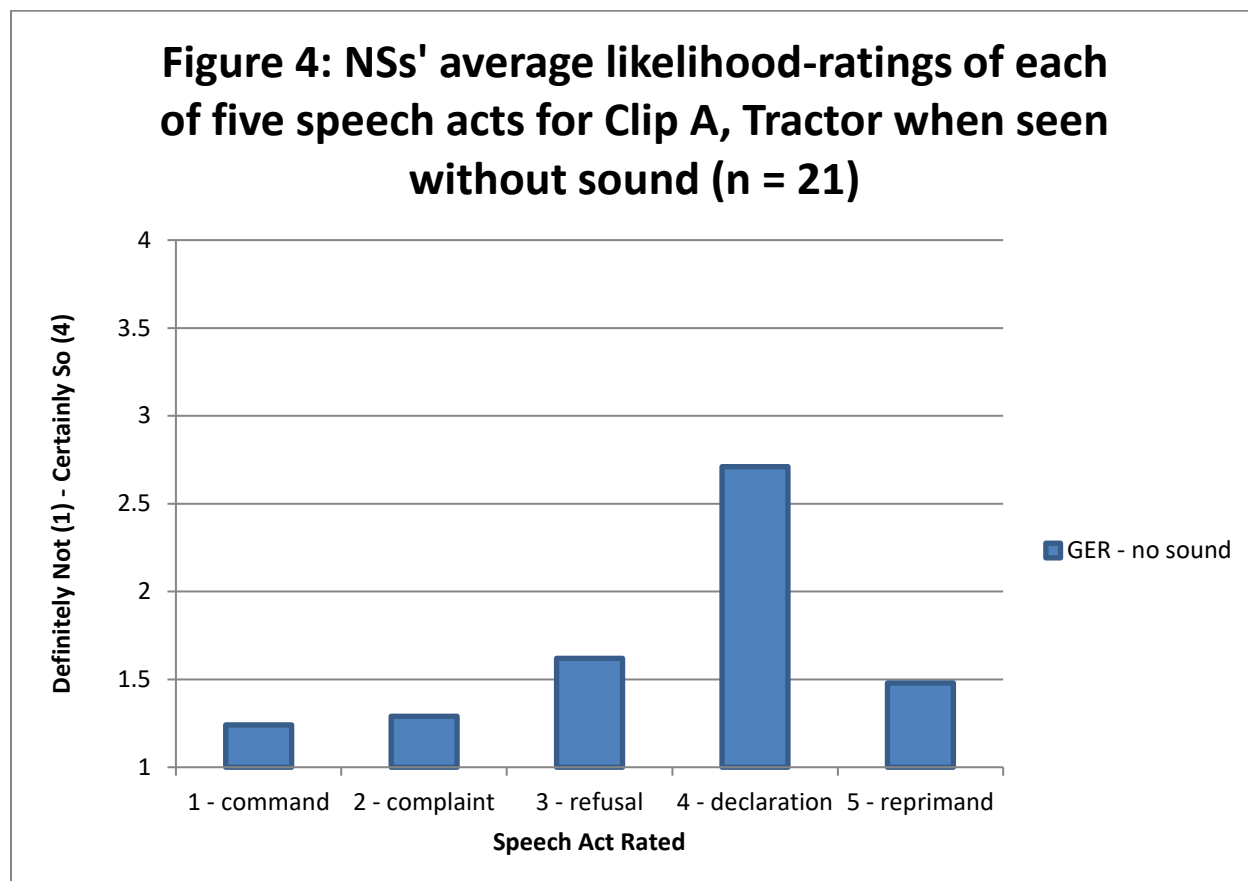
### 4.1.3 Research question 1A

#### **RQ1A.a To what extent did NSs of German agree on what speech act they saw in Clip A, Tractor when they saw it without sound?**

I will discuss statistical methods for sub-questions RQ1A.a and RQ1A.b (just below) together as these methods were identical; these same methods also applied to the corresponding sub-questions for the other clips rated by this participant group (RQ1B.a, RQ1B.b, RQ1C.a, and RQ1C.b) as well as the corresponding sub-questions in RQ2 and RQ3. Specifically, to answer sub-questions RQ1A.a and RQ1A.b, I performed one-way within-subjects ANOVA tests for each clip. Sphericity was tested using Mauchly's test of sphericity. If the condition of sphericity had not been met, I used the Greenhouse-Geisser correction to compensate for the violated assumption of sphericity. ANOVA tests that yielded significant results were followed up by post-hoc tests in the form of paired t-tests. The Bonferroni adjustment was used for the aforementioned post-hoc tests, such that the overall alpha level of 0.05 was divided by the number of paired t-tests applied to responses for each clip (i.e., ten per clip, all unique pairings of the five speech acts rated in the study) to establish an alpha level of 0.005 for each t-test. For the purpose of a concise manner of referencing the ratings of each speech act that was shown in each clip, respondents' ratings of the likelihood with which a clip depicted each of five speech acts will be referred to as 'likelihood-ratings.'

Figure 4 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip A, Tractor on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they saw Clip A, Tractor without sound. The order in which the average ratings of speech acts are depicted reflects

the sequence in which they were presented for rating to the respondents, in that ratings without sound are shown before those with sound.

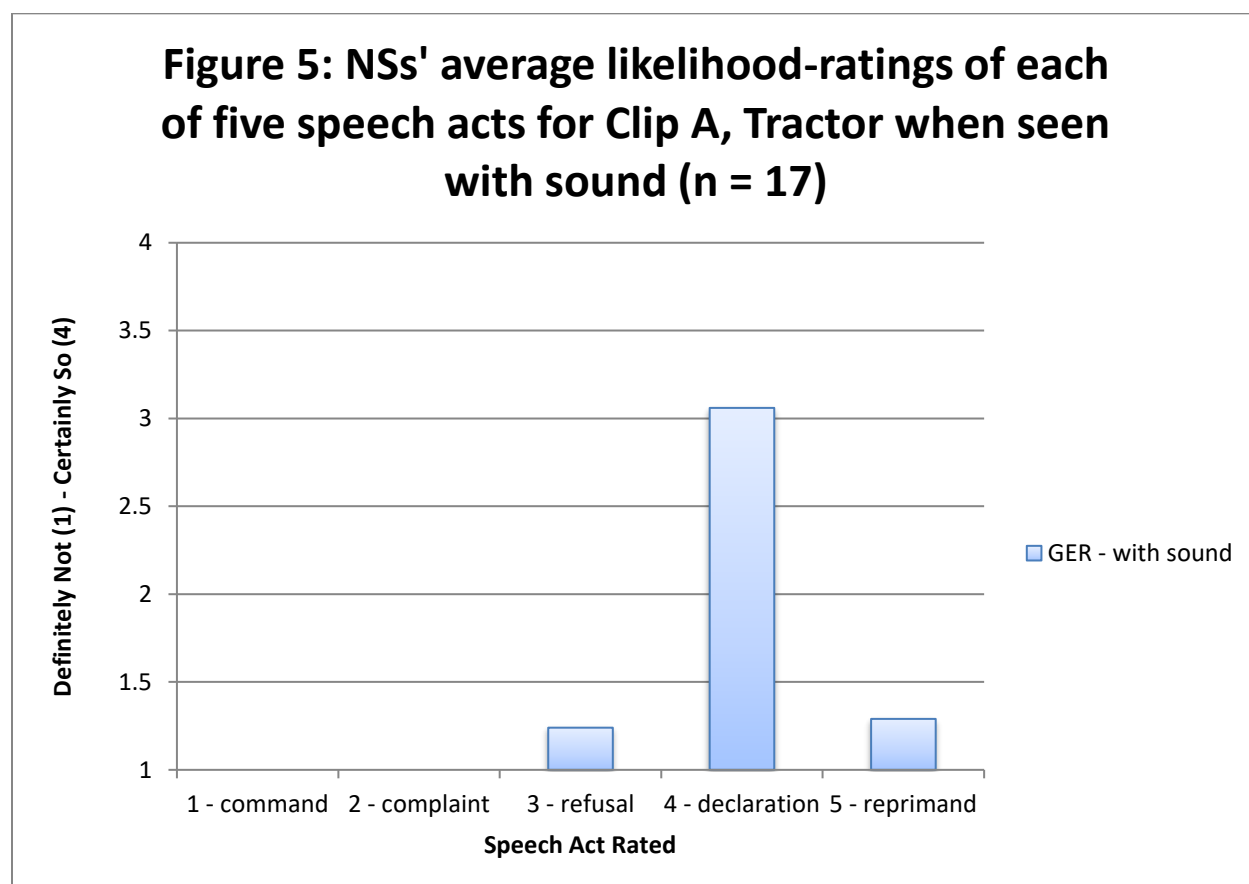


As can be seen in Figure 4, the speech act declaration drew the highest average rating (2.71) of all five speech acts when NSs rated Clip A, Tractor without sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(2.844, 56.877) = 20.482$ ,  $p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration* vs *command* (mean = 1.24) ( $t = 7.287$ ), *declaration* vs *complaint* (mean = 1.29) ( $t = 7.524$ ), *declaration* vs *refusal* (mean = 1.62) ( $t = 5.645$ ), and *declaration* vs *reprimand* (mean = 1.48) ( $t = 4.994$ ). No other

pairings showed significant differences. In other words, there was discernable agreement among NSs of German when they saw Clip A, Tractor without sound that the clip represented a declaration.

**RQ1A.b To what extent did NSs of German agree on what speech act they saw in Clip A, Tractor when they saw it with sound?**

Figure 5 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they saw Clip A, Tractor with sound.



As can be seen in Figure 5, the speech act declaration drew the highest average rating (3.06) of all five speech acts when NSs rated Clip A, Tractor with sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(2.188, 35.005) = 35.187$ ,  $p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration* vs *command* (mean = 1.00) ( $t = 8.250$ ), *declaration* vs *complaint* (mean = 1.00) ( $t = 8.250$ ), *declaration* vs *refusal* (mean = 1.24) ( $t = 6.6647$ ), and *declaration* vs *reprimand* (mean = 1.29) ( $t = 6.6061$ ). No other pairings showed significant differences. There was discernable agreement among NSs of German when they saw Clip A, Tractor with sound that the clip represented a declaration.

**RQ1A.c      Was the presence or absence of sound associated with differences in NSs' perceptions of what speech act they saw in Clip A, Tractor?**

For RQ1A.c, as well as, subsequently, for the corresponding sub-questions pertaining to the other clips (RQ1B.c and RQ1C.c) and those sub-questions in RQ2 and RQ3, I performed a total of five paired t-tests, one for each speech act rated in the study. The significance was determined at an alpha level of 0.05. No correction to the alpha level was used because the comparisons were orthogonal.

Table 6 shows the results of five paired t-tests that were used to compare likelihood-ratings given to each speech act when NSs of German saw Clip A, Tractor without sound to the ratings given when they saw the clip with sound. Significant differences are highlighted in green.

Table 6: Paired t-tests of likelihood-ratings of five speech acts by sound condition for Clip A, Tractor (n = 17)					
Speech Act	Sound	Mean	SD	t	p <sup>13</sup>
command	no	1.24	0.562	1.725	0.104
	yes	1.00	0.000		
complaint	no	1.29	0.470	2.582	0.020*
	yes	1.00	0.000		
refusal	no	1.47	0.717	2.219	0.041*
	yes	1.24	0.437		
declaration	no	2.65	0.862	-1.514	0.150
	yes	3.06	1.029		
reprimand	no	1.47	0.800	1.144	0.269
	yes	1.29	0.849		

The likelihood with which NSs considered Clip A, Tractor to represent either a complaint or a refusal diminished significantly when they saw the clip with sound present. In addition, although at non-significant levels, the likelihood-ratings of two other speech acts (command, reprimand) also decreased in the presence of sound. Only the speech act declaration – which was the speech act that respondents generally agreed on as the one shown in Clip A, Tractor – increased in its likelihood-ratings when sound was added. In other words, the presence of sound increased NSs' certainty both in terms of what speech act Clip A, Tractor showed (a declaration; not at a significant level) and in terms of what speech act it did not show (a command, reprimand, complaint, or refusal; with only the two last two at a significant level).

<sup>13</sup> Significance is achieved when  $p \leq .05$ .

**RQ1A.d: Was the presence or absence of sound associated with differences in the rankings of the extra-linguistic features of NSs of German that those NSs of German relied on to arrive at their determination of Clip A, Tractor as a declaration?**

NSs of German agreed that Clip A, Tractor represented a declaration. RQ1A.d examined the role that sound played in how much NSs of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they arrived at the determination of Clip A, Tractor to be a declaration. Respondents had been asked to rank the four extra-linguistic features according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the rankings as they pertain to the speech act declaration because NS respondents had clearly agreed that this was the speech act shown in the clip. RQ1A.d will focus specifically on how rankings in the context of *declaration* compared when respondents saw Clip A, Tractor with sound and when they saw it without sound.

To answer RQ1A.d, as well as, subsequently, for RQ1C.d, RQ2A.d, RQ2C.d, RQ3A.d, and RQ3C.d, I performed four Wilcoxon signed-rank tests, one for each extra-linguistic feature used in arriving at the conclusions that Clip A, Tractor, depicted a declaration and Clip C, Big Brother, depicted a complaint. This non-parametric test is appropriate because the data are comprised of rankings. The significance was determined at an alpha level of 0.05. No correction to the alpha level was used because the comparisons are orthogonal.

Table 7 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when NSs of German saw Clip A, Tractor without sound and when they saw the clip with sound.

Table 7: Wilcoxon Signed-Rank tests on reliance on extralinguistic features in arriving at the conclusion that Clip A, Tractor depicts a declaration (n = 15)				
Extra-linguistic Feature	Sound	Median	Z	p <sup>14</sup>
gestures	no	1	-0.520	0.603
	yes	1		
gaze	no	2	-0.318	0.751
	yes	3		
facial expressions	no	3	-0.543	0.587
	yes	3		
positioning	no	3	-0.672	0.502
	yes	4		

Because, as is evident in Table 7, analyses showed no significant differences, it can be surmised that the presence or absence of sound was not associated with the extent to which native speakers relied on any of the extra-linguistic features to arrive at the conclusion that Clip A, Tractor showed a declaration.

**RQ1A.e: What extra-linguistic reasons did NSs of German cite in explaining how they had arrived at the designation of Clip A, Tractor, as a *declaration* when they saw it without sound?**

RQ1A.e and RQ1A.f (just below), respectively, explored the extent to which NSs of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and

<sup>14</sup> Significance is achieved when  $p \leq .05$ .

positioning) when they saw Clip A, Tractor without sound and with sound. The same analytic methods were used to approach each of these questions.

These methods were also applied to the sub-questions of RQ1 as they pertained to the other clips rated by this participant group (RQ1C.e, and RQ1C.f) and the corresponding sub-questions in RQ2 and RQ3.

Specifically, I performed a Friedman test. The alpha level for the Friedman test was set at .05. This non-parametric test was appropriate because the data were comprised of rankings. Friedman tests that yielded significant results were followed up by post-hoc tests in the form of Wilcoxon signed-rank tests. The Bonferroni adjustment was used for the aforementioned post-hoc tests, such that the overall alpha level of 0.05 was divided by the number of Wilcoxon signed-rank tests run<sup>15</sup> to establish an alpha level of 0.0083 for each comparison.

The initial Friedman test that was applied to answer RQ1A.e indicated that there was no statistically significant difference among the extra-linguistic features shown in Table 3,  $\chi^2(3) = 7.390$ ,  $p = .060$ . Therefore, no post-hoc tests were performed, and it was concluded that none of the four extra-linguistic features was relied upon significantly more than any other when NSs determined that Clip A, Tractor when seen without sound represented a declaration.

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<sup>15</sup> Six tests, all unique pairings of the four extra-linguistic features used to arrive at the conclusions that Clip A, Tractor depicted a declaration and Clip C, Big Brother depicted a complaint

**RQ1A.f: What extra-linguistic reasons did NSs of German cite in explaining how they had arrived at the designation of Clip A, Tractor as a declaration when they saw it with sound?**

As explained above, to explore RQ1A.f via inferential statistics, a Friedman omnibus test was followed by Wilcoxon signed-rank tests. The initial Friedman test indicated that there was a statistically significant difference in what extra-linguistic features NSs drew on when they decided that Clip A, Tractor depicted a declaration when seen with sound,  $\chi^2(3) = 10.219$ ,  $p = .017$ . However, results of post-hoc tests (shown in Table 8) failed to pinpoint specific differences.

Table 8: Wilcoxon Signed-Rank tests on reliance on extralinguistic features in arriving at the conclusion that Clip A, Tractor depicts a declaration when seen with sound (n = 15)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>16</sup>
1	gaze	3	-2.303	0.021
	gestures	1		
2	facial expressions	3	-2.553	0.011
	gestures	1		
3	positioning	4	-2.547	0.011
	gestures	1		
4	facial expressions	3	-0.722	0.470
	gaze	3		
5	positioning	4	-1.259	0.208
	gaze	3		
6	positioning	4	-0.426	0.670
	facial expressions	3		

<sup>16</sup> Significance is achieved when  $p \leq .0083$ .

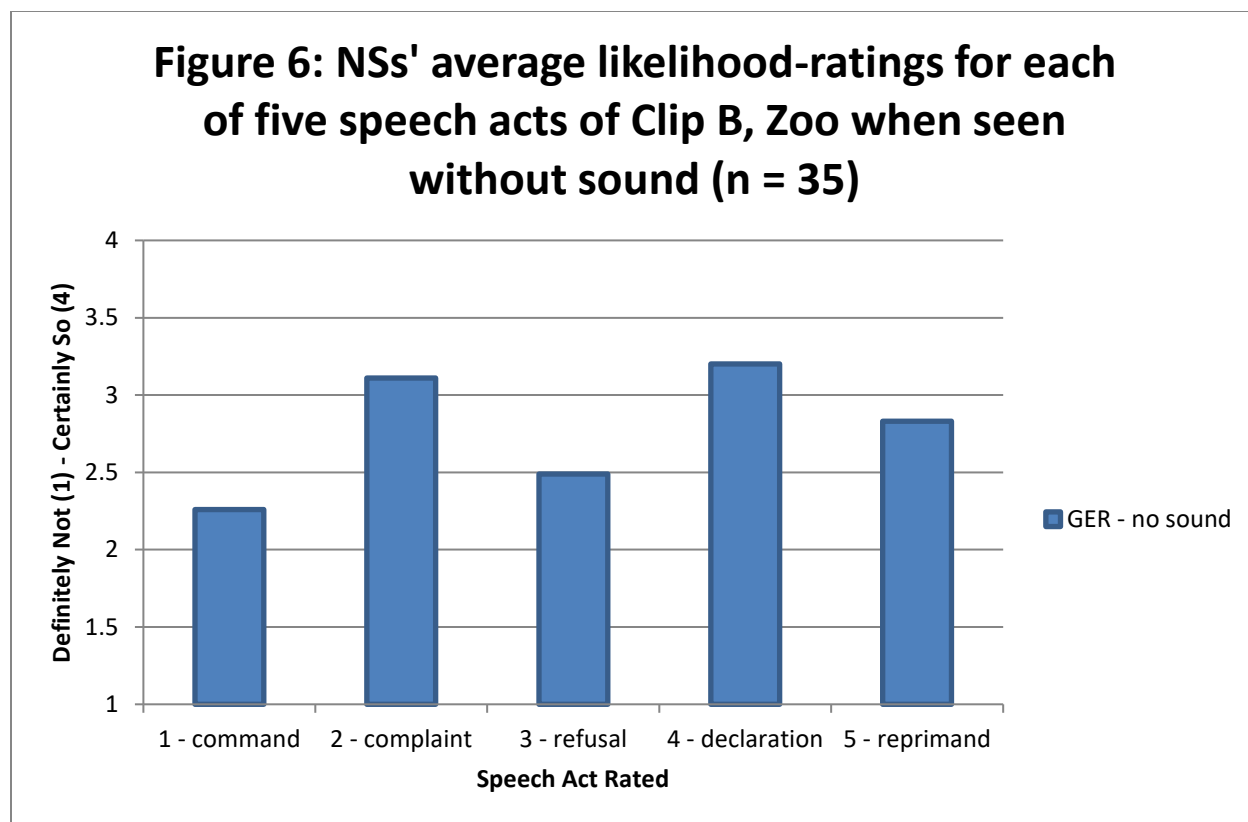
In summary, although gestures were most and positioning least influential in NSs' interpretation of Clip A, Tractor as a declaration, both when they saw it with and without sound, these differences were not statistically significant. Considered together with the answer of RQ1A.d, it appears that none of the extra-linguistic features made a decisive difference in NSs' assessment of Clip A, Tractor as a declaration and the presence or absence of sound, in turn, also made no difference on which extra-linguistic features were relied more or less.

