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Using Sitcoms to Measure Humor Comprehension Between L1, L2, and Bilingual Users of English: Implications for Pragmatic Research

Aaron L. Beasley

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USING SITCOMS TO MEASURE HUMOR COMPREHENSION
BETWEEN L1, L2, AND BILINGUAL USERS OF ENGLISH:
IMPLICATIONS FOR PRAGMATIC RESEARCH

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

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Seeking to add to the limited research on humor comprehension, the purpose of this study was to measure how multilingual users of English comprehend distinct types of sitcom humor, specifically: sarcasm, wordplay, and teasing. The participants in the study were both L1, L2, and Bilingual users of English. They were recruited using Amazon's Mechanical Turk platform, which employs workers around the world. The participants were divided into three analysis groups: L1 ($n = 576$), L2 ($n = 90$), and Bilingual ($n = 222$). Using a survey design, participants watched six clips from popular US sitcoms (*The Office*, *Friends*, *Seinfeld*, *Big Bang Theory*, and *30 Rock*) and answered questions about them.

The results of the study suggest a broader understanding of multilingual humor comprehension. First, the results suggest a similarity in how L1 and L2 users of English understood the video examples. Second, the data show high variability in how each sample categorized the video examples. The L1 and L2 groups, although variable in how they categorized each video example, were not significantly different in their choices. The Bilingual group, however, was significantly different from the L1 and L2 groups. Third, the Bilingual group also rated the video examples as funnier than the L1 and L2 groups.

The findings for this study help to broaden the scope of humor comprehension research by measuring humor categorization and funniness ratings. The findings also reveal the messiness of humor categorization research and gives implications for pragmatic instruction. Additionally,

the study challenges the assumption of difference within humor research. The similarities found in the study suggest a shared, global sense of humor, as delivered by US sitcoms. However, while these findings offer more empirical evidence on multilingual humor comprehension, the findings also show limitations and expose new areas of research.

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*This dissertation is dedicated in loving memory of
Judah Lawrence Beasley
(Aug. 4 – Aug 7, 2018)*

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CHAPTER 1

INTRODUCTION

“Humor can be dissected, as a frog can, but the thing dies in the process and the innards are discouraging to any but the pure scientific mind.” – E. B. White

There is something inherently human about noticing difference in our world.

Understanding the differences between the way people view the world and use language is important, especially for communication, business, medicine, education, and other types of industry. By exploring differences, we better learn how to interact successfully with those around us. However, perhaps the assumption that differences always exists should be challenged. There is an assumption that has been developed in applied linguistic research that has led researchers to explore differences between language groups. The assumption is that there are differences. This pattern holds true at the morphological, syntactical, semantic, and pragmatic levels of inquiry. Within pragmatic research, the discipline most connected with the current study, it is common to read studies that pit two languages against each other in an attempt to draw any range of conclusions – enter humor research.

It is natural for humor researchers to start from an assumption of difference because humor is difficult to learn, use, and understand in a foreign language. Any person who has spent time in another country learning a language will attest to this struggle. Speaking to this, Dewaele (2005) shares this anecdote:

I personally remember feeling quite a fool when, at the end of a period of instructed learning of Spanish at the university in Brussels, I went to Spain only to discover that I was unable to produce anything of bland talk with my interlocutors. I could say something about the weather (*que calor* ‘it’s hot’). I could order *tapas*, and ask for

directions, but I was unable to impress Spanish girls with my sophistication and wit, which mattered a lot to me at the time. I felt like a terrible bore, acutely aware of my lack of sociocultural and sociopragmatic competence. I tried in vain to recall anything from my course books that could constitute the basis of an interesting conversation. (pp. 375-376)

Therefore, it is easy to assume that because humor is difficult in a foreign language, then everything about humor use in the foreign language must be different from the first language. The reality that humor is a difficult area of language learning has inspired several different lines of research.

One of the earliest areas of humor research studied the pragmatic features of humor. While Chapter 2 will give a more in-depth look into this topic, this line of research gives us the practical, social reasons why it is important to understand and use humor well. Humor can ease the tension in an uncomfortable situation; however, a poor execution of humor could make the situation worst. Humor can help people make new friends and maintain relationships with others. Humor can make a person feel included or excluded in social groups, which makes it important for us to study. Teaching humor in the L2 classroom is a second line of inquiry that has arisen in the past few decades. While Nancy Bell (2002; 2007; 2011; Bell & Pomerantz, 2016) has been the leading voice in this field, the rationale for its existence is grounded in L2 pragmatic research. Research strongly suggests that pragmatic features of language can be explicitly taught to language learners. However, due to a dearth of scholarship on humor comprehension, L2 humor research is lacking answers to basic questions. A third line of inquiry has been to look at the inter/intra/cross-cultural differences in conversational humor. Dynell's (2017) overview of

this area shows a rich body of research that studies the cultural differences in how people use humor. The current study is able to speak to all three of these lines of inquiry.