In short, reviewing answers to all sub-questions of RQ1A, NSs' finding that Clip A, Tractor represents a declaration (RQ1A.a; RQ1A.b) was independent of sound condition (RQ1A.c) and under neither sound condition premised on any of the four suggested extra-linguistic features (RQ1A.d; RQ1A.e; RQ1A.f).

#### 4.1.4 Research question 1B

**RQ1B.a      To what extent did NSs of German agree on what speech act they saw in Clip B, Zoo when they saw it without sound?**

Figure 6 shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they were shown the clip without sound.



As can be seen in Figure 6, the speech act declaration drew the highest average rating (3.20) followed closely by complaint (mean = 3.11) when NSs rated Clip B, Zoo without sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 136) = 7.327, p < .0005$ . Post-hoc tests are shown in full in Table 9. Significant differences are highlighted in green.

Comparison	Speech Acts Involved	Mean	SD	t	p <sup>17</sup>
1	1 - command vs	2.26	1.039	-4.013	< .0005*
	2 - complaint	3.11	0.932		
2	1 - command vs	2.26	1.039	-1.160	.254
	3 - refusal	2.49	0.951		
3	1 - command vs	2.26	1.039	-4.007	< .0005*
	4 - declaration	3.20	0.868		
4	1 - command vs	2.26	1.039	-3.095	.004*
	5 - reprimand	2.83	0.857		
5	2 - complaint vs	3.11	0.932	3.339	.002*
	3 - refusal	2.49	0.951		
6	2 - complaint vs	3.11	0.932	-0.342	.734
	4 - declaration	3.20	0.868		
7	2 - complaint vs	3.11	0.932	1.663	.106
	5 - reprimand	2.83	0.857		
8	3 - refusal vs	2.49	0.951	-3.053	.004*
	4 - declaration	3.20	0.868		
9	3 - refusal vs	2.49	0.951	-1.709	.097
	5 - reprimand	2.83	0.857		
10	4 - declaration vs	3.20	0.868	1.710	.096
	5 - reprimand	2.83	0.857		

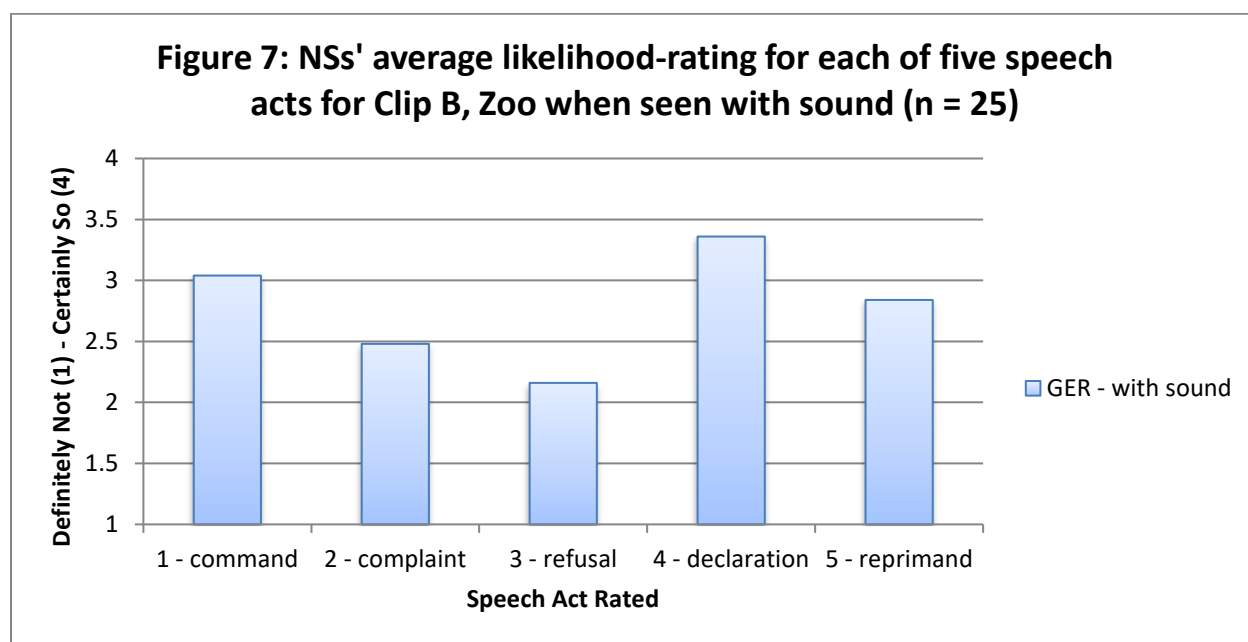
Here it is important to note that all significant pairings in Table 9 involve the lowest rated speech acts, namely command and refusal. Table 5 shows that the lowest rated speech act, command, had significant differences with all pairings other than the next lowest rated speech act, refusal, as opposed to the two significantly different pairings that *refusal* had (with *complaint* and *declaration*). This additional significant pairing for *command* was with *reprimand* – a speech act that was rated in the middle of the pack and had no other significant pairings. It

<sup>17</sup> Significance is achieved when  $p \leq .005$ .

can be concluded that NSs of German agreed that a command was not depicted in Clip B, Zoo without sound.

**RQ1B.b To what extent did NSs of German agree on what speech act they saw in Clip B, Zoo when they saw it with sound?**

Figure 7 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo, on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they saw Clip B, Zoo with sound.



As can be seen in Figure 7, the speech act declaration drew the highest average rating (3.36) of all five speech acts when NSs rated Clip B, Zoo with sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 96) = 5.989$ ,  $p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* vs *complaint* (mean = 2.48) ( $t = 4.342$ ,  $p < .0005$ ) and *declaration* vs *refusal* (mean = 2.16) ( $t = 4.899$ ,  $p < .0005$ ) were significantly different at the adjusted alpha level of .005. No other

pairings showed significant differences. There was tendential agreement among NSs of German when they saw Clip B, Zoo with sound that the clip represented a declaration.

**RQ1B.c Was the presence or absence of sound associated with differences in NSs' perceptions of what speech act they saw in Clip B, Zoo?**

Table 10 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when NSs of German saw Clip B, Zoo without sound to the ratings given when the clip was seen with sound. Significant differences are highlighted in green.

Table 10: Pairwise comparison of likelihood-ratings of five speech acts by sound condition for Clip B, Zoo (n = 25)					
Speech Act	Sound	Mean	SD	t	p <sup>18</sup>
command	no	2.20	1.080	-2.871	0.008*
	yes	3.04	1.172		
complaint	no	3.20	0.957	3.524	0.002*
	yes	2.48	1.046		
refusal	no	2.40	1.000	1.063	0.298
	yes	2.16	1.106		
declaration	no	3.12	0.971	-1.000	0.327
	yes	3.36	0.952		
reprimand	no	3.04	0.790	0.816	0.422
	yes	2.84	0.987		

The likelihood with which NSs considered Clip B, Zoo to represent a command increased significantly when they saw the clip with sound. In RQ1B.b, it was shown that NSs of German agreed that Clip B, Zoo did not represent a command when they saw the clip without sound, and when they saw the clip with sound, the average likelihood-rating for *command* increased

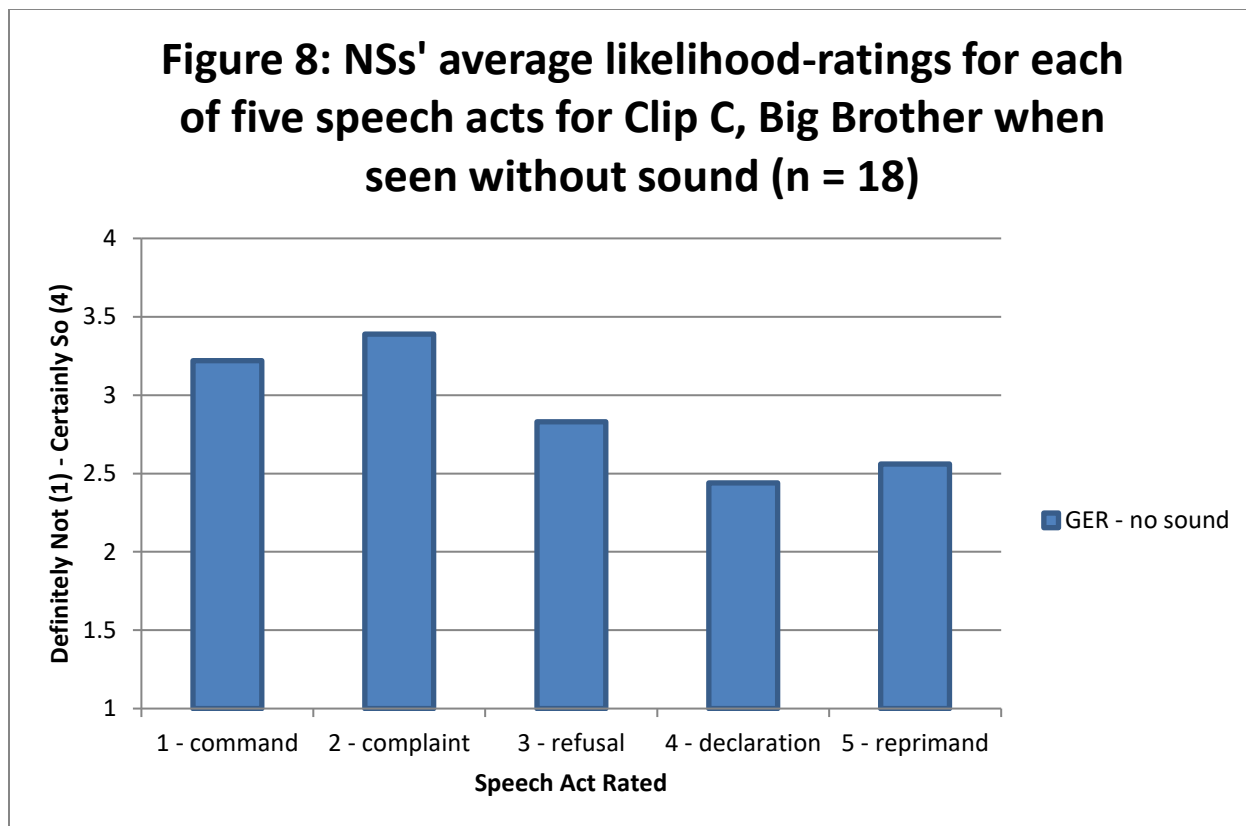
<sup>18</sup> Significance is achieved when  $p \leq .05$ .

significantly to the second highest speech act behind *declaration*. The opposite trend can be seen in the analyses of *complaint*, whose average likelihood-rating dropped significantly with the addition of sound. The presence of sound decreased NSs' perceptions that Clip B, Zoo depicted a complaint and increased the likelihood-rating that the clip could be showing a command. This doubt cast on *complaint* allowed for tendential agreement to emerge for *declaration* with sound, despite the likelihood-ratings for *declaration* itself not differing significantly between sound conditions.

#### 4.1.5 Research question 1C

**RQ1C.a      To what extent did NSs of German agree on what speech act they saw in Clip C, Big Brother when they saw it without sound?**

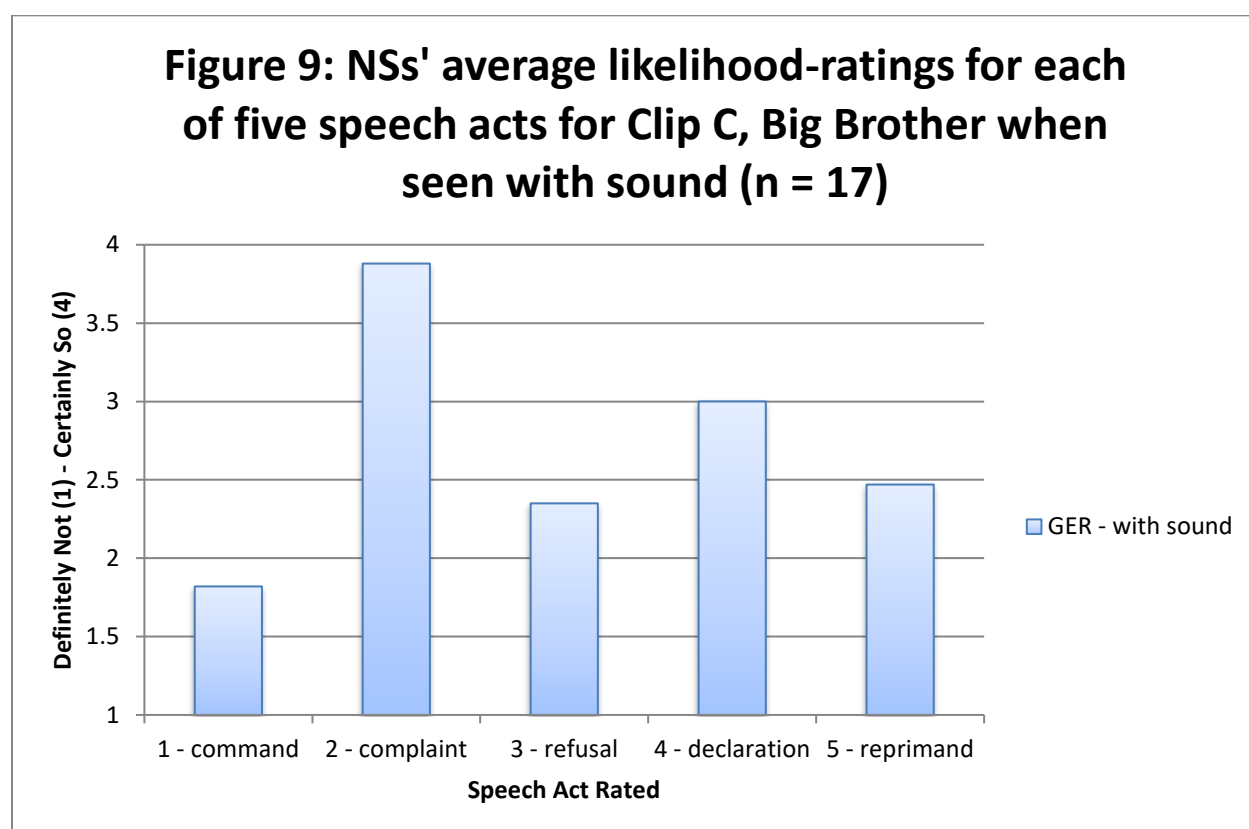
Figure 8 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they saw Clip C, Big Brother without sound.



As can be seen in Figure 8, the speech act complaint drew the highest average rating (3.39) of all five speech acts when NSs rated Clip C, Big Brother without sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 68) = 5.162, p = .001$ . Post-hoc tests showed that pairwise comparisons of ratings of *complaint* and three of the other speech acts exhibited significant differences: *complaint* vs *refusal* (mean = 2.83) ( $t = 3.828, p = .001$ ); *complaint* vs *declaration* (mean = 2.44) ( $t = 3.796, p = .001$ ); and *complaint* vs *reprimand* (mean = 2.56) ( $t = 3.389, p = .003$ ). No other pairings showed significant differences. There was discernable agreement among NSs of German when they saw Clip C, Big Brother without sound that the clip represented a complaint.

**RQ1C.b To what extent did NSs of German agree on what speech act they saw in Clip C, Big Brother when they saw it with sound?**

Figure 9 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother on a scale from Definitely Not (1) to Certainly So (4) by NSs of German when they saw Clip C, Big Brother with sound.



As can be seen in Figure 9, the speech act complaint drew the highest average rating (3.88) of all five speech acts when NSs rated Clip C, Big Brother with sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 64) = 14.648, p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *complaint* and all of the other speech acts exhibited significant differences: *complaint* vs *command* (mean =

1.82) ( $t = 7.089$ ,  $p < .0005$ ); *complaint vs refusal* (mean = 2.35) ( $t = 5.907$ ,  $p < .0005$ ); *complaint vs declaration* (mean = 3.00) ( $t = 3.922$ ,  $p = .001$ ); and *complaint vs reprimand* (mean = 2.47) ( $t = 5.800$ ,  $p < .0005$ ). No other pairings showed significant differences. There was discernable agreement among NSs of German when they saw Clip C, Big Brother with sound that the clip represented a complaint.

**RQ1C.c Was the presence or absence of sound associated with differences in NSs' perceptions of what speech act they saw in Clip C, Big Brother?**

Table 11 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when NSs of German saw Clip C, Big Brother without sound to the ratings given when the clip was seen with sound. Significant differences are highlighted in green.

Table 11: Pairwise comparison of likelihood-ratings of five speech acts by sound condition for Clip C, Big Brother (n = 17)					
Speech Act	Sound	Mean	SD	t	p <sup>19</sup>
command	no	3.18	0.809	5.989	<.0005*
	yes	1.82	1.074		
complaint	no	3.41	0.507	-3.108	0.007*
	yes	3.88	0.332		
refusal	no	2.82	0.809	1.926	0.072
	yes	2.35	0.931		
declaration	no	2.41	0.939	-3.922	0.001*
	yes	3.00	0.866		
reprimand	no	2.53	0.943	0.187	0.854
	yes	2.47	1.007		

<sup>19</sup> Significance is achieved when  $p \leq .05$ .

The likelihood with which NSs considered Clip C, Big Brother to represent either a complaint or declaration increased significantly when they saw the clip with sound. However, the likelihood that they thought Clip C, Big Brother represented a command significantly decreased when they saw the clip with sound. Taken as a whole, it appears that the presence of sound increased NSs' certainty that Clip C, Big Brother showed a complaint.

**RQ1C.d: Was the presence or absence of sound associated with certain rankings for extra-linguistic features as reasons used by NSs of German to arrive at ratings for *complaint* for Clip C, Big Brother?**

NSs of German agreed that Clip C, Big Brother represented a complaint. This question examines the role that sound played on what extra-linguistic features they used to come to that conclusion. Respondents had been asked to rank four extra-linguistic features (gestures, gaze, facial expressions, and positioning) according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the ranking as they pertain to the speech act complaint because native speaker respondents had clearly agreed that this was the speech act shown in the clip.

Table 12 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when NSs of German saw Clip C, Big Brother without sound and when they saw the clip with sound. Significant differences are highlighted in green.

Extra-linguistic Feature	Sound	Median	Z	p <sup>20</sup>
gestures	no	1	-2.226	0.026*
	yes	2		
gaze	no	2	-0.175	0.861
	yes	2		
facial expressions	no	2	-1.000	0.317
	yes	2		
positioning	no	4	-2.720	0.785
	yes	4		

Gestures were significantly less important in the decision-making process of NSs of German with sound than they were without sound. With sound, NSs relied less on gestures to conclude that Clip C, Big Brother depicted a complaint.

**RQ1C.e: What extra-linguistic reasons did NSs of German cite in explaining how they arrived at the designation of Clip C, Big Brother as a complaint when they saw it without sound?**

RQ1C.e and RQ1C.f, respectively, explored the extent to which NSs of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they saw Clip C, Big Brother without sound and with sound.

The Friedman test indicated a statistically significant difference among the four extra-linguistic features,  $\chi^2(3) = 36.631$ ,  $p < .0005$ . Post-hoc tests are shown in full below in Table 13, and significant differences are highlighted in green.

<sup>20</sup> Significance is achieved when  $p \leq .05$ .

Table 13: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen without sound (n = 18)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>21</sup>
1	gaze	2	-1.137	0.256
	gestures	2		
2	facial expressions	2	-1.295	0.195
	gestures	2		
3	positioning	4	-3.500	<.0005*
	gestures	2		
4	facial expressions	2	-2.160	0.829
	gaze	2		
5	positioning	4	-2.766	0.006*
	gaze	2		
6	positioning	4	-2.759	0.006*
	facial expressions	2		

The analyses in Table 13 showed that NSs of German relied on positioning significantly less than all other extra-linguistic features. NSs of German appear united in how little they relied on positioning to determine that Clip C, Big Brother depicted a complaint when they saw it without sound.

**RQ1C.f: What extra-linguistic reasons did NSs of German cite in explaining how they arrived at the designation of Clip C, Big Brother as a complaint when they saw it with sound?**

The initial Friedman test indicated that there was a statistically significant difference in what extra-linguistic features NSs drew on when they decided that Clip C, Big Brother depicted

<sup>21</sup> Significance is achieved when  $p \leq .0083$ .

a complaint when seen with sound,  $\chi^2(3) = 11.605$ ,  $p = .009$ . Post-hoc tests are shown in full below in Table 14, and significant differences are highlighted in green.

Table 14: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen with sound (n = 15)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>22</sup>
1	gaze	2	-0.369	0.712
	gestures	2		
2	facial expressions	2	-0.464	0.642
	gestures	2		
3	positioning	4	-2.093	0.036
	gestures	2		
4	facial expressions	2	-0.284	0.776
	gaze	2		
5	positioning	4	-2.827	0.005*
	gaze	2		
6	positioning	4	-2.264	0.024
	facial expressions	2		

As analyses in Table 14 showed, positioning is the least relied upon extra-linguistic feature with sound. NSs relied on positioning the least in their determinations that Clip C, Big Brother depicted a complaint when they saw it with sound.

In summary, positioning was least influential in NSs' interpretation of Clip C, Big Brother as a complaint, both when they saw it with and without sound.

In short, reviewing answers to all sub-questions of RQ1C, NSs' finding that Clip C, Big Brother represented a complaint (RQ1C.a; RQ1C.b) was strengthened by the presence of sound

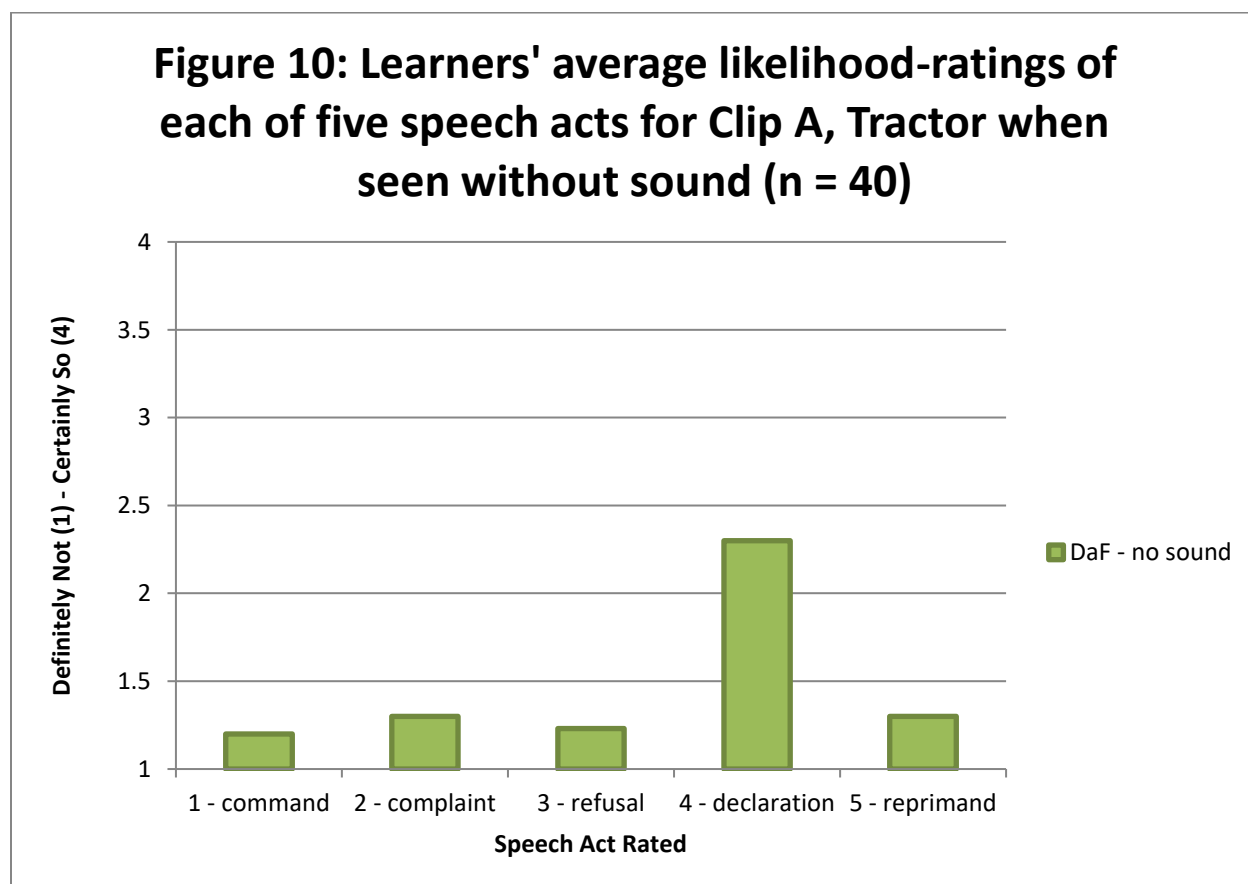
<sup>22</sup> Significance is achieved when  $p \leq .0083$ .

(RQ1A.c) and positioning was the least relied upon extra-linguistic feature regardless of sound condition (RQ1C.d; RQ1C.e; RQ1C.f).

#### 4.1.6 Research question 2A

**RQ2A.a**      **To what extent did American learners of German agree on what speech act they saw in Clip A, Tractor when they saw it without sound?**

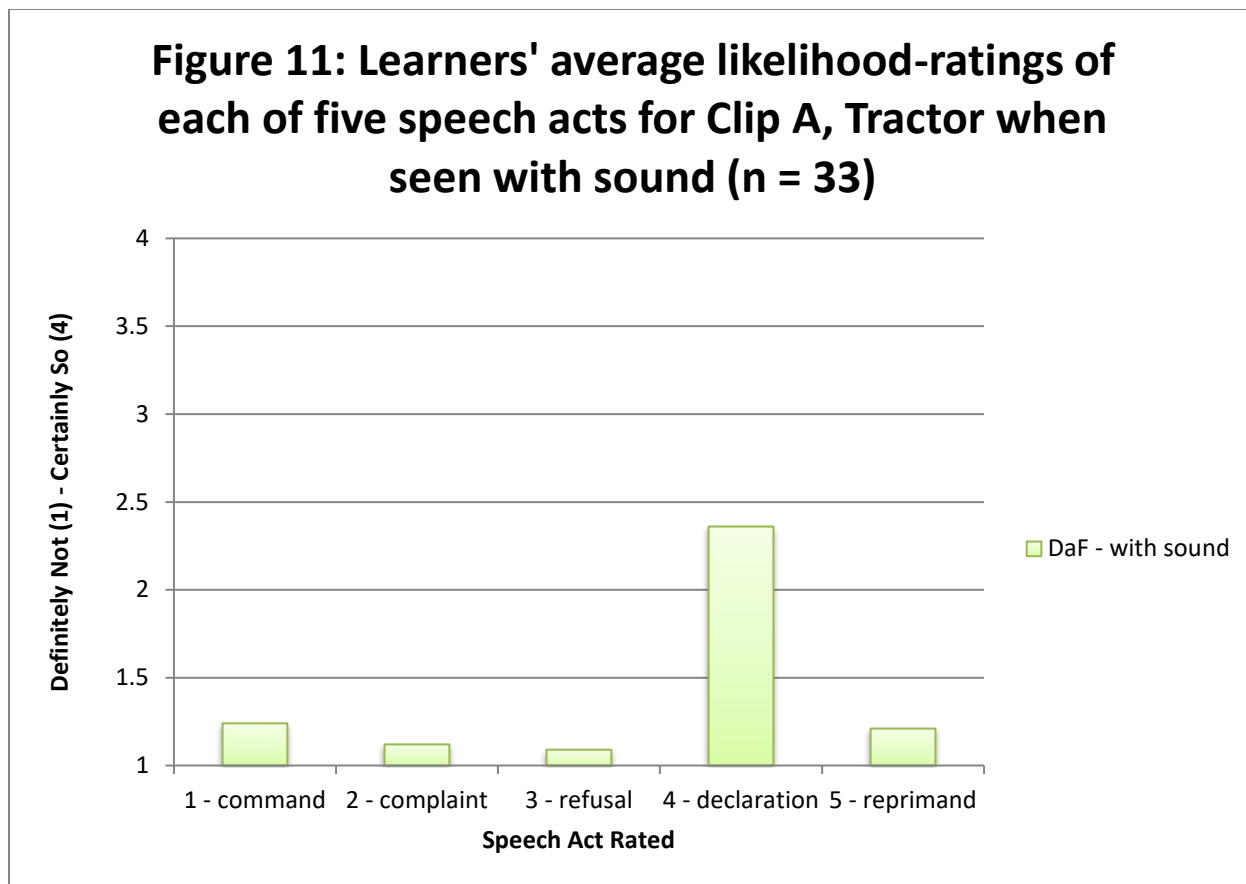
Figure 10 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip A, Tractor on a scale from Definitely Not (1) to Certainly So (4) by American learners of German when they saw Clip A, Tractor without sound.



As can be seen in Figure 10, the speech act declaration drew the highest average rating (2.30) of all five speech acts when Learners rated Clip A, Tractor without sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(2.065, 80.547) = 29.814, p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration* vs *command* (mean = 1.20) ( $t = 6.904$ ), *declaration* vs *complaint* (mean = 1.30) ( $t = 6.094$ ), *declaration* vs *refusal* (mean = 1.23) ( $t = 6.649$ ), and *declaration* vs *reprimand* (mean = 1.30) ( $t = 5.954$ ). No other pairings showed significant differences. There was discernable agreement among Learners when they saw Clip A, Tractor without sound that the clip represented a declaration.

**RQ2A.b      To what extent did American learners of German agree on what speech act they saw in Clip A, Tractor when they saw it with sound?**

Figure 11 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip A, Tractor on a scale from Definitely Not (1) to Certainly So (4) by American learners of German when they saw Clip A, Tractor with sound.



As can be seen in Figure 11, the speech act declaration drew the highest average rating (2.36) of all five speech acts when NSs rated Clip A, Tractor with sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(1.637, 52.373) = 28.100$ ,  $p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration* vs *command* (mean = 1.24) ( $t = 5.655$ ), *declaration* vs *complaint* (mean = 1.12) ( $t = 6.082$ ), *declaration* vs *refusal* (mean = 1.09) ( $t = 6.341$ ), and *declaration* vs *reprimand* (mean = 1.21) ( $t = 5.387$ ). No other pairings showed significant differences. There was discernable agreement among learners when they saw Clip A, Tractor with sound that the clip represented a declaration.

**RQ2A.c Was the presence or absence of sound associated with differences in Learners' perceptions of what speech act they saw in Clip A, Tractor?**

Table 15 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when learners saw Clip A, Tractor without sound to the ratings given when the clip was seen with sound.

Table 15: Pairwise comparison of likelihood-ratings of five speech acts by sound condition for Clip A, Tractor (n = 32)					
Speech Act	Sound	Mean	SD	t	p <sup>23</sup>
command	no	1.19	0.397	-0.701	0.448
	yes	1.25	0.508		
complaint	no	1.22	0.553	0.902	0.374
	yes	1.13	0.336		
refusal	no	1.19	0.397	1.139	0.263
	yes	1.09	0.296		
declaration	no	2.19	0.931	-1.365	0.182
	yes	2.41	1.132		
reprimand	no	1.25	0.568	0.442	0.662
	yes	1.22	0.491		

As Table 15 shows, analyses yielded no significant differences, meaning that adding sound to the clip did not significantly change Learners' average likelihood-ratings for each speech act.

<sup>23</sup> Significance is achieved when  $p \leq .05$ .

**RQ2A.d: Was the presence or absence of sound associated with certain rankings for extra-linguistic features as reasons used by American learners of German to arrive at ratings for *declaration* for Clip A, Tractor?**

Learners agreed that Clip A, Tractor represented a declaration. This question examines the role that sound played on what extra-linguistic features they used to come to that conclusion. Respondents had been asked to rank four extra-linguistic features (gestures, gaze, facial expressions, and positioning) according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the rankings of the speech act declaration because Learners had clearly agreed that this was the speech act shown in the clip. RQ2A.d will focus specifically on how rankings in the context of *declaration* compared when respondents saw Clip A, Tractor with sound and when they saw it without sound.

Table 16 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when American learners of German saw Clip A, Tractor without sound and when they saw the clip with sound.

Table 16: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip A, Tractor depicts a declaration (n = 34)				
Extra-linguistic Feature	Sound	Median	Z	p <sup>24</sup>
gestures	no	2	-1.122	0.262
	yes	2		
gaze	no	3	-0.655	0.512
	yes	2		
facial expressions	no	3	-0.597	0.550
	yes	3		
positioning	no	3	-0.452	0.652
	yes	3		

Because, as is evident in Table 16, analyses showed no significant differences, it can be surmised that the presence or absence of sound was not associated with the extent to which learners relied on any of the extra-linguistic features to arrive at the conclusion that Clip A, Tractor showed a declaration.

**RQ2A.e: What extra-linguistic reasons did American learners of German cite in explaining how they arrived at the designation of Clip A, Tractor, as a declaration when they saw it without sound?**

RQ2A.e and RQ2A.f, respectively, explored the extent to which American learners of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they saw Clip A, Tractor without sound and with sound.

The Friedman test indicated that there was a statistically significant difference among the extra-linguistic features when the clip was seen without sound,  $\chi^2(3) = 8.586$ ,  $p = .035$ . However, results of post-hoc tests (shown in Table 17) failed to pinpoint specific differences.

<sup>24</sup> Significance is achieved when  $p \leq .05$ .

Table 17: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip A, Tractor depicts a declaration when seen without sound (n = 41)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>25</sup>
1	gaze	3	-2.426	0.015
	gestures	2		
2	facial expressions	2	-1.117	0.264
	gestures	2		
3	positioning	3	-2.387	0.017
	gestures	2		
4	facial expressions	2	-1.301	0.193
	gaze	3		
5	positioning	3	-0.496	0.620
	gaze	2		
6	positioning	3	-1.346	0.178
	facial expressions	2		

**RQ2A.f: What extra-linguistic reasons did American learners of German cite in explaining how they arrived at the designation of Clip A, Tractor, as a declaration when they saw it with sound?**

The Friedman test indicated that there were no statistically significant differences among the four extra-linguistic features,  $\chi^2(3) = 1.766$ ,  $p = .622$ . Therefore, no post-hoc tests were performed, and it was concluded that none of the four extra-linguistic features was relied upon significantly more than any other when American learners of German determined that Clip A, Tractor when seen with sound represented a declaration.

In summary, Learners agreed that Clip A, Tractor represented a declaration. This decision was independent of sound condition (RQ2A.c), and Learners did not rely significantly more on

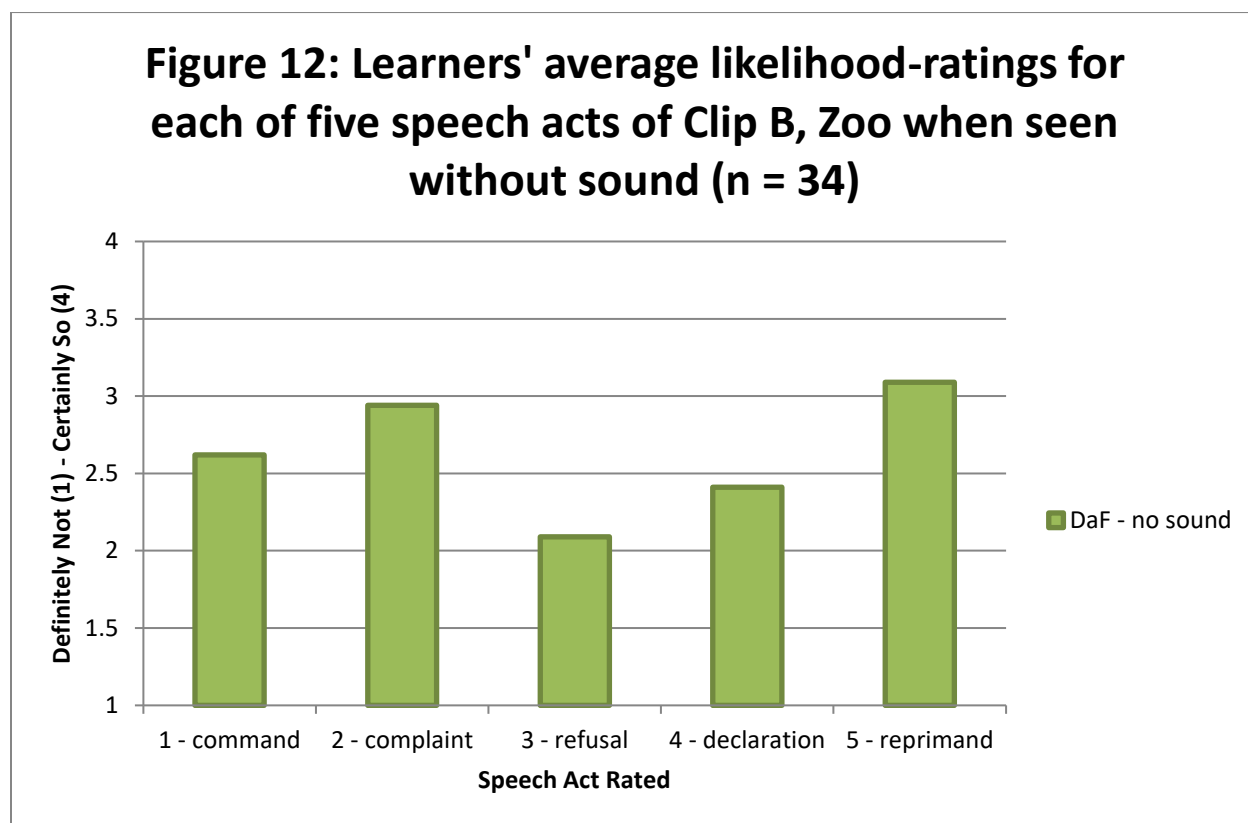
<sup>25</sup> Significance is achieved when  $p \leq .0083$ .

any of the four extra-linguistic features than any other under either sound condition (RQ2A.d; RQ2A.e; RQ2A.f).