While often being one of the last things to learn in another language, the ability to understand humor speaks to a person's sociocultural and sociopragmatic competence. And this is not simply a matter for academic research; it has practical implications. Bell and Pomerantz (2016) noted, "Books and articles that suggest ways of using humor in the classroom are consumed eagerly by language instructors, yet most of the suggestions they make have little grounding in research (perhaps largely because there is so little)" (p. 194). The ability to understand humor in another language both makes that language more enjoyable and increases a person's investment in it. And while there are great strides being taken in humor research, there are areas that remain thin – comprehension being one of them. Knowing more about how humor is understood could have a significant impact on pragmatic instruction. The current study seeks to add to the work that is being done in humor comprehension research by measuring comprehension by humor type.

However, before going further, it is important to note an assumption that can be seen throughout multilingual humor research. There is something of a cultural bias running through the research frameworks of many humor studies. The assumption is that because there is cultural difference, then there will be linguistic difference as well. This assumption is by no means nefarious on the part of any researcher; however, I believe that the current humor research landscape operates from an assumption that non-US English speakers are intrinsically different in some way. Indeed, before starting the current study, I assumed that the L1 English speaking group would rate the sitcom examples as funnier than the multilingual participants. However, I

could not have been more wrong. The results from the current study will call that assumption into question.

Who Is Multilingual and What Counts for Humor?

Throughout the study, I use the term *multilingual users of English* as an umbrella term to refer to my L2 and Bilingual participants. On one level, this is simply because the participants all speak more than one language and English is the lesser known of those languages. However, as the results of the study will show, these two groups are different, so the theoretical foundation behind this term must be understood before going further. After that, I briefly discuss my definition of humor.

Multilingual User of English

First, the notion of multilingual follows the work of Kramsch (2009) in describing a person who is equipped with multiple communicative resources. As Kramsch (2009) explained it,

A multilingual subject is not necessarily the person who speaks many languages with equal mastery or with native or near-native proficiency, but is more often than not someone who resonates to each language relative to the other, and who has a more acute awareness than usual of the social, cultural, and emotional contexts in which his/her various languages have grown and of the life experiences they evoke. (p. 148)

This definition views the multilingual participant as being equipped with a more comprehensive set of linguistic resources which would allow them to better produce and comprehend humor – the logic being that the more languages a person speaks, the more resources that person has to draw upon in humorous instances (Bell and Attardo, 2010; Bialystock, 2009; Vaid 2006). For instance, in Vaid's (2006) study of bilingual Mexican-Americans she found that a majority of

respondents agreed with the statement: “Knowing two languages and belonging to two cultures has expanded what I find funny – I find humor in more things compared to those who know only one language/culture” (p. 172). Thus, the use of the term multilingual, as opposed to other popular terms (e.g., English language learner, Non-native speaker), carries with it less of a stigma that the person lacks certain skills.

The term *user* was chosen to describe individuals as active participants in the language, not just learners. Firth and Wagner (1997) discussed the notion of a language learner as a somewhat reductive construct, with the implication being the learner is simply taking in decontextualized rules and grammar to regurgitate on tests and essays. The term *user*, however, carries the notion of a “multicompetent, bilingual individual who uses whatever communicative competence is required by the task, the activity, or the situation in variable social contexts in real life” (Kramsch & Whiteside, 2007, p. 911). Thus, although my preference is *multilingual user of English* when describing the participants of this research, the findings will show that the L2 users and the bilingual users understood humor in different ways. This study is a comparison of three different samples: L1, L2, and Bilingual users of English. Thus, when appropriate, I will distinguish between the L2 and Bilingual groups.

Humor

The issue of defining humor is not as straightforward as one might think; it is a context-specific term that must be defined according to discipline. Indeed, Goldstein and McGhee (1972) do not even attempt a definition, noting, “there is no single definition of humor acceptable to all investigators in the area” (p. xxi). Although these two authors were writing from a psychological viewpoint, their statement rings true across disciplinary boundaries. The fields of linguistics, psychology, and anthropology generally view humor as any “event or object that elicits laughter,

amuses, or is felt to be funny” (Attardo, 1994, p. 4). For this dissertation, the definition of humor will be limited to *verbalizations* that elicit, or attempt to elicit, laughter and/or amusement. Therefore, the focus of verbal humor excludes physical genres of comedy, such as funny gestures or much of the material found in *The Three Stooges* films.

The literature on verbal humor historically has been separated into two camps: “canned” or “scripted” jokes and “conversational” or “situational” jokes (Norrick, 1993). Scripted jokes are often memorized pieces of text that are largely context independent. These jokes, often told by a certain uncle at Thanksgiving or a long-winded pastor, give a signal phrase, or introduction, that lets the audience know that a joke is on the way (e.g., “have you heard the one about...?” or “an Irish fisherman walks into a bar...”). In other words, when a person is asked to tell a joke, a scripted joke is often the result. Situational jokes, on the other hand, are just that—dependent on the situational context. Success for these jokes is often dependent upon the interlocutors sharing the same situation. Said another way, situational jokes often fall flat when speakers try to retell them in a different context. This is a common experience that nearly always forces the speaker to say something like, “I guess you had to be there” or “It was funnier the first time.” Thus, taking the above discussion into account, this dissertation will primarily be concerned with humor that is both verbal and situational.

However, the video examples used in this study come from US sitcoms, thus cannot technically be considered examples of conversational humor. Conversational humor happens naturally between interlocutors, and even though sitcom humor is written to mimic the structure and effect of conversational humor, there is an additional layer of production that always present. Sitcoms stage humor in a way that is easy for viewers to understand, which makes them ideal for

pragmatic research. A more in-depth pragmatic analysis of sitcom humor is included in Chapter 2.

Multilingual Humor Research: Entering the Conversation

In the early days of humor research, the primary focus was on more psychological functions (Martin, 2007), and it was not until the late 1980s that scholars began applying linguistic theories to the study of humor. At that time, a significant number of linguists were turning from the syntactic emphasis that Chomsky established to a more contextual study of language that we have come to call pragmatics (Raskin, 1987). Within the broader field of pragmatics, second language pragmatic research has made great strides over the past 20 years or so, especially in how the field contributes to second language acquisition (SLA) (see Taguchi, 2015 for a review). However, as Bell (2011) noted, “the study of the use and understanding of L2 humor has been largely neglected within this paradigm” (p. 134). Within the field of multilingual humor research, the conversation has primarily centered around two broad areas: the pragmatic features of humor and pedagogical possibilities in language education. This focus on form and function affirms what Davies (2003) noted when she wrote, “Much research in applied linguistics focuses on identifying what [a] construct entails, and then exploring how to help language learners achieve it” (p. 1362). While Chapter 2 will fully explore the pragmatic construct of humor, the following section will review the relevant pedagogical research on teaching humor to multilingual users of English.

Pedagogy

Multilingual users of English experience significant difficulty learning pragmatic features (Taguchi, 2015), and that difficulty is not always something that exposure over time can alleviate. Speaking to this, Rose (2005) noted, “pragmatic functions and relevant contextual

factors are often not salient to learners and so not likely to be noticed even after prolonged exposure” (p. 386). Humor is a pragmatic feature of language. Indeed, Hoicka (2014) noted, “Humor highlights a central aspect of pragmatics – that context and intentions are important in understanding utterances, above and beyond literal meaning alone” (p. 219). Thus, teaching humor can be reinforced by the literature on teaching pragmatic features –a field known as instructed pragmatics. Being that this is not the place to give an extensive review of the work of instructed pragmatics (for such a review, see Taguchi, 2015), it is accurate to note that its findings support the efficacy of explicit instruction, as well as the need for more pragmatic comprehension research (Rose, 2005; Taguchi, 2015).

Teaching about humor involves some of the primary goals of instructed pragmatics, namely the explicit instruction in the use and comprehension of conversational humor. The purpose of this body of research is not to make comedians out of students; rather, the goal is to teach learners how to identify, comprehend, produce, and respond to humor in interaction. Looking at identification, Prichard and Rucynski Jr. (2018) conducted a study to test Japanese students’ ability to detect the humor in satirical English language news stories, compared to English speaking students in the US. Expectedly, the Japanese students had a harder time detecting the humor; however, this ability increased after explicit training in humor detection. Looking at comprehension, Shively et al. (2008) explored how L2 Spanish users understood irony in film clips. They found that irony comprehension increased as language proficiency and length of exposure increased. As already noted, the area of humor comprehension is still ripe with research possibilities, which is the primary reason for the current study.