#### 4.1.7 Research question 2B

##### **RQ2B.a To what extent did American learners of German agree on what speech act they saw in Clip B, Zoo when they saw it without sound?**

Figure 12 shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo on a scale from Definitely Not (1) to Certainly So (4) by American learners of German when they were shown the clip without sound.



As can be seen in Figure 12, the speech act reprimand drew the highest average rating (3.09) followed closely by *complaint* (mean = 2.94) when Learners rated Clip B, Zoo without

sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 134) = 8.119, p < .0005$ . Post-hoc tests are shown in full in Table 18.

Significant differences are highlighted in green.

Comparison	Speech Acts Involved	Mean	SD	t	p <sup>26</sup>
1	1 - command vs	2.62	0.954	-1.541	0.133
	2 - complaint	2.94	0.851		
2	1 - command vs	2.62	0.954	2.721	0.010
	3 - refusal	2.09	0.712		
3	1 - command vs	2.62	0.954	0.925	0.362
	4 - declaration	2.41	0.821		
4	1 - command vs	2.62	0.954	-2.478	0.019
	5 - reprimand	3.09	0.965		
5	2 - complaint vs	2.94	0.851	4.294	<.0005*
	3 - refusal	2.09	0.712		
6	2 - complaint vs	2.94	0.851	2.601	0.014
	4 - declaration	2.41	0.821		
7	2 - complaint vs	2.94	0.851	-0.867	0.392
	5 - reprimand	3.09	0.965		
8	3 - refusal vs	2.09	0.712	-1.726	0.094
	4 - declaration	2.41	0.821		
9	3 - refusal vs	2.09	0.712	-5.050	<.0005*
	5 - reprimand	3.09	0.965		
10	4 - declaration vs	2.41	0.821	-3.100	0.004*
	5 - reprimand	3.09	0.965		

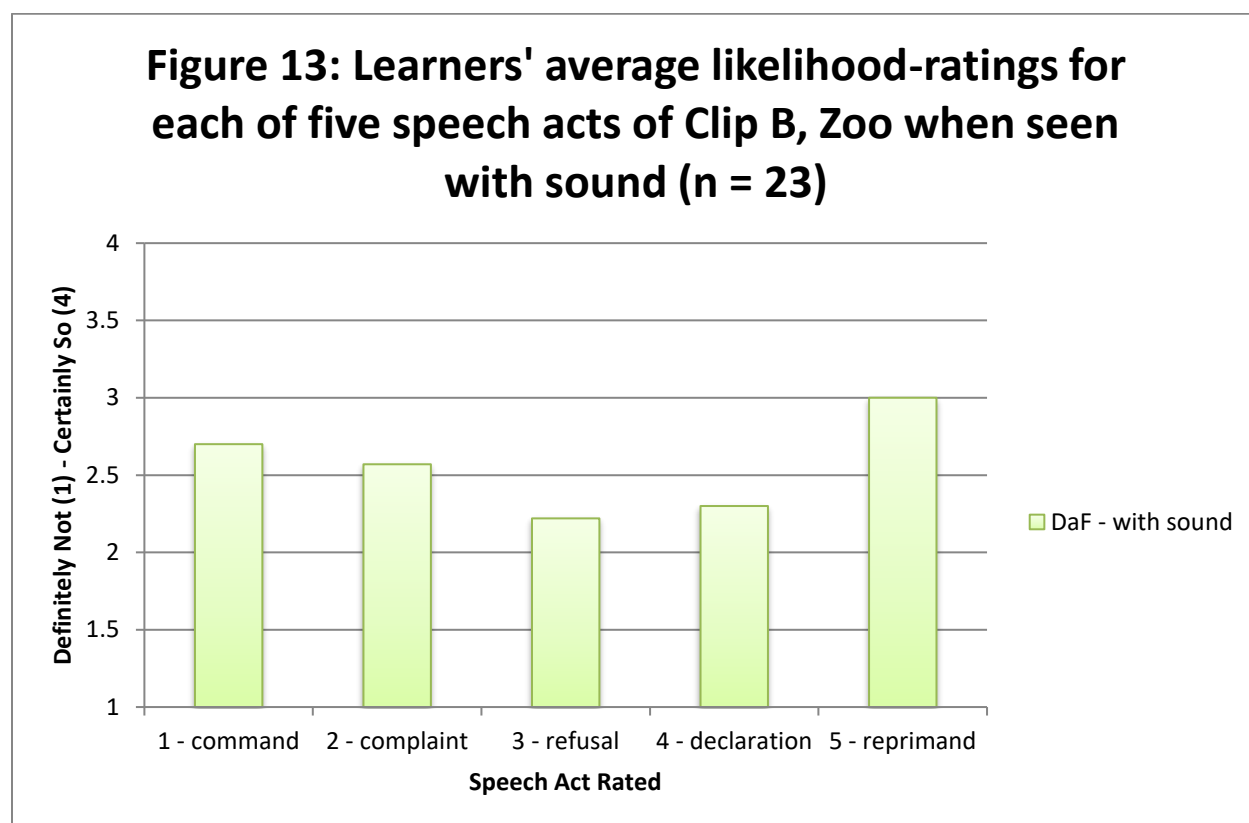
All significant pairings in Table 18 involve the lowest rated speech acts, namely refusal and declaration. Table 18 shows that the lowest rated speech act, refusal, had significant differences with the two highest rated speech acts, complaint and reprimand. The second lowest-rated speech act, declaration, had a significant pairing with the highest rated speech act

<sup>26</sup> Significance is achieved when  $p \leq .005$ .

reprimand. There was tendential agreement among American learners of German when they saw Clip B, Zoo without sound that the clip did not represent a refusal.

**RQ2B.b To what extent did American learners of German agree on what speech act they saw in Clip B, Zoo when they saw it with sound?**

Figure 13 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo, on a scale from Definitely Not (1) to Certainly So (4) by Learners when they saw Clip B, Zoo with sound.



As can be seen in Figure 13, the speech act reprimand drew the highest average rating (3.00) of all five speech acts and refusal drew the lowest average rating (2.22) when learners rated Clip B, Zoo with sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser

correction showed that mean scores were not significantly different between speech acts,  $F(3.072, 67.574) = 2.069$ ,  $p = .111$ . Therefore, no post-hoc tests were performed. There was tendential agreement, though not statistically significant agreement, among Learners when they saw Clip B, Zoo with sound that the clip represented a reprimand.

**RQ2B.c      Was the presence or absence of sound associated with differences in Learners' perceptions of what speech act they saw in Clip B, Zoo?**

Table 19 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when American learners of German saw Clip B, Zoo without sound to the ratings given when the clip was seen with sound. Significant differences are highlighted in green.

Table 19: Pairwise comparison of likelihood-ratings of five speech acts by sound condition for Clip B, Zoo (n = 23)					
Speech Act	Sound	Mean	SD	t	p <sup>27</sup>
command	no	2.74	0.964	0.204	0.840
	yes	2.70	1.105		
complaint	no	3.09	0.848	2.152	0.043*
	yes	2.57	1.037		
refusal	no	1.96	0.706	-0.901	0.377
	yes	2.22	1.126		
declaration	no	2.48	0.846	0.699	0.492
	yes	2.30	1.146		
reprimand	no	3.13	0.968	0.485	0.633
	yes	3.00	1.044		

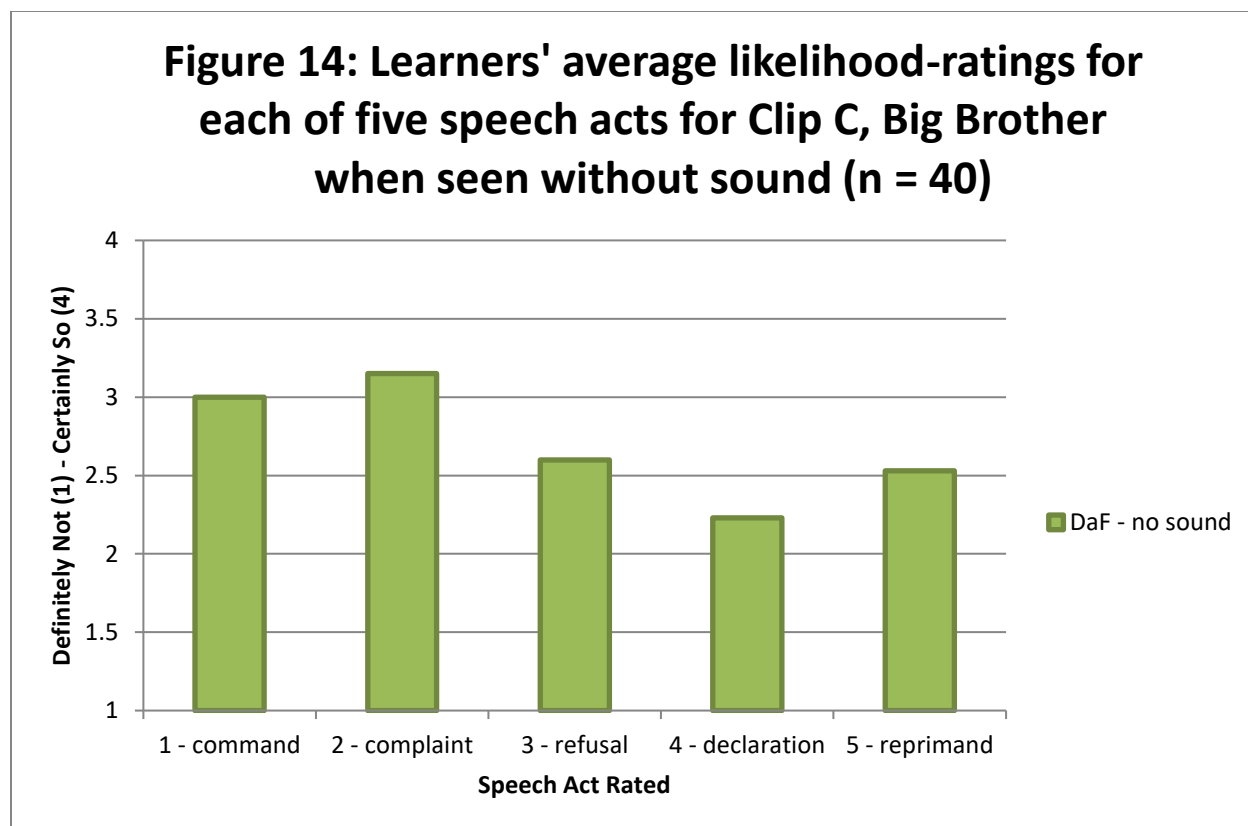
The likelihood with which learners considered Clip B, Zoo to represent a complaint decreased significantly when they saw the clip with sound. In RQ2B.a, it was shown that Learners do not think that a refusal was represented in the clip without sound. In RQ2B.b, *refusal* was again the lowest speech act, but not significantly so, perhaps due to lower participant numbers (n = 23 with sound vs n = 34 without sound).

#### 4.1.8 Research question 2C

##### **RQ2C.a To what extent did American learners of German agree on what speech act they saw in Clip C, Big Brother when they saw it without sound?**

Figure 14 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother on a scale from Definitely Not (1) to Certainly So (4) by American learners of German when they saw Clip C, Big Brother without sound.

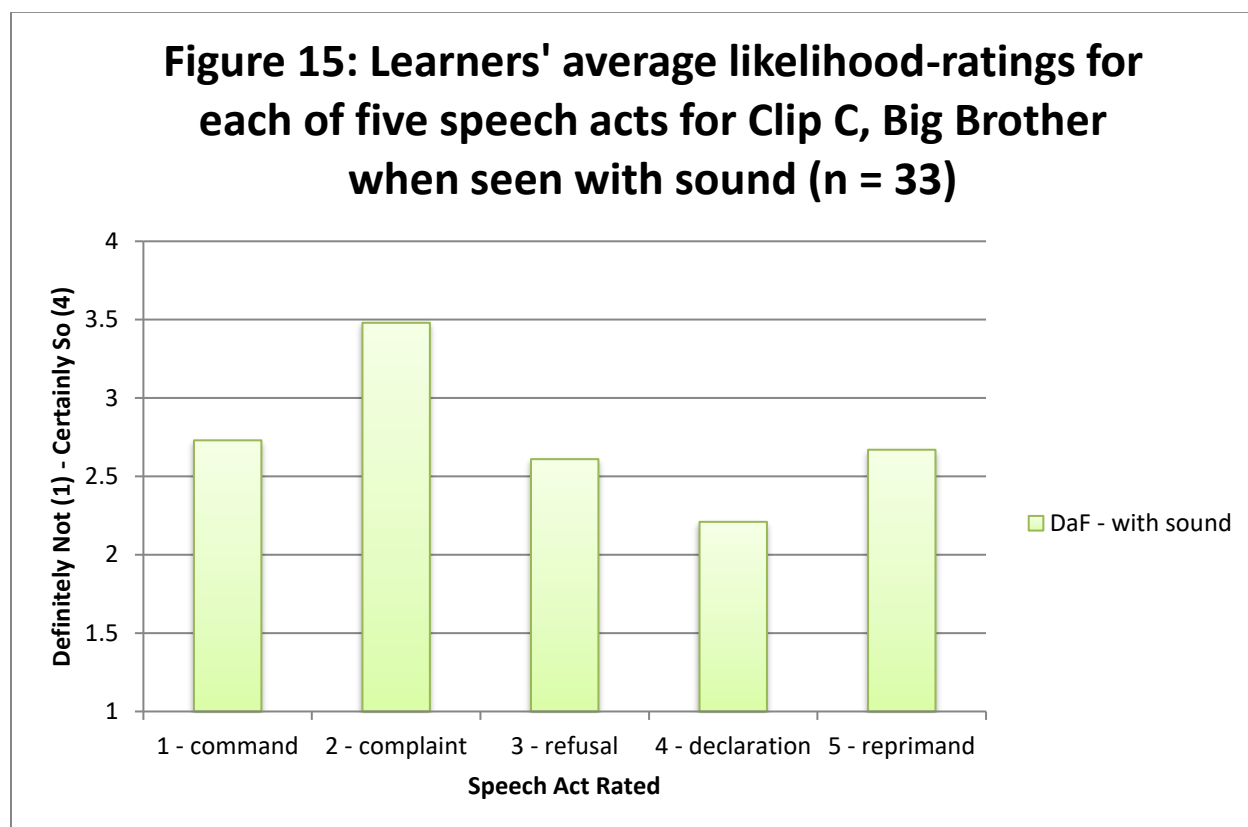
<sup>27</sup> Significance is achieved when  $p \leq .05$ .



As can be seen in Figure 14, the speech act complaint drew the highest average rating (3.15) of all five speech acts when NSs rated Clip C, Big Brother without sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 156) = 10.944, p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *complaint* and three of the other speech acts exhibited significant differences: *complaint* vs *refusal* (mean = 2.60) ( $t = 3.279, p = .002$ ); *complaint* vs *declaration* (mean = 2.23) ( $t = 5.867, p < .0005$ ); and *complaint* vs *reprimand* (mean = 2.53) ( $t = 4.900, p < .0005$ ). The second highest-rated speech act, *command* (mean = 3.00), had significant pairings with the two lowest-rated speech acts: *command* vs *declaration* ( $t = 4.564, p < .0005$ ); *command* vs *reprimand* ( $t = 3.219, p = .003$ ). There was discernable agreement among Learners when they saw Clip C, Big Brother without sound that the clip represented a complaint.

**RQ2C.b To what extent did American learners of German agree on what speech act they saw in Clip C, Big Brother when they saw it with sound?**

Figure 15 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother on a scale from Definitely Not (1) to Certainly So (4) by Learners when they saw Clip C, Big Brother with sound.



As can be seen in Figure 15, the speech act complaint drew the highest average rating (3.48) of all five speech acts when NSs rated Clip C, Big Brother with sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 128) = 12.905$ ,  $p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *complaint* and all other speech acts exhibited significant differences ( $p < .0005$  for all

comparisons): *complaint vs command* (mean = 2.73) ( $t = 3.990$ ); *complaint vs refusal* (mean = 2.61) ( $t = 5.256$ ); *complaint vs declaration* (mean = 2.21) ( $t = 8.027$ ); and *complaint vs reprimand* (mean = 2.67) ( $t = 5.555$ ). No other pairings showed significant differences. There was discernable agreement among learners when they saw Clip C, Big Brother with sound that the clip represented a complaint.

**RQ2C.c Was the presence or absence of sound associated with differences in Learners' perceptions of what speech act they saw in Clip C, Big Brother?**

Table 20 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when learners saw Clip C, Big Brother without sound to the ratings given when the clip was seen with sound. Significant differences are highlighted in green

Speech Act	Sound	Mean	SD	t	p <sup>28</sup>
command	no	3.06	0.556	2.000	0.054
	yes	2.73	0.944		
complaint	no	3.15	0.667	-2.602	0.014*
	yes	3.48	0.508		
refusal	no	2.58	0.902	-0.215	0.831
	yes	2.61	0.864		
declaration	no	2.18	0.635	-0.239	0.813
	yes	2.21	0.740		
reprimand	no	2.58	0.708	-0.649	0.521
	yes	2.67	0.736		

The likelihood with which Learners considered Clip C, Big Brother to represent a complaint increased significantly when they saw the clip with sound present. The likelihood that

<sup>28</sup> Significance is achieved when  $p \leq .05$ .

they thought Clip C, Big Brother represented a command decreased when they saw the clip with sound present, but not significantly so. It appears that the presence of sound increased Learners' certainty that Clip C, Big Brother showed a complaint.

**RQ2C.d: Was the presence or absence of sound associated with certain rankings for extra-linguistic features as reasons used by American learners of German to arrive at ratings for *complaint* for Clip C, Big Brother?**

American learners of German agreed that Clip C, Big Brother represented a complaint. This question examines the role that sound played on what extra-linguistic features they used to come to that conclusion. Respondents had been asked to rank four extra-linguistic features (gestures, gaze, facial expressions, and positioning) according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the ranking as they pertain to the speech act complaint because Learners had clearly agreed that this was the speech act shown in the clip.

Table 21 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when Learners saw Clip C, Big Brother without sound and when they saw the clip with sound. Significant differences are highlighted in green.

Table 21: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint (n = 33)				
Extra-linguistic Feature	Sound	Median	Z	p <sup>29</sup>
gestures	no	2	-1.952	0.051
	yes	1		
gaze	no	3	-0.876	0.381
	yes	3		
facial expressions	no	2	-2.558	0.011*
	yes	2.5		
positioning	no	4	-0.829	0.407
	yes	4		

Facial expressions were significantly less important in the decision-making process of Learners with sound than they were without sound. With sound, learners relied less on facial expressions to conclude that Clip C, Big Brother depicted a complaint.

**RQ2C.e: What extra-linguistic reasons did American learners of German cite in explaining how they arrived at the designation of Clip C, Big Brother as a complaint when they saw it without sound?**

RQ2C.e and RQ2C.f, respectively, explored the extent to which NSs of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they saw Clip C, Big Brother without sound and with sound.

The Friedman test indicated a statistically significant difference among the four extra-linguistic features,  $\chi^2(3) = 36.631$ ,  $p < .0005$ . Post-hoc tests are shown in full below in Table 22, and significant differences are highlighted in green.

<sup>29</sup> Significance is achieved when  $p \leq .05$ .

Table 22: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen without sound (n = 39)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>30</sup>
1	gaze	3	-2.353	0.019
	gestures	2		
2	facial expressions	2	-3.470	0.729
	gestures	2		
3	positioning	4	-4.322	< .0005*
	gestures	2		
4	facial expressions	2	-2.663	0.008*
	gaze	3		
5	positioning	4	-3.169	0.002*
	gaze	3		
6	positioning	4	-4.333	< .0005*
	facial expressions	2		

The analyses in Table 22 showed that Learners relied on positioning significantly less than all other extra-linguistic features. Analyses also showed that they relied on facial expressions more than gaze. Learners appear united in that they relied on facial expressions and ignored positioning to determine that Clip C, Big Brother depicted a complaint when seen without sound.

<sup>30</sup> Significance is achieved when  $p \leq .0083$ .

**RQ2C.f: What extra-linguistic reasons did American learners of German cite in explaining how they arrived at the designation of Clip C, Big Brother as a complaint when they saw it with sound?**

The initial Friedman test indicated that there was a statistically significant difference in what extra-linguistic features Learners drew on when they decided that Clip C, Big Brother depicts a complaint when seen with sound,  $\chi^2(3) = 42.527$ ,  $p < .0005$ . Post-hoc tests are shown in full below in Table 23, and significant differences are highlighted in green.

Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>31</sup>
1	gaze	3	-3.672	< .0005*
	gestures	1		
2	facial expressions	3	-3.271	0.001*
	gestures	1		
3	positioning	4	-4.674	< .0005*
	gestures	1		
4	facial expressions	3	-0.212	0.832
	gaze	3		
5	positioning	4	-3.772	< .0005*
	gaze	3		
6	positioning	4	-3.301	0.001*
	facial expressions	3		

As analyses shown in Table 23 showed, Learners relied most on gestures with sound. Learners relied on gestures the most in their determinations that Clip C, Big Brother depicted a

<sup>31</sup> Significance is achieved when  $p \leq .0083$ .

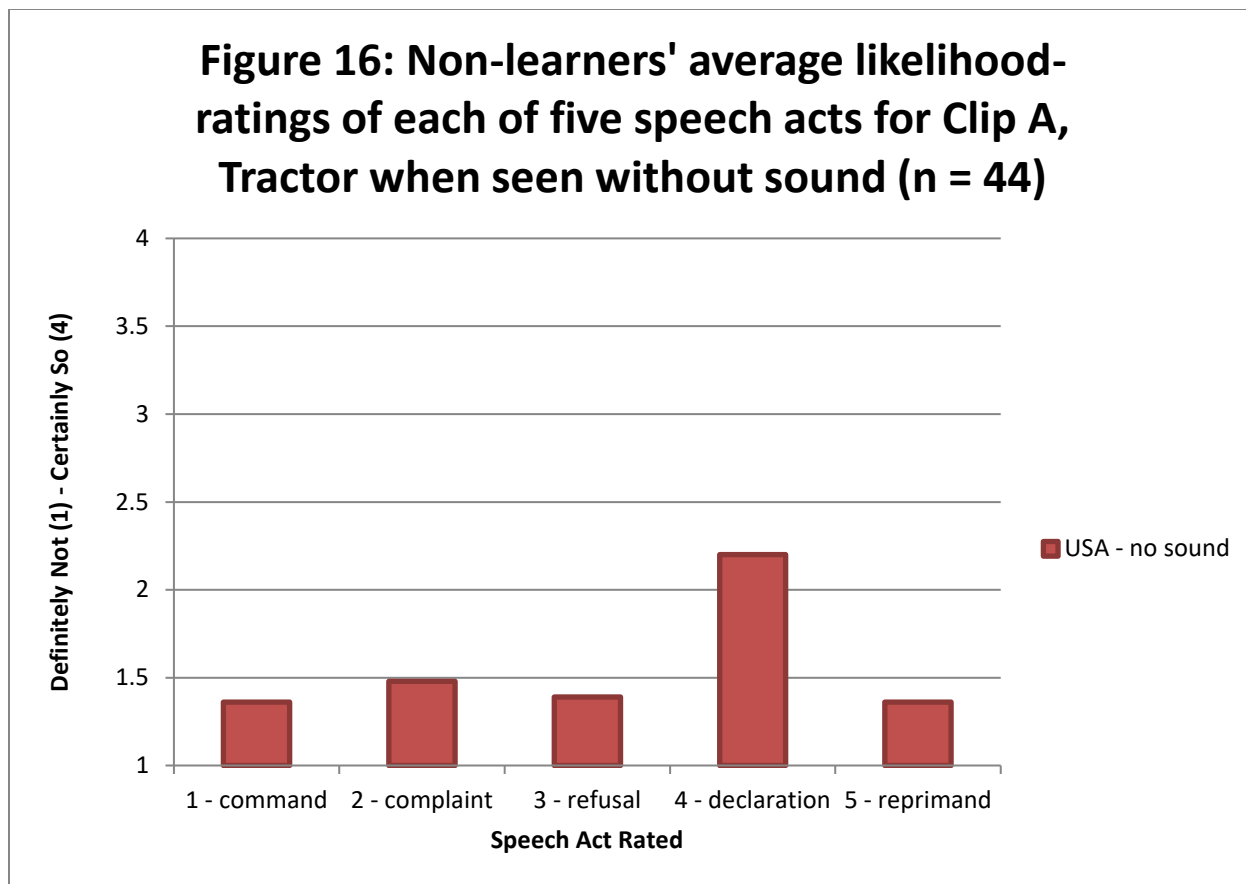
complaint when seen with sound. As was the case without sound, positioning is again the least important extra-linguistic factor for Learners to make their decision.

In short, reviewing answers to all sub-questions of RQ2C, learners' finding that Clip C, Big Brother represented a complaint (RQ2C.a; RQ2C.b) was strengthened by the presence of sound (RQ2A.c). The most relied upon extra-linguistic feature shifts from tentatively being facial expression without sound (RQ2C.e) to clearly being gestures with sound (RQ2C.f). Positioning was the least relied upon extra-linguistic feature regardless of sound condition (RQ2C.e; RQ2C.f).

#### 4.1.9 Research question 3A

**RQ3A.a      To what extent did American non-learners of German agree on what speech act they saw in Clip A, Tractor when they saw it without sound?**

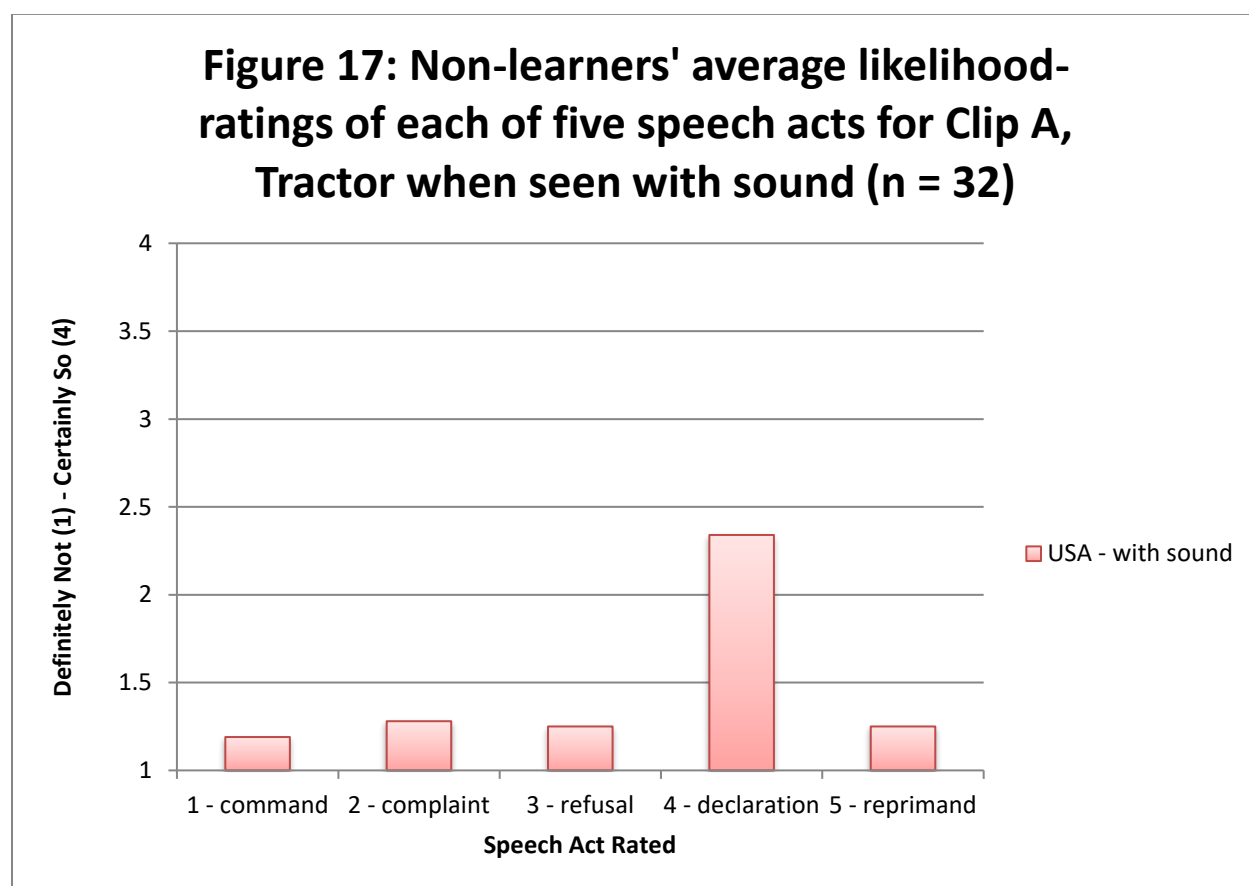
Figure 16 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip A, Tractor on a scale from Definitely Not (1) to Certainly So (4) by American non-learners of German when they saw Clip A, Tractor without sound.



As can be seen in Figure 16, the speech act declaration drew the highest average rating (2.20) of all five speech acts when Learners rated Clip A, Tractor without sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(2.058, 88.495) = 18.183, p < .0005$ . Post-hoc tests showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration* vs *command* (mean = 1.36) ( $t = 5.521$ ), *declaration* vs *complaint* (mean = 1.48) ( $t = 4.442$ ), *declaration* vs *refusal* (mean = 1.39) ( $t = 4.651$ ), and *declaration* vs *reprimand* (mean = 1.36) ( $t = 5.521$ ). No other pairings showed significant differences. There was discernable agreement among Non-Learners when they saw Clip A, Tractor without sound that the clip represented a declaration.

**RQ3A.b To what extent did American non-learners of German agree on what speech act they saw in Clip A, Tractor when they saw it with sound?**

Figure 17 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip A, Tractor on a scale from Definitely Not (1) to Certainly So (4) by American non-learners of German when they saw Clip A, Tractor with sound.



As can be seen in Figure 17, the speech act declaration drew the highest average rating (2.34) of all five speech acts when NSs rated Clip A, Tractor with sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were significantly different between speech acts,  $F(1.366, 42.353) = 27.498, p < .0005$ . Post-hoc tests

showed that pairwise comparisons of ratings of *declaration* and each of the other speech acts exhibited significant differences ( $p < .0005$  for all comparisons): *declaration vs command* (mean = 1.19) ( $t = 5.891$ ), *declaration vs complaint* (mean = 1.28) ( $t = 5.587$ ), *declaration vs refusal* (mean = 1.25) ( $t = 5.271$ ), and *declaration vs reprimand* (mean = 1.25) ( $t = 5.685$ ). No other pairings showed significant differences. There was discernable agreement among Non-Learners when they saw Clip A, Tractor with sound that the clip represented a declaration.

**RQ3A.c Was the presence or absence of sound associated with differences in Non-Learners' perceptions of what speech act they saw in Clip A, Tractor?**

Table 24 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when Non-Learners saw Clip A, Tractor without sound to the ratings given when the clip was seen with sound.

Speech Act	Sound	Mean	SD	t	p <sup>32</sup>
command	no	1.32	0.475	1.438	0.161
	yes	1.19	0.402		
complaint	no	1.48	0.677	1.647	0.110
	yes	1.29	0.529		
refusal	no	1.32	0.599	1.000	0.325
	yes	1.26	0.445		
declaration	no	2.26	0.930	-0.205	0.839
	yes	2.29	1.071		
reprimand	no	1.35	0.486	1.360	0.184
	yes	1.26	0.445		

<sup>32</sup> Significance is achieved when  $p \leq .05$ .

As Table 24 shows, analyses yielded no significant differences, meaning that adding sound to the clip did not significantly change Non-Learners' average ratings for each speech act.

**RQ3A.d: Was the presence or absence of sound associated with certain rankings for extra-linguistic features as reasons used by American non-learners of German to arrive at ratings for declaration for Clip A, Tractor?**

Non-Learners agreed that Clip A, Tractor represented a declaration. This question examines the role that sound played on what extra-linguistic features they used to come to that conclusion. Respondents had been asked to rank four extra-linguistic features (gestures, gaze, facial expressions, and positioning) according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the ranking as they pertain to the speech act declaration because Non-Learners had clearly agreed that this was the speech act shown in the clip. RQ3A.d will focus specifically on how rankings in the context of *declaration* compared when respondents saw Clip A, Tractor with sound and when they saw it without sound.

Table 25 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when American non-learners of German saw Clip A, Tractor without sound and when they saw the clip with sound.

Table 25: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip A, Tractor depicts a declaration (n = 30)				
Extra-linguistic Feature	Sound	Median	Z	p <sup>33</sup>
gestures	no	2	-2.054	0.040*
	yes	3		
gaze	no	2	-0.791	0.429
	yes	2		
facial expressions	no	2	-1.607	0.108
	yes	2		
positioning	no	3	-0.290	0.772
	yes	4		

Analyses indicated that Non-Learners relied less on gestures to decide that Clip A, Tractor showed a declaration when they saw the clip with sound as compared to when they saw it without sound.

**RQ3A.e: What extra-linguistic reasons did American non-learners of German cite in explaining how they arrived at the designation of Clip A, Tractor as a declaration when they saw it without sound?**

RQ3A.e and RQ3A.f, respectively, explored the extent to which American non-learners of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they saw Clip A, Tractor without sound and with sound.

The Friedman test indicated that there was no statistically significant difference among the extra-linguistic features when the clip was seen without sound,  $\chi^2(3) = 4.954$ ,  $p = .175$ . Therefore, no post-hoc tests were performed, and it was concluded that none of the four extra-linguistic features was relied upon significantly more than any other when American non-

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<sup>33</sup> Significance is achieved when  $p \leq .05$ .

learners of German determined that Clip A, Tractor when seen without sound represented a declaration.

**RQ3A.f: What extra-linguistic reasons did American non-learners of German cite in explaining how they arrived at the designation of Clip A, Tractor, as a declaration when they saw it with sound?**

The Friedman test indicated that there was a statistically significant difference among the four extra-linguistic features,  $\chi^2(3) = 11.555$ ,  $p = .009$ . Post-hoc tests are shown in full below. Significant pairings are highlighted in green.

Table 26: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen with sound (n = 34)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>34</sup>
1	gaze	2	-1.316	0.188
	gestures	3		
2	facial expressions	2	-1.602	0.109
	gestures	3		
3	positioning	4	-1.256	0.209
	gestures	3		
4	facial expressions	2	-0.062	0.950
	gaze	2		
5	positioning	4	-2.815	0.005*
	gaze	2		
6	positioning	4	-2.627	0.009
	facial expressions	2		

<sup>34</sup> Significance is achieved when  $p \leq .0083$ .

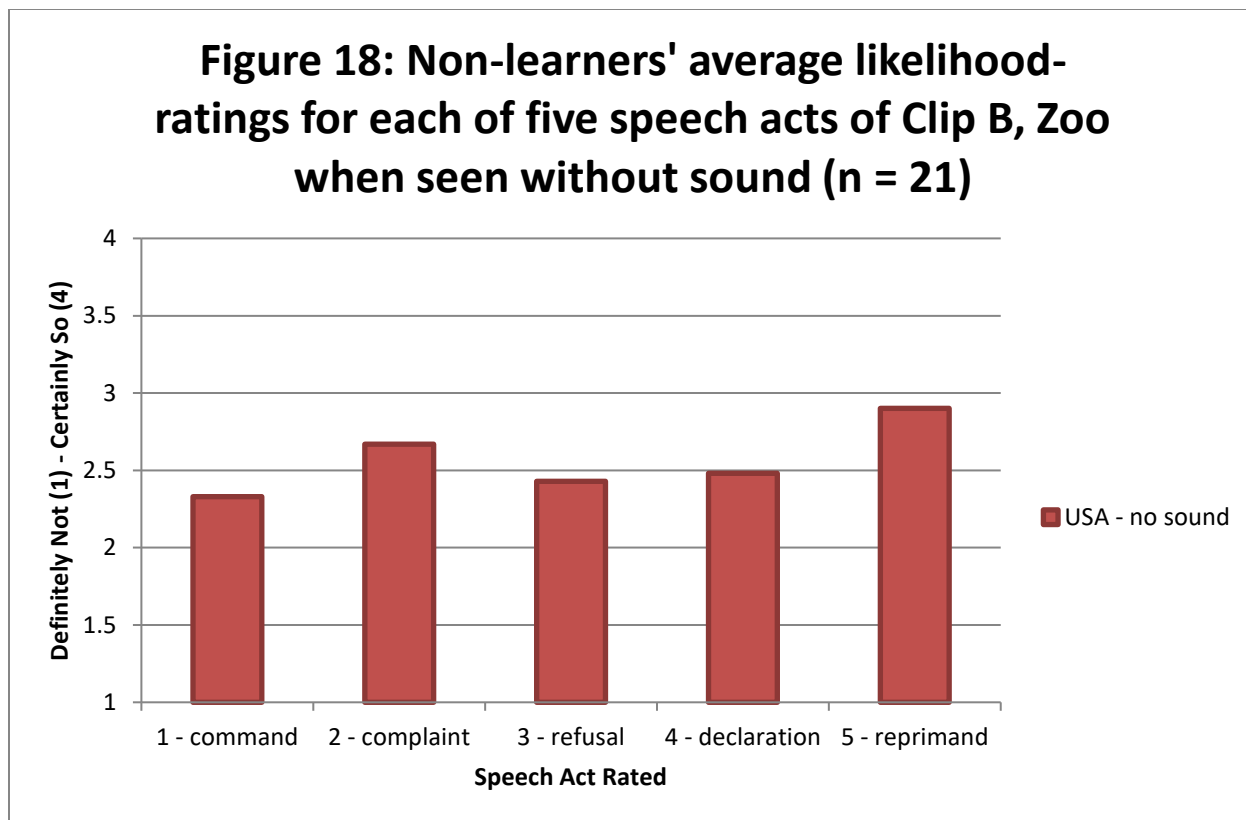
From the analyses shown in Table 26, it can be concluded that gaze was most important and positioning least important for Non-Learners to decide that Clip A, Tractor represented a declaration when the clip was seen with sound.

In summary, Non-Learners agreed that Clip A, Tractor represented a declaration. This decision was independent of sound condition (RQ3A.c). They relied most on gaze with sound (RQ3A.f) to arrive at their decision. With sound, they relied significantly less on gestures than they did without sound (RQ3A.d).