In regards to teaching learners to use humor in conversation, research is certainly thin. Although work has been done to find universal topics of humor, such as age, politics, ethnicity,

and sex (see Driessen, 2004), those universal topics are also ones we often teach our students to avoid, for fear that they will offend their audience. Even though multilingual users of English are often extended more grace within humorous attempts (Bell, 2011), it is still tricky territory to teach students how to be funny. That same grace is often extended in how multilingual users' respond to humor. According to Hay (2001), showing comprehension also involves showing agreement with the message being conveyed. This can be difficult when the speaker wants to show comprehension but does not want to show agreement, such as laughing at an ethnic joke. More work needs to be done on showing language learners a variety of ways to respond to humor.

Problem Statement

Bell (2011) wrote, "Humor is a worthy topic for L2 scholars and teachers because it is pervasive in interaction, but its complexity makes it challenging for L2 users. Learners recognize this and often express frustration, as well as a desire to better understand humor" (p. 136). One way we can push this desire forward is to further the research on humor comprehension. Based on the available studies that explore multilingual humor comprehension, a few conclusions can be drawn. First, Bell (2007) found that appreciation of a humorous utterance does not entail that the hearer fully understood the meaning of the utterance. By using conversational analysis, she showed that appreciation of an utterance can "be achieved in varying degrees" (Bell, 2007, p. 384). In other words, a hearer can laugh at a joke even if she does not fully understand all aspects of why the joke is funny. Additionally, Bell (2007) showed that recognizing humor is often dynamic, in that it changes with learning new forms of humor and conversational styles. Second, several studies (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017; Erdodi & Lajiness-O'Neill, 2012; Shardakova, 2016) showed that multilingual humor comprehension can be tied to

the hearer's linguistic proficiency level. However, these three studies all used text-based humor for their stimulus, rather than audio or video examples. While text-based humor is important to understand, particularly when researching reading comprehension, so much of humor is delivered in conversational settings that require the interlocutors to be able to show immediate comprehension.

Therefore, to situate the need of this study into the current research landscape, studies suggest that multilingual users of English fail to understand humor quantitatively more than L1 users English (Bell & Attardo, 2010) and that these users fail due to either not being able to recognize the form of the joke or not have the appropriate script for understanding (Carrell, 1997). So, research suggests that this population finds humor difficult to understand, as well as suggests reasons why this is; however, that is where our knowledge stops. The current study seeks to add to this area by a) broadening humor comprehension to include categorization and funniness ratings and b) exploring how three different samples understand specific types of humor presented to them in US sitcoms.

Purpose Statement

The purpose of this study is to use a survey methodology to measure how L1, L2, and bilingual users of English comprehend three distinct types of sitcom humor: sarcasm, wordplay, and teasing.

Research Questions

To guide this study, I propose the following questions and hypotheses:

1. Is humor type a stable category of analysis?

H₀: Humor type is not a stable category of analysis.

H₁: Humor type is a stable category of analysis.

2. Is there a significant difference in how L1, L2, and bilingual users of English categorize types of humor?

H₀: There is no significant difference in how L1, L2, and bilingual users of English categorize types of humor

H₁: There is a significant difference in how L1, L2, and bilingual users of English categorize types of humor

3. Is there a significant difference in how funny L1, L2, and bilingual users of English rate different types of humor?

H₀: There is no significant difference in how funny L1, L2, and bilingual users of English rate different types of humor.

H₁: There is a significant difference in how funny L1, L2, and bilingual users of English rate different types of humor.

4. Is there a significant difference in how L2 and bilingual users of English comprehend different humor types?

H₀: There is no significant difference in how L2 and bilingual users of English comprehend different humor types.

H₁: There is a significant difference in how L2 and bilingual users of English comprehend different humor types.

Research Approach

A quantitative research design was used in this study. In order to measure the participants' comprehension of different types of sitcom humor, I created a survey on Qualtrics that included six imbedded video clips. The clips were from popular television sitcoms and each

provided an example of a different type of humor: sarcasm, wordplay, and teasing. Participants watched clips, then answered a series of questions about the clips.