#### 4.1.10 Research question 3B

**RQ3B.a      To what extent did American non-learners of German agree on what speech act they see in Clip B, Zoo when they saw it without sound?**

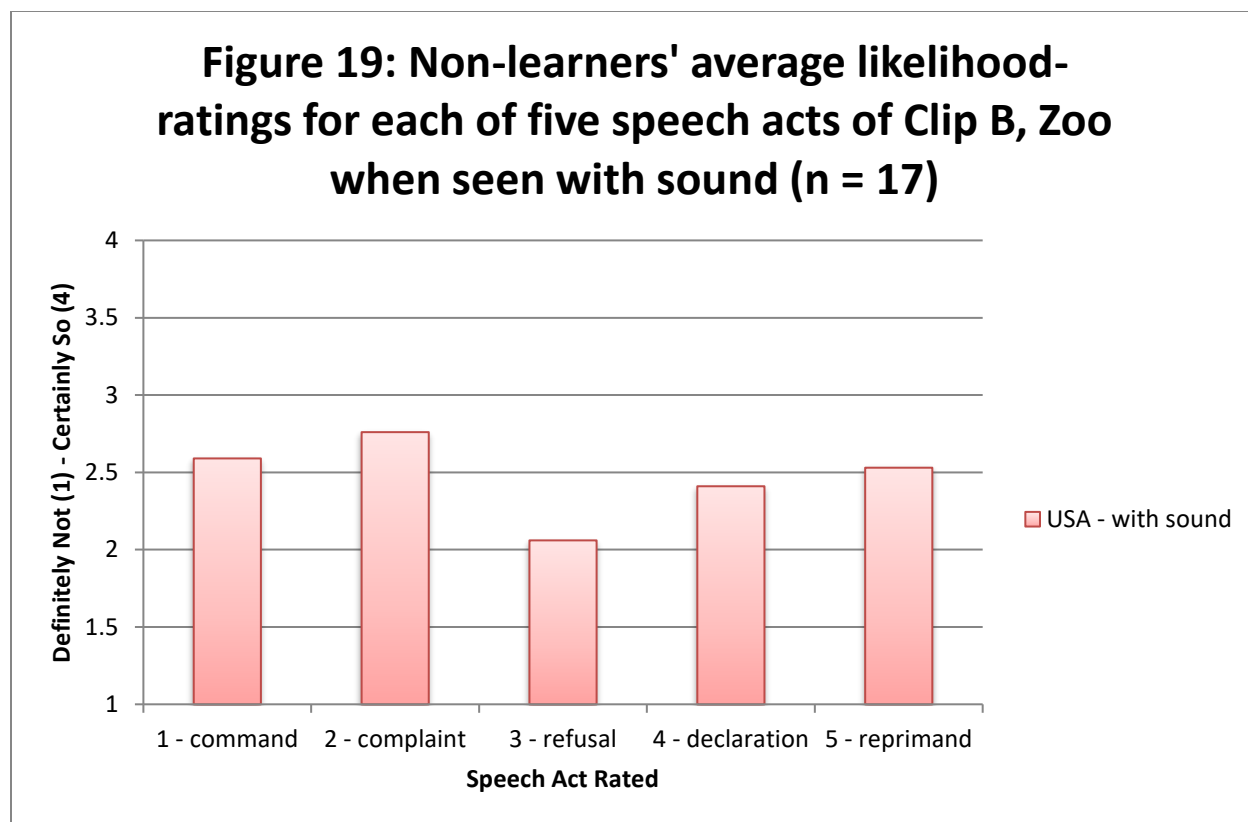
Figure 18 shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo on a scale from Definitely Not (1) to Certainly So (4) by American non-learners of German when they were shown the clip without sound.



As can be seen in Figure 18, the speech act reprimand drew the highest average rating (2.90) when Non-Learners rated Clip B, Zoo without sound. A one-way within-subjects ANOVA with a Greenhouse-Geisser correction showed that mean scores were not significantly different between speech acts,  $F(2.670, 53.398) = 1.769, p = .170$ . Therefore, no post-hoc tests were conducted.

**RQ3B.b To what extent did American learners of German agree on what speech act they see in Clip B, Zoo when they saw it with sound?**

Figure 19 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip B, Zoo, on a scale from Definitely Not (1) to Certainly So (4) by Non-Learners when they saw Clip B, Zoo with sound.



Complaint drew the highest average rating (2.76) when Non-Learners rated Clip B, Zoo with sound. A one-way within-subjects ANOVA showed that mean scores were not significantly different between speech acts,  $F(4, 64) = 1.553$ ,  $p = .198$ . Therefore, no post-hoc tests were conducted.

**RQ3B.c Was the presence or absence of sound associated with differences in Non-Learners' perceptions of what speech act they saw in Clip B, Zoo?**

Table 27 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when American non-learners of German saw Clip B, Zoo without sound to the ratings given when the clip was seen with sound.

Speech Act	Sound	Mean	SD	t	p <sup>35</sup>
command	no	2.29	0.920	-1.000	0.332
	yes	2.59	0.939		
complaint	no	2.65	0.702	-0.566	0.579
	yes	2.76	0.664		
refusal	no	2.41	0.795	2.073	0.055
	yes	2.06	0.748		
declaration	no	2.53	0.717	0.523	0.608
	yes	2.41	1.064		
reprimand	no	3.00	0.791	1.926	0.072
	yes	2.53	1.007		

The lack of significant pairings from analyses shown in Table 27 indicated that sound condition did not have a significant effect on Non-Learners' ratings of Clip B, Zoo.

In summary, the lack of significant differences between speech acts both without sound (RQ3B.a) and with sound (RQ3B.b) as well as between sound conditions for each speech act individually (RQ3B.c) indicated that Non-Learners of German do not agree at all on what speech act they saw depicted in Clip B, Zoo.

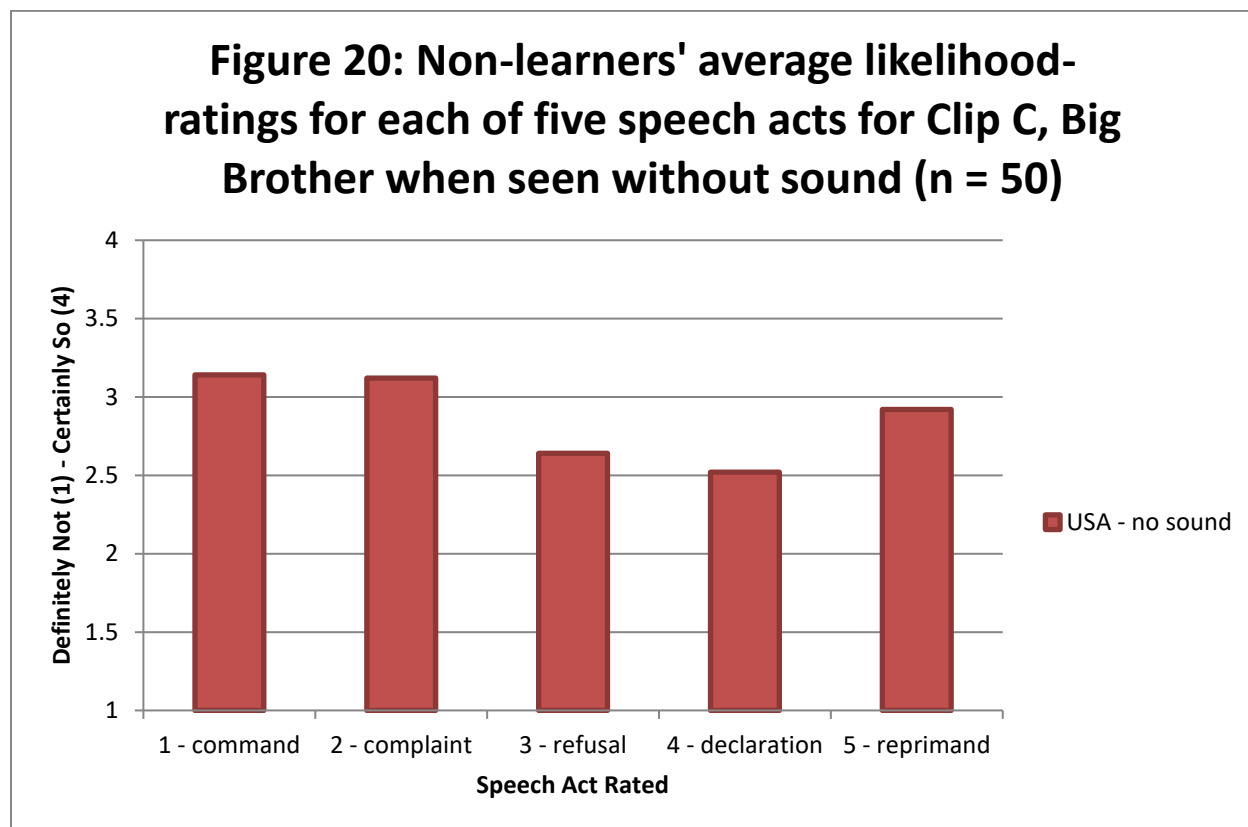
#### 4.1.11 Research question 3C

**RQ3C.a To what extent did American non-learners of German agree on what speech act they saw in Clip C, Big Brother when they saw it without sound?**

Figure 20 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother

<sup>35</sup> Significance is achieved when  $p \leq .05$ .

on a scale from Definitely Not (1) to Certainly So (4) by American non-learners of German when they saw Clip C, Big Brother without sound.



As can be seen in Figure 20, the speech act command drew the highest average rating (3.14) followed closely by *complaint* (3.12) when NSs rated Clip C, Big Brother without sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4, 196) = 8.277, p < .0005$ . Post-hoc tests are shown in full in Table 28. Comparisons with significant differences are highlighted in green.

Table 28: Comparisons of Non-Learners' average likelihood-ratings for all unique pairings of five speech acts for Clip C, Big Brother when seen without sound (n = 50)					
Comparison	Speech Acts Involved	Mean	SD	t	p <sup>36</sup>
1	1 - command vs	3.14	0.783	0.131	0.896
	2 - complaint	3.12	0.718		
2	1 - command vs	3.14	0.783	3.889	< .0005*
	3 - refusal	2.64	0.749		
3	1 - command vs	3.14	0.783	3.904	< .0005*
	4 - declaration	2.52	0.762		
4	1 - command vs	3.14	0.783	1.709	0.094
	5 - reprimand	2.92	0.601		
5	2 - complaint vs	3.12	0.718	3.485	0.001*
	3 - refusal	2.64	0.749		
6	2 - complaint vs	3.12	0.718	4.379	< .0005*
	4 - declaration	2.52	0.762		
7	2 - complaint vs	3.12	0.718	1.528	0.133
	5 - reprimand	2.92	0.601		
8	3 - refusal vs	2.64	0.749	0.785	0.436
	4 - declaration	2.52	0.762		
9	3 - refusal vs	2.64	0.749	-2.189	0.033
	5 - reprimand	2.92	0.601		
10	4 - declaration vs	2.52	0.762	-3.500	0.001*
	5 - reprimand	2.92	0.601		

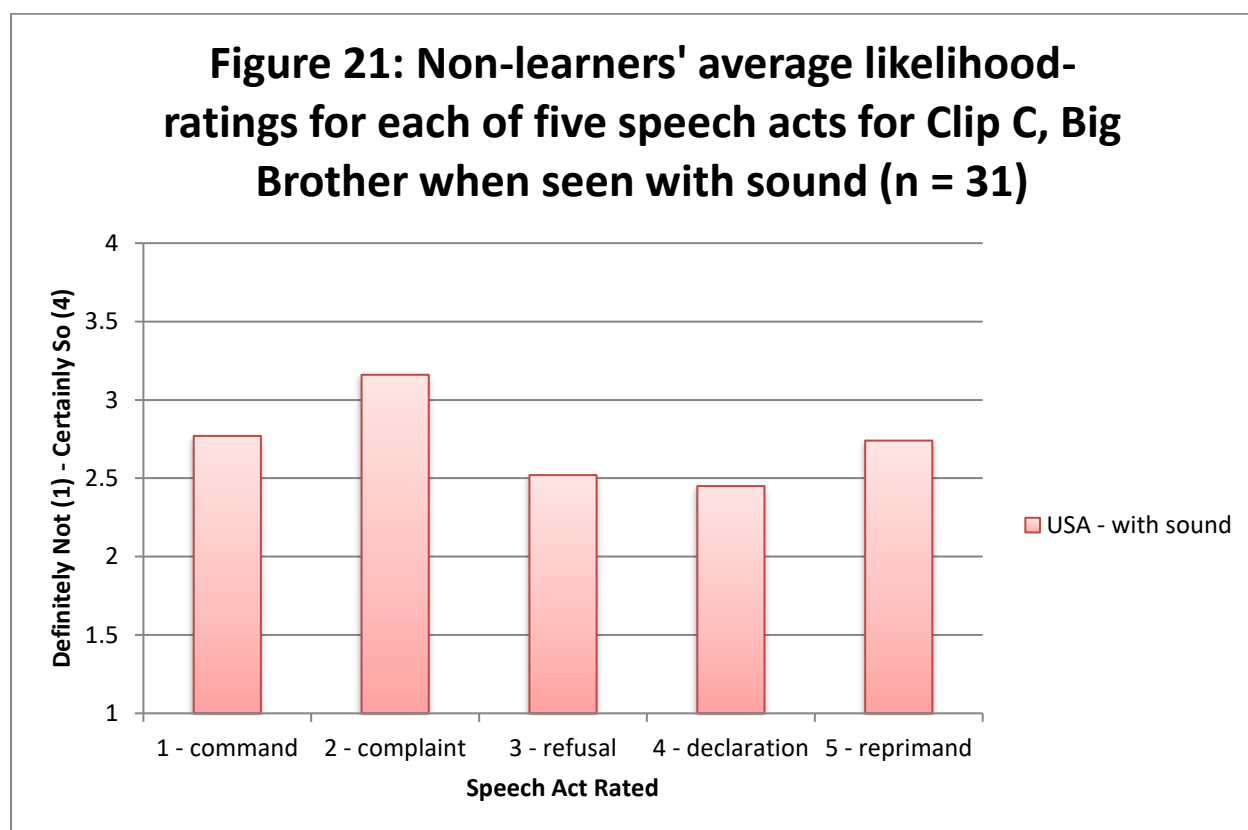
The lowest average rating was drawn by *declaration* (2.52), which also had significant pairings with all other speech acts except the next to lowest rated *refusal*, which itself was significantly different than the two highest rated speech acts, command and complaint. Overall, it

<sup>36</sup> Significance is achieved when  $p \leq .005$ .

seems that the clearest agreement on the part of American non-learners of German was that a declaration was not depicted in Clip C, Big Brother when seen without sound.

**RQ3C.b To what extent did American non-learners of German agree on what speech act they saw in Clip C, Big Brother when they saw it with sound?**

Figure 21 (below) shows the average likelihood-ratings given for each of five different speech acts (command, complaint, refusal, declaration, and reprimand) for Clip C, Big Brother on a scale from Definitely Not (1) to Certainly So (4) by Non-Learners when they saw Clip C, Big Brother with sound.



As can be seen in Figure 21, the speech act complaint drew the highest average rating (3.16) of all five speech acts when NSs rated Clip C, Big Brother with sound. A one-way within-subjects ANOVA showed that mean scores were significantly different between speech acts,  $F(4,$

120) = 3.853,  $p = .006$ . Post-hoc tests showed that pairwise comparisons of ratings of *complaint* and two other speech acts exhibited significant: *complaint vs refusal* (mean = 2.52) ( $t = 3.147$ ,  $p = .004$ ); and *complaint vs declaration* (mean = 2.45) ( $t = 3.493$ ). No other pairings showed significant differences. Overall, these post-hoc tests indicated tendential agreement that Clip C, Big Brother depicted a complaint when shown with sound.

**RQ3C.c Was the presence or absence of sound associated with differences in Non-Learners' perceptions of what speech act they saw in Clip C, Big Brother?**

Table 29 shows the results of five paired t-tests used to compare likelihood-ratings given to each speech act when Non-Learners saw Clip C, Big Brother without sound to the ratings given when the clip was seen with sound. Significant differences are highlighted in green.

Table 29: Pairwise comparison of likelihood-ratings of five speech acts by sound condition for Clip C, Big Brother (n = 31)					
Speech Act	Sound	Mean	SD	t	p <sup>37</sup>
command	no	3.19	0.833	3.243	0.003*
	yes	2.77	0.717		
complaint	no	3.10	0.746	-0.465	0.645
	yes	3.16	0.779		
refusal	no	2.71	0.824	1.647	0.110
	yes	2.52	0.811		
declaration	no	2.48	0.769	0.254	0.801
	yes	2.45	0.850		
reprimand	no	2.84	0.688	0.649	0.522
	yes	2.74	0.893		

<sup>37</sup> Significance is achieved when  $p \leq .05$ .

The likelihood with which Non-Learners considered Clip C, Big Brother to represent a command decreased significantly when they saw the clip with sound present as opposed to without sound. It is also important to note that the average rating for complaint increased while all other ratings decreased, though none of those changes were significant. It appears that the presence of sound shifted Non-learner consensus from thinking that a declaration was not depicted to agreeing that a complaint was depicted.

**RQ3C.d: Was the presence or absence of sound associated with certain rankings for extra-linguistic features as reasons used by American non-learners of German to arrive at ratings for *complaint* for Clip C, Big Brother?**

American non-learners of German agreed that Clip C, Big Brother represented a complaint when they saw the clip with sound. This question examines the role that sound played on what extra-linguistic features they used to come to that conclusion. Respondents had been asked to rank four extra-linguistic features (gestures, gaze, facial expressions, and positioning) according to how much they relied on each of them to judge the likelihood with which the clip represented a given speech act. Rank 1 was to represent the most relied on (most important) extra-linguistic feature and Rank 4 the least relied on (the least important). Respondents performed these rankings in the context of each of the five suggested speech acts and under both sound conditions. Present analyses concentrate on the ranking as they pertain to the speech act complaint because Non-Learners agreed that this was the speech act shown in the clip when seen with sound and it was one of their two top choices without sound.

Table 30 shows the results of four Wilcoxon signed-rank tests that were used to compare rankings given to each extra-linguistic feature when Learners saw Clip C, Big Brother without sound and when they saw the clip with sound.

Table 30: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint (n = 32)				
Extra-linguistic Feature	Sound	Median	Z	p <sup>38</sup>
gestures	no	2	-0.689	0.491
	yes	2		
gaze	no	2	-1.112	0.266
	yes	2		
facial expressions	no	2	-1.396	0.163
	yes	3		
positioning	no	4	-0.857	0.391
	yes	4		

Because, as is evident in Table 30, analyses showed no significant differences, it can be surmised that the presence or absence of sound was not associated with the extent to which native speakers relied on any of the extra-linguistic features to arrive at the conclusion that Clip A, Tractor showed a complaint.

**RQ3C.e: What extra-linguistic reasons did American non-learners of German cite in explaining how they arrived at the designation of Clip C, Big Brother as a complaint when they saw it without sound?**

RQ3C.e and RQ3C.f, respectively, explored the extent to which NSs of German relied on each of four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when they saw Clip C, Big Brother without sound and with sound.

The Friedman test indicated a statistically significant difference among the four extra-linguistic features,  $\chi^2(3) = 25.531$ ,  $p < .0005$ . Post-hoc tests are shown in full below in Table 31, and significant differences are highlighted in green.

<sup>38</sup> Significance is achieved when  $p \leq .05$ .