Participants were recruited using Amazon's Mechanical Turk (MTurk) service. MTurk is an online labor market that Amazon created to provide the recruitment of workers to complete Human Intelligence Tasks (HITS), or tasks that are unable to be automated. Studies have been done that underscore the value of the service, in that quality work can be done for minimal cost (Horton & Chilton, 2010) and that the reliability of the responses are on par with traditional methods of data collection (Buhrmester, Kwang, & Gosling, 2011). MTurk can be used for myriad reasons, but for my case, I used it to recruit participants whose first language is not English. These participants came from both inside the US and around the world. MTurk has a way of setting up certain filters to make sure the participants who take the survey will indeed match my participant criteria.

Organizational Overview

I will organize this dissertation into five chapters: Introduction, Literature Review, Methodology, Results, and Interpretation & Discussion. While the present chapter contextualizes the primary trends in multilingual humor research, Chapter 2 is a literature review that explains humor comprehension from a pragmatic viewpoint and points to areas of research on which my study hopes to build. In Chapter 3, I discuss my methodology, showing how my research design will both answer my research questions. I report my results in Chapter 4; however, because the study is quantitative, the results will be displayed in the form of numbers and tables. In an effort for readability, I have included a verbal explanation after each result in this chapter. and Chapter 5 discusses what my results mean to broader fields of pragmatics and humor research.

CHAPTER 2

LITERATURE REVIEW

The purpose of this study is to use survey methodology to measure how multilingual users of English comprehend distinct types of sitcom humor. While the field of multilingual humor has begun to explore various issues relating to humor usage, particularly interactions between L1 and L2 users of English (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017; Bell & Attardo, 2010; Shardakova, 2016), less with interactions between L1 and Bilingual users of English (Vaid, 2006), and no studies with research between L2 and Bilingual users of English, basic questions surrounding the topic of humor comprehension still exist. As the previous chapter overviewed the scope of multilingual humor scholarship, particularly focusing on the field's interest in pedagogy, this chapter seeks to give a more in-depth look at the pragmatics of humor. Doing so will a) lay bare the complexities behind multilingual humor comprehension, b) reveal the dearth of research available on the topic, and c) and present the need for the present study.

This chapter reviews the relevant literature surrounding this topic. First, being that humor has been written about for centuries, I will give a brief overview of some of the most prominent theories of humor. After that, I will explain the humor theory used in this study, Attardo's (1994) General Theory of Verbal Humor. I then shift the discussion to how humor is a pragmatic feature of language and review research relating to the forms, functions, and cues of humor. After that, I provide a brief discussion on the inner workings of sitcom humor. Then, I narrow the literature review to humor comprehension and the specific topic of multilingual humor comprehension. I end the chapter with methodological considerations.

Theories of Humor

Although humor has been written about for thousands of years, with Plato calling it “a mixed feeling of the soul” (Piddington, 1933, p. 152), research into the linguistic workings of humor has only recently been explored. Historically, there have been three approaches to theorizing humor: aggression-based, repression-based, and incongruity-based (Raskin, 1987, p. 17). Since this study deals with linguistic theories of humor, it would not be beneficial to fully elaborate on each of these theories (however, see Morreall [1983] and Attardo [1994] for more comprehensive reviews), so I will provide a brief explanation of each before fully unpacking the most applicable linguistic theories.

The first two groups of theories (i.e., aggression-based and repression-based) place the individual participating in the humorous exchange at the center of the equation. The aggression-based theories of humor focus on the (often negative) relationship between the speaker and listener. Dating back to Plato and Aristotle (Morreall, 1983), aggression-based theories are some of the oldest accounts of understanding humor. According to Morreall (1983), this type of humor is “essentially derisive and that in being amused by someone we are finding that person inferior in some way” (p. 14). An example of this would be laughing at someone’s, or an entire group’s, misfortune because it is not your own. However, from a different perspective, the repression-based theories of humor “view laughter as the release of pent-up energy resulting from societal constraints which cause us to suppress many of our desires” (Bell, 2002, p. 15). Dealing with the emotional state of the hearer, this approach to humor is, not surprisingly, linked to notable figures like Freud. The nervous energy does not seem to constantly be present in each individual, but it is often built up in the telling of a joke or funny story. In this line of thinking, laughter is a way to healthily release that nervous energy.