Table 31: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen without sound (n = 49)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>39</sup>
1	gaze	2	-0.353	0.724
	gestures	2		
2	facial expressions	2	-1.028	0.304
	gestures	2		
3	positioning	4	-3.590	< .0005*
	gestures	2		
4	facial expressions	2	-1.078	0.281
	gaze	2		
5	positioning	4	-3.340	0.001*
	gaze	2		
6	positioning	4	-3.700	< .0005*
	facial expressions	2		

The analyses in Table 31 showed that Non-Learners had relied on positioning significantly less than all other extra-linguistic features.

**RQ3C.f: What extra-linguistic reasons did American non-learners of German cite in explaining how they arrived at the designation of Clip C, Big Brother, as a complaint when seen with sound?**

The initial Friedman test indicated that there was a statistically significant difference in what extra-linguistic features Non-Learners drew on when they decided that Clip C, Big Brother depicts a complaint when seen with sound,  $\chi^2(3) = 26.316$ ,  $p < .0005$ . Post-hoc tests are shown in full below in Table 32, and significant differences are highlighted in green.

<sup>39</sup> Significance is achieved when  $p \leq .0083$ .

Table 32: Wilcoxon Signed-Rank tests on reliance on extra-linguistic features in arriving at the conclusion that Clip C, Big Brother depicts a complaint when seen with sound (n = 32)				
Comparison	Extra-linguistic Features Involved	Median	Z	p <sup>40</sup>
1	gaze	2	-0.084	0.933
	gestures	2		
2	facial expressions	3	-1.577	0.115
	gestures	2		
3	positioning	4	-3.196	0.001*
	gestures	2		
4	facial expressions	3	-1.277	0.202
	gaze	2		
5	positioning	4	-3.961	< .0005*
	gaze	2		
6	positioning	4	-2.692	0.007*
	facial expressions	3		

As was the case without sound, positioning is again the least important extra-linguistic factor for Non-Learners to make their decision.

In short, reviewing answers to all sub-questions of RQ3C, Non-Learners only agreed that Clip C, Big Brother did not depict a declaration without sound (RQ3C.a). With sound, they tentatively agreed that it depicted a complaint (RQ3C.b). This shift in thinking from without sound to with sound was largely made possible by a significant decrease in ratings for *command* with sound (RQ3C.c). Non-Learners only agreed that they did not rely much at all on positioning when rating complaint (RQ3C.e; RQ3C.f).

#### 4.2 Part II: Overview of RQ1 – RQ3

<sup>40</sup> Significance is achieved when  $p \leq .0083$ .

This section is intended to provide an overview of the findings of Part I of this chapter, which dealt with RQ1 – RQ3, in order to set the stage for Part III of this chapter. Three tables below (one for each clip examined in this study; Clip A, Tractor; Clip B, Zoo; and Clip C, Big Brother) showcase the most pertinent information to be taken away from RQ1 – RQ3; this information is foundational to RQ4. Areas highlighted in green indicate that the participant group in question agreed that the clip in question represented a certain speech act. Orange highlights indicate that they agreed that the clip did not represent the speech act. Red highlights indicate that there was no agreement either way. All of the findings in the following tables were examined in more detail in Part I.

Table 33 shows mean ratings for Clip A, Tractor for both sound conditions, all five speech acts, and the three participant groups with highlights as described in the previous paragraph.

Clip	Sound	Speech Act	Participant Group	Mean
A	no	command	NSs	1.24
			Learners	1.2
			Non-Learners	1.36
		complaint	NSs	1.29
			Learners	1.3
			Non-Learners	1.48
		refusal	NSs	1.62
			Learners	1.23
			Non-Learners	1.39
		declaration	NSs	2.71
			Learners	2.3
			Non-Learners	2.2
	reprimand	NSs	1.48	
		Learners	1.3	
		Non-Learners	1.36	
	yes	command	NSs	1
			Learners	1.24
			Non-Learners	1.19
		complaint	NSs	1
			Learners	1.12
			Non-Learners	1.28
		refusal	NSs	1.24
			Learners	1.09
			Non-Learners	1.25
declaration		NSs	3.06	
		Learners	2.36	
		Non-Learners	2.34	
reprimand	NSs	1.29		
	Learners	1.3		
	Non-Learners	1.25		

Table 33 shows that all participant groups agreed that a declaration was depicted in Clip A, Tractor under both sound conditions.

Table 34 shows mean ratings for Clip B, Zoo for both sound conditions, all five speech acts, and the three participant groups with highlights as described above.

Clip	Sound	Speech Act	Participant Group	Mean
<b>B</b>	no	command	NSs	2.26
			Learners	2.62
			Non-Learners	2.33
		complaint	NSs	3.11
			Learners	2.94
			Non-Learners	2.67
		refusal	NSs	2.49
			Learners	2.09
			Non-Learners	2.43
		declaration	NSs	2.16
			Learners	2.41
			Non-Learners	2.48
	reprimand	NSs	2.83	
		Learners	3.09	
		Non-Learners	2.9	
	yes	command	NSs	3.04
			Learners	2.7
			Non-Learners	2.59
		complaint	NSs	2.48
			Learners	2.57
			Non-Learners	2.76
		refusal	NSs	2.16
			Learners	2.22
			Non-Learners	2.06
declaration		NSs	3.36	
		Learners	2.3	
		Non-Learners	2.41	
reprimand	NSs	2.84		
	Learners	3		
	Non-Learners	2.53		

Table 34 shows that NSs of German agreed that Clip B, Zoo did not depict a command without sound; whereas American learners of German agreed that it did not depict a refusal without sound. With sound, NSs agreed that it represented a declaration, and no other participant group showed any form of agreement.

Table 35 shows mean ratings for Clip C, Big Brother for both sound conditions, all five speech acts, and the three participant groups with highlights as described above.

Table 35: Mean ratings for Clip C, Big Brother				
Clip	Sound	Speech Act	Participant Group	Mean
C	no	command	NSs	3.22
			Learners	3
			Non-Learners	3.14
		complaint	NSs	3.39
			Learners	3.15
			Non-Learners	3.12
		refusal	NSs	2.83
			Learners	2.6
			Non-Learners	2.64
		declaration	NSs	2.44
			Learners	2.23
			Non-Learners	2.52
	reprimand	NSs	2.56	
		Learners	2.53	
		Non-Learners	2.92	
	yes	command	NSs	1.82
			Learners	2.73
			Non-Learners	2.77
		complaint	NSs	3.88
			Learners	3.48
			Non-Learners	3.16
		refusal	NSs	2.35
			Learners	2.61
			Non-Learners	2.52
declaration		NSs	3	
		Learners	2.21	
		Non-Learners	2.45	
reprimand	NSs	2.47		
	Learners	2.67		
	Non-Learners	2.74		

Table 35 shows that both NSs and learners agreed that Clip C, Big Brother depicted a complaint without sound, whereas Non-Learners agreed that it did not depict a declaration without sound. With sound, all three groups agreed that a complaint had been depicted.

### 4.3 Part III: Exploring between-group agreement on pragmatic perception

A fourth umbrella research question (RQ4) was posed in Part III of this study. RQ4 examined the extent to which the three participant groups, namely (1) NSs of German, (2) American learners of German, and (3) American non-learners of German, relied on the four extra-linguistic features (gestures, gaze, facial expressions, and positioning). Analyses done for RQ4 focused on two of the three video clips explored in section I: (1) Clip A, Tractor and (2) Clip C, Big Brother. These two clips were selected because they both showed group-internal agreement by each of the three participant groups on which speech act had been depicted, i.e., declaration for Clip A, Tractor and complaint for Clip C, Big Brother (while Non-Learners did not agree on complaint without sound, it was one of their top two choices).

Since discernable agreement on what speech act each of those two clips showed had been established within each participant group in Part I of this chapter (with the only exception of Non-Learners being only tendential agreement on complaint without sound on Clip C, Big Brother), the first part of RQ4 (RQ4a) examined the extent of that agreement both when the clip was shown without sound and with sound. Are any of the participant groups more sure of declaration for Clip A, Tractor or complaint for Clip C, Big Brother than any of the other participant groups under either sound condition? If so, where do these differences lie?

The most common finding concerning extra-linguistic features was that positioning was universally the least relied upon feature when participants decided that Clip A, Tractor depicted a declaration and Clip C, Big Brother depicted a complaint. The second half of RQ4 (RQ4b) examined differences among the three participant groups for of the four extra-linguistic features (gestures, gaze, facial expressions, and positioning) when the clips were seen without sound and with sound. We already know that none of the groups had relied much on positioning, but were

there extra-linguistic features that any group relied on more than any other group? If so, where exactly did those differences lie?

#### 4.3.1 Research question 4

**RQ4a**      **How do the three participant groups compare in the extent to which they agree that Clip A, Tractor depicted a declaration and Clip C, Big Brother depicted a complaint when they saw each clip without sound and with sound? If differences existed, where did they lie?**

I performed a one-way ANOVA for each clip and sound condition. ANOVA tests that yielded significant results were followed up by post-hoc Tukey tests. Significance is achieved when  $p \leq .05$  throughout RQ4. Significant results were highlighted in green.

Clip	sound	F	p <sup>41</sup>
A, Tractor	no	2.206	0.126
A, Tractor	yes	3.351	0.047*
C, Big Brother	no	1.804	0.181
C, Big Brother	yes	2.562	0.092

The one-way ANOVA indicated significant differences between average ratings for *declaration* among the three participant groups when they rated Clip A, Tractor after seeing it with sound,  $F(2, 33) = 3.351$ ,  $p = .047$ . Tukey post-hoc testing showed that NSs rated *declaration* significantly higher than Non-Learners (2.71 vs 2.20),  $p = .038$ .

<sup>41</sup> Significance is achieved when  $p \leq .05$ .

**RQ4b**      **How do the three participant groups compare in the extent to which they relied on each of the four extra-linguistic features? If there were differences, where did they lie?**

I performed Kruskal-Wallis tests on each of the four extra-linguistic features. Any significant differences among groups were followed up with Dunn-Bonferroni poc-hoc tests. Significant results were highlighted in green.

Clip	Sound	Extra-linguistic feature	Chi-square	p <sup>42</sup>
A	no	gestures	1.835	0.399
		gaze	1.641	0.440
		facial expressions	0.210	0.900
		positioning	1.121	0.571
	yes	gestures	8.803	0.012*
		gaze	2.620	0.270
		facial expressions	3.704	0.157
		positioning	1.371	0.504
C	no	gestures	4.100	0.129
		gaze	0.659	0.719
		facial expressions	0.239	0.887
		positioning	0.575	0.750
	yes	gestures	1.772	0.412
		gaze	1.824	0.402
		facial expressions	1.299	0.522
		positioning	0.973	0.615

The only significant differences were found for Clip A, Tractor with sound, just like in RQ4a. These differences involved the extent to which the three participant groups relied on

<sup>42</sup> Significance is achieved when  $p \leq .05$ .

gestures to determine that Clip A, Tractor depicted a declaration with sound. The Dunn-Bonferroni post-hoc tests indicated that NSs of German relied on gestures significantly more than American non-learners of German,  $p = .014$ .

## 5.0 Discussion

In this Discussion, I give a brief summary of results and delve into three main themes that arose from results: (1) thresholds for regarding a speech act as neutral as opposed to face-threatening, (2) familiarity with and attitude towards German, and (3) processing differences. This study examined how learners of German (Learners, DaF), NSs of German (NSs, GER), and Americans unfamiliar with German (Non-Learners, USA) reached decisions about the nature of speech acts that they witnessed NSs of German perform in three clips (Clip A, Tractor; Clip B, Zoo; and Clip C, Big Brother). Participants were put in the onlooker perspective as they viewed the clips in an online survey without the potential to interact with the speakers in the clips.

### 5.1 Overview of results

Part I of Results explored group-internal agreement on pragmatic perception of speech acts depicted in the three clips. There were high levels of agreement within each group for Clip A, Tractor and Clip C, Big Brother. All three participant groups agreed that Clip A, Tractor depicted a declaration when seen with and without sound. The three participant groups agreed that Clip C, Big Brother depicted a complaint when seen with sound. NSs and Learners also agreed that Clip C, Big Brother depicted a complaint when seen without sound, but Non-Learners agreed only that a declaration was not depicted in Clip C, Big Brother. While Learners and Non-Learners showed no within-group agreement on which speech act was depicted in Clip

B, Zoo, NSs agreed that it depicted a declaration with sound. Part II of Results gave an overview of the results from Part I of Results enumerated just above.

Part III of Results examined between-group agreement on pragmatic perception. Despite analyses in Part I of Results indicating that all participant groups agreed that Clip A, Tractor depicted a declaration, NSs of German rated *declaration* significantly higher than Non-Learners of German for Clip A, Tractor when they saw the clip with sound. Analyses also showed that NSs of German relied significantly more on gestures than Non-Learners of German to arrive at the decision that Clip A, Tractor depicted a declaration when they saw the clip with sound.

The reasons behind Non-Learners' lack of understanding of German interactions are more complicated than I had originally thought. If stereotypes that paint Germans as rude and angry were the only important factor, I would have expected Non-Learners to agree on a face-threatening act (FTA) instead of *declaration* (a non-FTA) for Clip A, Tractor. If only the American perception of German as a harsh-sounding language (Chavez, 2009; Wilkerson, 2013) mattered, I would have expected consistent differences for Non-Learners between their ratings of clips viewed without and with sound. No one factor adequately explained the differences between participant groups.

The differences in degree of certainty and reasoning behind the speech act selection bring three issues to the forefront: (1) Pragmatic thresholds: NSs seemed readier to designate a speech act to be a declaration, a relatively neutral speech act; whereas NNS groups had a lower threshold for upgrading a speech act to a FTA; (2) Familiarity with and attitude towards German; (3) Processing differences: Even in instances in which NSs and NNSs seem to largely agree in their designation of a speech act, this type of concordance may be only superficial and may be hiding important underlying differences (Bardovi-Harlig, 2014; Jackson, 2007; Tesink, et al.,

2009). The differences in what extra-linguistic factors the respective respondent groups attended to may cause divergent perceptions in other scenarios.

## 5.2 Thresholds for regarding a speech act as neutral vs. face-threatening

There appear to be different thresholds for NSs and Non-Learners for regarding a speech act as neutral. This claim is drawn from two pieces of evidence from the results of the present study. The first piece of evidence is that NSs displayed a significantly higher degree of certainty than Non-Learners that Clip A, Tractor depicted a declaration; NS ratings for declaration were higher than and significantly different from those of Non-Learners. The second piece of evidence comes from Clip B, Zoo. Clip B, Zoo was excluded from the analyses in part III of Results because of the lack of within-group agreement on speech act. However, there was one measure of agreement, namely, when Clip B, Zoo was seen with sound, NSs agreed that the clip depicted a declaration. In short, NSs not only showed a greater tendency to agree on the nature of a speech act, they also were readier to believe a speech act to represent a declaration or, more broadly, a neutral rather than a face-threatening act.

Different pragmatic thresholds can cause communicative failures. If an utterance made by a German is intended as a neutral declaration, but not perceived as a neutral speech act but rather an FTA, such as a command, complaint, reprimand, or refusal, by an American, it is easy to see how the American listener could come away with the mistaken perception of the German as rude.

The German perception that Clip B, Zoo represented a declaration while both American groups did not agree on any particular speech act, which seems to indicate that they found the interaction more face-threatening than the Germans, suggests a different threshold for a speech act shifting from a non-FTA to an FTA. Much in the same way that a large, imposing man can cause others to feel threatened and uncomfortable when displaying a low level of agitation that

would not cause discomfort in the observer if expressed by a less physically imposing person, it seems that the Americans in this study felt discomfort when observing Germans express a low level of agitation which Germans themselves do not view as face-threatening.

### 5.3 Familiarity with and attitude towards German

The between-group differences for degree of certainty and reasoning behind speech act selection indicated that familiarity with and attitude towards the German language and its speakers played a large role in pragmatic perception in this study. Given that the important between-group differences discussed at the beginning of this chapter were between Non-Learners of German and NSs of German (with Learners being in the middle/not significantly different than either other group in those situations), it makes sense that familiarity with and affinity towards the German language, culture, and people played a role in the judgments of American participants. American non-learners of German, the group with the least familiarity with German differed more from the NSs than the Learners.

In the absence of familiarity with the language, the Non-Learners were left to draw on the attitudes that they already had about German and its speakers. These findings line up with those of Lindemann (2002), who found that negative attitudes towards speakers of a language can have a negative impact on the perception of that group's L2 language use and the strategies used to actively communicate with that group. Thus, lack of desire to understand a specific group results in actual lack of understanding of members of that group. Additionally, a lack of affinity for a specific group makes people more susceptible to believe stereotypes about that group. In the case of my study, this would mean that Non-Learners would be more likely than Learners to take stereotypes about Germans at face value, which could alter perceptions.

While the present study did not have enough Learner participants to analyze their responses broken down by familiarity with German (based on what level of German course they were enrolled in at the time of the survey), doing exactly that would help to shed light on the role that familiarity with German plays in the threshold where Learner perception shifts from interpreting a speech act as a non-FTA to an FTA. The data suggest the existence of a positive correlation between familiarity with German and target-like non-FTA identification, but it would be interesting to know more about where in the learning process this shift occurs. Also, if there were differences between Learners based on course enrollment, i.e., first-semester students of German were just as adept at identifying a German non-FTA as fifth-semester students, that would speak to the importance of the role of attitude towards German.

Although students often arrive to class with higher affinity towards the target culture than their peers who opt not to take the language course, the findings indicate that dispelling any lingering negative stereotypes could remove barriers to comprehension.

#### 5.4 Processing differences

The existence of between-group differences, despite surface-level agreement on speech act, such as how NSs relied more on gestures than Non-Learners when they decided that Clip A, Tractor depicted a declaration, lends credence to the idea that processing differences may have played a role in those differences in this study.

Let us examine an example from a different field to illustrate why these processing differences merit our attention. Consider two different arithmetical processes: 1) addition and 2) multiplication. Although these processes generally give different outcomes, they can produce the same outcome, such as for two 2s, i.e.  $2 + 2 = 4$  and  $2 \times 2 = 4$ <sup>43</sup>. If one generally dealt with

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<sup>43</sup> Any number pair that satisfies the equation  $y = 1/(x-1)+1$ , such as 1.5 and 3, will yield the same result for addition and multiplication.

number pairs that yielded the same result from both processes, there would be no reason to suspect that the processes differed in any meaningful way. However, this does not mean that the processes are the same. In much the same way, German and American pragmatic norms can appear the same when an insufficient number of data points are analyzed, but there are fundamentally different processes at work that are easy to observe with further analysis.

Given the existence of processing differences in syntax (Jackson, 2007), interpretation of argument structure (Jackson, 2008), and processing time of grammatical case (Jackson, Dussias, & Hristova, 2012) between NSs and NNS, it is reasonable to think that processing differences for L2 pragmatics may also exist.

Bardovi-Harlig (2014) also showed that a successful outcome (correct use of conventional expression) sometimes occurred despite an inaccurate understanding of the meaning of that expression and that in those instances “an inconsistent underlying meaning may persist for some time” (p. 53). Padilla Cruz (2013) discussed instances of pragmatic failure that may not initially appear as failure on the surface. One example had an L2 hearer failing to understand the implication of “You’re late again!” as “Don’t be late again!” (p. 31), instead taking the utterance at face value and applying it only to the one instance. If the student responds with silence and is on time the next day, the instructor may assume that the student understood, even though that may not have been the case.

Padilla Cruz (2013) pointed out that learners will strive for efficiency with their processing and “search for the interpretation that yields the largest amount of cognitive effect for the lowest level of cognitive effect” (p. 33). Instructors need to give students a reason to exert more than the minimal processing effort. When instructors give students insight into the important parts of interactions to attend to, new tools to think about those interactions, and new

processing strategies that are more effective, it can help students move towards more target-like pragmatic interpretations.

Padilla Cruz (2013) specifically recommended helping students shift from naïve optimism to cautious optimism, terms coined by Sperber (1994). Padilla Cruz described the outcome of the shift to cautious optimism as the “competent attribution of beliefs and intentions” (p. 25). This type of systematic shift in thinking seems much more useful than simply explaining individual “cultural quirks.” Using examples can still be an effective means to work through these systems with students. Raising awareness about different communication styles and pragmatic norms across cultures with specific examples to highlight trends is an important step that can be taken in the classroom. Interactions shown without sound can be useful in the classroom to focus students’ attention on important extralinguistic features, such as gestures.

Further research that explores pragmatic problem areas for American learners of German would be a welcome addition. Just knowing that these sorts of processing differences exist may already be beneficial for instructors, but it would be even better to have more concrete examples of situations where surface level expressions of learner knowledge may belie deeper misunderstandings.

## 6.0 Limitations

Low participant numbers (15-35 for NSs, 23-41 for Learners, and 17-50 for Non-Learners; participant numbers varied by Survey Question, clip, and sound condition; see Table 4 for further details) limited the statistical power of the present study. Given the importance that participants’ familiarity with German played, it would have been interesting to compare the responses of Learners by level of German course they were enrolled in at the time of the survey.

Two issues arose from Survey Question 4, which asked about extra-linguistic features, was added only after the pilot study (see 3.2.1 Changes to the instrument). The first issue is that it asked participants to rank order importance of each of the extra-linguistic factors (gestures, gaze, facial expression, and positioning) in making their decisions regarding the ratings of speech acts in Survey Question 3. Asking for a ranking of the extra-linguistic factors instead of a rating made it more difficult to find statistically significant differences between the extra-linguistic factors within-group and for each extra-linguistic factor between-groups. The second issue was that positioning was a very unpopular option. It would have been better to replace positioning with another extra-linguistic feature that was more relevant in the clips analyzed and to the participants. These two issues might have been caught and addressed if Survey Question 4 had been included in the pilot study.

## 7.0 Conclusion

Learners of German often have difficulties figuring out what German speakers really mean, i.e., the pragmatic intent of native speech. This study specifically sought to shed light on how learners of German, NSs of German, and Americans unfamiliar with German reach decisions about the nature of speech acts that they witness NSs of German perform. I also aimed to gain a better understanding of what sources learners as compared to native speakers bring to bear when they attempt to disambiguate pragmatic information. The overarching goal was to explore whether and how learners develop the receptive pragmatic skills that they need to interpret the type of authentic L2 evidence that they are most likely to encounter, i.e., visual and auditory information in which they play an onlooker role. Three factors emerged as important to understanding NS utterances: (1) pragmatic thresholds, (2) familiarity with and attitude towards

German, and (3) processing differences. As a result of this study, I believe that these three interacting factors can be used as a starting point for further study to understand more exactly how pragmatics works.

I would like to suggest two complementary policy recommendations with regards to pragmatics that are informed by this dissertation study. One policy recommendation takes a top-down and the other a bottom-up approach as I believe that both approaches are necessary to help learners improve their ability to interpret pragmatic intent.

The first policy recommendation is to amend the *World-Readiness Standards* so as to make explicit reference to pragmatics and to thereby underscore the important role that it plays in language use, including in language reception (see section 2.5.1). An explicit inclusion of pragmatics in the *World-Readiness Standards* would provide more stringent guidance to teachers and would elicit a multiplying effect through teacher trainers, mentors, and colleagues. What is more, pragmatics would then eventually flow into how teachers talk about language with their students. In turn, students would gradually be socialized into a greater regard for pragmatics as an important component of language. Ultimately, a more explicit presence of pragmatics in pedagogic discourses would also inspire an increase in concomitant research.

The second policy recommendation is for teachers to be cognizant of the fact that when learners perceive and interpret language situations, they may not draw on the full array of available cues. Learners need explicit guidance to attend to visual and auditory cues in language reception. I will illustrate the point with two insights, one gained in the pilot study; the other noticed in the dissertation itself.

In the pilot study, two clips had been taken from *Big Brother Germany* (see Table 1) and each contained visual cues, which – in my mind – had made it obvious that the clips were from a

German TV show: 1) in both clips, a large “BigBrother” was written in the bottom left corner with an oval background with black, red, and gold of the German flag; and 2) both clips contained the German word for “house” written in capital letters (“HAUS”) in a corner of the screen. Some American learners of German had indicated as part of the pilot study surveys that they thought that the interactants in those two clips came from countries other than Germany when they had watched the clips without sound in the pilot study. In interviews, they explained that they simply had not noticed those two visual cues even as I had considered them to be prominent.

In the dissertation study itself, I examined multiple cues based on which respondents had determined the likely nature of a given speech act. I determined that gesture was an important extra-linguistic feature for NSs of German even when they watched Clip A, Tractor with sound. NSs of German relied on gesture more than did Non-Learners of German when they judged this clip to depict a declaration.

In closing, however, I want to be clear that I am not suggesting that teachers – or for that matter, researchers – focus specifically on the role of gesture in language reception or any one single cue or feature of language. This study suggests two principles for the consideration of practitioners and researchers alike, both in keeping with DST and highlighted in section 5.1 of results report for extra-linguistic reasoning for pragmatic judgements: 1) Language (as represented in the presence or absence of sound) alone does not account for differences among the pragmatic judgements of the three respondent groups of NSs of German; American learners of German; and American Non-Learners of German; and neither does any single extra-linguistic feature. Instead, particular features become more or less important for certain respondent groups under certain conditions (presence or absence of sound/language) and for certain situations (as

represented in different clips). In essence, the data presented as part of the study yielded no clear picture. However, rather than consider them to be merely ‘messy,’ I would judge them to be complex, i.e., to have emerged as a result of complex and dynamic processes; and 2) One cannot infer processes from outcomes. That is, similar response patterns (the determination of a specific type of speech act) across or within respondent groups in this study could be accompanied by very different pathways of reasoning (differences in the reported reliance on specific cues). The insight that processes and outcomes can diverge, complicates the tasks of teaching and learning a second language considerably as it remains to be seen whether pedagogical effort should be directed at one or the other. The divergence between processes and outcomes presents a particular challenge for non-routinized speech acts of the type under investigation in this study, as for them, neither the process (reasons that prompted a particular pragmatic judgement) nor the outcome (the accurate recognition of the nature of the speech act) are predictable or, literally, routinized.

Ultimately, in light of students’ need for guidance in noticing and utilizing a variety of cues, as was noted above, in the case of non-routinized speech acts, it may be preferable to focus teaching on processes, i.e., to assist learners with an assessment of available cues, followed by possible interpretations of those cues. In fact, the lack of perfect agreement on the exact nature of a speech act even among NS respondents, suggests that the ‘outcome’ (i.e., the designation of a speech act to be of a specific nature) is too elusive as to constitute a viable teaching objective. However, rather than to accept divergence even among NSs as an explanation of ‘why the pragmatics of non-routinized speech acts are just too difficult to teach,’ it should serve as an impetus to take learners on the path toward an understanding of language as the complex and dynamic phenomenon that it is.

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## 9.0 Appendices

### 9.1 Appendix 1: IRB approval letter



**Education and Social/Behavioral Science IRB**  
10/11/2017

**Submission ID number:** [SE-2011-0158-CR006](#)  
**Title:** Pragmatic Perception: What do Germans Really Mean?  
**Principal Investigator:** MONIKA MARIA T CHAVEZ  
**Point-of-contact:** RAGNAR C SVARE  
**IRB Staff Reviewer:** LAURA CONGER

A designated ED/SBS IRB member conducted an expedited review of the above-referenced continuing review progress report form. As part of its review, the IRB determined this study does not require continuing review either under federal regulations or institutional policy, or both. Please note, however, that although this study is not required to undergo continuing review, you must still submit the following to the IRB:

1. Changes of protocol prior to their implementation (unless the change is necessary to eliminate an apparent immediate hazard to subjects)
2. Addition of new study personnel
3. Funding updates
4. Reportable events (unanticipated problems, noncompliance, new information) in accordance with institutional policy
5. Closure report

In addition, please be aware that the type of funding that supports a study or whether the study falls under FDA regulations can affect whether continuing review may be required in future.

The study qualified for expedited review pursuant to 45 CFR 46.110 and, if applicable, 21 CFR 56.110 and 38 CFR 16.110:

**Category 7:** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, or quality assurance methodologies

To access the materials approved by the IRB, including any stamped consent forms and recruitment materials, please log in to your ARROW account and view the documents tab in the submission's workspace.

Please review the Investigator Responsibilities guidance (<https://kb.wisc.edu/images/group99/shared/BSIR>), which includes a description of IRB

requirements for submitting personnel changes, changes of protocol and reportable events.

If you have general questions, please contact the Education and Social/Behavioral Science IRB at 608-263-2320. For questions related to this submission, contact the assigned staff reviewer.

## 9.2 Appendix 2: Excerpt from survey for American learners of German

This is an excerpt from the survey distributed to American learners of German where Set A was introduced before Set B (see Table 3) that was used to collect data for the dissertation study. This excerpt contains all background questions, including those asking which German course that Learners were enrolled in, which were specific to the version of the survey for Learners. The survey for Non-Learners did not include questions asking for which section of German they were enrolled in. The survey for NSs of German did not include questions about German courses and was translated into German. In addition to the background questions, this excerpt also contains the questions for Clip A, Tractor when seen without sound. The questions for the other clips and clips seen with sound were very similar and not included due to length concerns.

# DaFSurveyAB - final

## Survey Flow

Standard: Background Questions (21 Questions)

BlockRandomizer: 3 -

Standard: Clip3o (14 Questions)  
 Standard: Clip10o (14 Questions)  
 Standard: Clip8o (14 Questions)

BlockRandomizer: 3 -

Standard: Clip 3m (16 Questions)  
 Standard: Clip10m (16 Questions)  
 Block: Clip8m (16 Questions)

Block: Keep going or stop (1 Question)

Branch: New Branch

If

If Would you like to keep going and rate the 3 video clips in Set B now or would you rather finish the... Keep going and rate 3 more clips. Is Selected

BlockRandomizer: 3 -

Standard: Clip6o (14 Questions)  
 Standard: Clip9o (14 Questions)  
 Standard: Clip4o (14 Questions)

BlockRandomizer: 3 -

Standard: Clip6m (16 Questions)  
 Standard: Clip9m (16 Questions)  
 Standard: Clip4m (16 Questions)

Block: Incentives (1 Question)

Page Break

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Start of Block: Background Questions

B1 Dear German student,  
I would like to invite you to participate in this short questionnaire study.

I would like to hear your honest opinions and impressions about some short video clips that you're going to watch. There are no correct or incorrect answers. Please do not worry about saying the wrong thing or being offensive; just answer whatever comes to mind.

By completing this questionnaire, you agree to participate in this study.

Your responses either are anonymous or confidential depending on whether you choose to participate in additional components of the study. If you wish to continue your participation, you will be asked for your email address and although you cannot remain anonymous in this case, I will keep in the strictest confidence any information that you share. If you wish to be eligible for cash prizes (12 prizes in the sum of \$20 each), you will also need to supply your email address, and the same provisions of confidentiality will apply. I do ask that each participant tell me about membership in general groups, such as those defined by gender and age. This information will be used in grouping responses.

Nobody except for the researcher (the researcher, Ragnar Svare, svare@wisc.edu, 850 Van Hise Hall) and his dissertation advisor (Prof. Monika Chavez, mmchavez@wisc.edu, 846 Van Hise Hall, Principle Investigator of this study) will have access to the original responses hosted by the Qualtrics service, which is password protected. Responses will remain on the secure Qualtrics service for 5 years, at which time they will be deleted. Generally, the responses will be represented in tables and charts, without reference to individuals. Your participation will have no effect on your grade in your German course.

This study looks at how native speakers and language learners view social interactions. If you have any questions about this project or your participation therein, please contact the researcher (svare@wisc.edu).

If you agree to permit me to cite you verbatim in research including my dissertation without mentioning your name, please click "Yes."

Yes (1)

No (2)

Q219 Please write your pseudonym below. If you have not yet participated in this survey, please create one now that you will remember. If you have already rated the clips in Set B, please write in the pseudonym that you used when you rated those clips.

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Q365 Please select the option below that applies to you.

- I have never participated in this survey before. Take me to the beginning! (1)
- I have already rated the clips in Set B. Take me directly to Set A! (2)

*Skip To: End of Block If Please select the option below that applies to you. = I have already rated the clips in Set B. Take me directly to Set A!*

B2 Are you male or female?

- male (1)
- female (2)

B3 How old are you?

---

Q170 All of the short video clips for this survey will be presented in Flash (above) and Windows Media (below) formats. Use whichever format you prefer. There are no differences between the two versions of each video, so you only need to be able to play one in order to complete the survey. If at least one of the versions of the test video below plays, please answer the question under the videos and continue with the survey.

If you can't play either of the test videos below, you can download the latest version of the Adobe Flash Player here:

<http://www.adobe.com/support/flashplayer/downloads.html>

If you would rather play the Windows Media versions of the videos and are having difficulties, you may need to install a plugin for Windows Media Player 11 (which requires

restarting your browser under Firefox). If you are using a Mac and are unable to play the Windows Media version, you may need to install Flip4Mac (free) and then restart your computer:  
<http://windows.microsoft.com/en-US/windows/products/windows-media-player/wmcomponents>

If you are still having problems, try using Chrome or Explorer. Please also feel free to contact the researcher with any technical difficulties (svare@wisc.edu).

Please select the level of German class in which you are currently enrolled.

- German 101 (1)
- German 203 (2)
- German 204 (3)
- German 249: Speaking and Listening (4)
- German 258: Reading (5)
- German 262: Writing (6)

---

B4 What is/are your first/native language/s?

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B5 What other languages do you know/speak? Please list them below. If you know more than 3 other languages, please list the 3 you know best.

	language/s (1)
language A (1)	
language B (2)	
language C (3)	

B6 Rate the languages that you listed in the previous question.

	I can follow the gist of predictable conversations (1)	I can follow the gist of unpredictable conversations (2)	I can understand details of predictable conversations (3)	I can understand details of unpredictable conversations (4)
language A (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
language B (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
language C (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B7 When you listen to someone speaking in your **native language**, what helps you understand even better?

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B8 When you listen to someone speaking in your **native language**, what could potentially distract from your comprehension?

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B9 When someone says they **understand** another person, what all does/can it mean?

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B10 Have you ever been to a German-speaking country?

Yes (1)

No (2)

*Skip To: B12 If Have you ever been to a German-speaking country? = No*

---

B11 Which German-speaking country/countries have you been to? When and for how long were you there?

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B12 Have you ever watched American reality TV before?

Yes (1)

No (2)

*Skip To: B15 If Have you ever watched American reality TV before? = No*

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B13 Please make a list of the reality TV shows you have seen. If you have seen more than 3, write the names of the 3 that you have seen the most.

	name of show (1)
show A (1)	
show B (2)	
show C (3)	

B14 How often have you seen the shows from the previous question?

	once or twice (1)	a few times (2)	often (3)
show A (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
show B (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
show C (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

B15 Please indicate the extent to which the following statements apply to you.

	Definitely Agree (1)	Slightly Agree (2)	Slightly Disagree (3)	Definitely Disagree (4)
Other people frequently tell me that what I've said is impolite, even though I think it is polite. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In a social group, I can easily keep track of several different people's conversations. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it easy to 'read between the lines' when someone is talking to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know how to tell if someone listening to me is getting bored. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I talk on the phone, I'm not sure when it's my turn to speak. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it easy to work out what someone is thinking or feeling just by looking at their face. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to work out people's intentions. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B16 Please indicate how important you believe the following skills to be for understanding what's going on in interactions with others.

	totally unimportant (1)	rather unimportant (2)	somewhat important (3)	extremely important (4)
the ability to read facial expressions (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of body language (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of popular culture (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of sentence melody (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the ability to tell where words start and stop (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of vocabulary (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of grammar (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
knowledge of the culture's behavioral norms (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B17 If you agree to be contacted for a voluntary follow-up interview for which you will receive \$5, please write your email below.

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**Q218 You are about to start answering questions pertaining to the video clips in Set A. Answer all of the following questions with your gut feelings, ie. don't take too long to think about your answers.**

End of Block: Background Questions

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Start of Block: Clip3o

Clip3o Play the clip twice. This clip purposefully has no sound.

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C3o1 In your opinion, what is happening between the man and the woman?

\_\_\_\_\_

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C3o2 What makes you think so?

\_\_\_\_\_

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Page Break

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C3o3 How likely is it that the interaction between the man and the woman is a \_\_\_\_\_?

	definitely not (1)	probably not (2)	probably yes (3)	certainly (4)
command (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
complaint (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
refusal (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
declaration (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
reprimand (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

C3o4 Please rank order the importance of following criteria in informing your answers to the previous question from 1 to 4, where 1 is the most important criteria and 4 is the least important criteria. Every number (1, 2, 3, and 4) should be used exactly once in each line.

	I believe this because of the gestures the people are using. (1)	I believe this because of the way people are looking at each other. (2)	I believe this because of the facial expressions that the people are using. (3)	I believe this because of the way people positions themselves (stand/sit). (4)
command (1)				
complaint (2)				
refusal (3)				
declaration (4)				
reprimand (5)				

C3o5 A good way to characterize the interaction shown in the clip is to call it...

- very positive (1)
  - rather positive (2)
  - rather negative (3)
  - very negative (4)
- 

C3o6 A good way to characterize the interaction shown in the clip is to call it...

- intense (1)
  - rather engaged (2)
  - rather detached (3)
  - distant (4)
-

C3o7 What emotions or thoughts is the woman conveying? In case you noticed more than 3 emotions or thoughts, write the 3 that you found most important.

	feelings/thoughts (1)
feeling/thought A (1)	
feeling/thought B (2)	
feeling/thought C (3)	

C3o8 Rate the intensity of the thoughts and/or feelings that you wrote in the previous question.

	very weak (1)	weak (2)	strong (3)	very strong (4)
feeling/thought A (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
feeling/thought B (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
feeling/thought C (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



C3o9 Complete the following sentences using information from the interaction between the man and the woman.

	much lower (1)	lower (2)	same (3)	higher (4)	much higher (5)
The educational level of the woman in comparison to the man is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The socioeconomic status of the woman in comparison to the man is (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

C3o10 Please indicate the level of familiarity between the man and the woman.

- complete strangers (1)
  - passing acquaintances (2)
  - acquaintances (3)
  - friends (4)
  - close friends or family (5)
- 

Page Break

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C3o11 How likely is it that the woman is from each of the following countries?

	certainly not (1)	probably not (2)	probably yes (3)	certainly (4)
France (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Switzerland (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poland (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Germany (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Australia (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The USA (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Austria (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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C3o12 How would you characterize the man's behavior at this moment?

	1 (1)	2 (2)	3 (3)	4 (4)
from disapproving (1) to approving (4) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from rude (1) to accomodating (4) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from fake (1) to sincere (4) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from cold (1) to warm (4) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from angry (1) to friendly (4) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from emotional (1) to calm (4) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

C3o13 In your opinion, how would the woman characterize the man's behavior at this moment?

	1 (1)	2 (2)	3 (3)	4 (4)
from cold (1) to warm (4) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from emotional (1) to calm (4) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from disapproving (1) to approving (4) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from rude (1) to accomodating (4) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from angry (1) to friendly (4) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from fake (1) to real (4) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Clip3o