The third approach to humor, the incongruity-based theories, differs from the previous two in that it does not place the speaker or hearer at the focus of the investigation, but the humor stimulus itself. These theories propose that humor “arises as a reaction to something that does not meet our expectations or is inappropriate to the context” (Bell, 2002, p. 15). An example of this type of humor can be illustrated in the following joke:

Customer: “Do you mind if I try those pants on in the window?”

Salesperson: “Wouldn’t be better to use the fitting room?”

As can be seen in this example, the element of surprise is often characteristic of the incongruity theories of humor.

Script-Based Theories of Humor

Unlike the theories mentioned above, which explain the various reasons why people use humor, this section explains the most widely accepted theory of analyzing humor linguistically. The first formal, linguistic theory of humor was Raskin’s (1985) Semantic Script Theory of Humor (SSTH). However, due to it being primarily constrained to one area of linguistics (semantics), it was later revised and renamed The General Theory of Verbal Humor (GTVH) (Attardo & Raskin, 1991). This revision broadened the scope of analysis to incorporate other linguistic areas, such as “textual linguistics, the theory of narrativity, and pragmatics broadly conceived” (Attardo, 2001, p. 22). The broadening of this theory was accomplished by creating six hierarchical Knowledge Resources (KRs), as illustrated below, which must be present to produce humor. The six KRs are language, narrative strategy, the target, the situation, the logical mechanism, and script opposition.

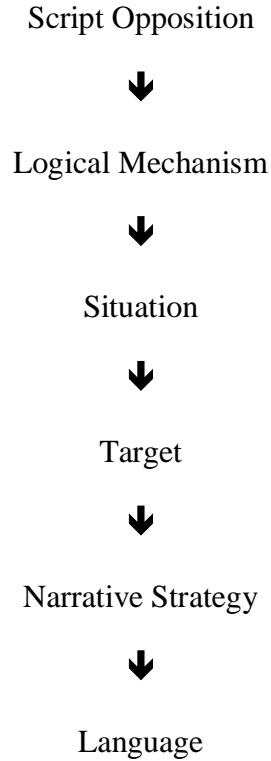


Figure 1. Attardo's knowledge resources.

Starting from the bottom of the hierarchy, *language* refers to what is needed to verbalize the text. This KR takes into account the phonetic, morphosyntactic, and pragmatic elements that constitute a humorous utterance. What is important about this KR in humorous utterances is that the same joke can be worded in many different ways, yet the semantic content remains intact. This can be illustrated in the 2005 documentary *The Aristocrats*, which shows how numerous comedians tell the same dirty joke in a variety of ways. Moving up the hierarchy, *narrative strategy* refers to the type, or genre, of humor used in an utterance. For instance, a person may choose to speak a riddle, pun, or story joke, which all use different narrative strategies. The *narrative strategy* can be linked to humor categorization. The *target* is best defined as the “butt” of the joke; however, not all jokes have a target, which makes this the only KR that is not required in a humorous utterance. The *situation* is simply what the joke is about, or the context of the joke. Information like setting, characters, and events are included in this KR.

Moving up the hierarchy, the *logical mechanism* is the tool by which two opposing scripts (see the next KR) are brought together. In other words, this is the way humor is created.

To best explain how this works, take this joke told in Bell and Pomerantz (2016):

Two tourists were driving through Louisiana. As they approached Natchitoches, they started arguing about the pronunciation of the town. They went back and forth until they stopped for lunch. At the counter, one tourist asked the employee, “Before we order, could you please settle an argument for us? Would you please pronounce where we are very slowly?” The guy leaned over the counter and said, “Burrrr-gerrr Kiiing.” (p. 24)

In this example, the logical mechanism lies within the phrase “where we are.” Its ambiguity could allow for multiple interpretations. The tourist broadly conceived the phrase, wishing to hear the name of the town, but the employee narrowly interpreted the phrase, pronouncing the name of the restaurant. An example of a different type of logical mechanism uses puns to accomplish the humor, as in this example, “If a wild boar kills you, does it mean you’ve been boared to death?” Here, the phrase “boared to death” shares phonological similarity to the common expression “bored to death.”

Finally, the last KR of the GTVH is *script opposition*, which lies at the core of all humorous instances. However, to fully understand this KR, a proper definition of scripts must be established. Raskin (1985) defines scripts as “large chunk[s] of semantic information surrounding the word or evoked by it” (p. 81). Scripts are constituted of common knowledge surrounding word, phrase, or event. However, as Bell and Pomerantz (2016) have noted, “Scripts do not reside in individual peoples’ heads. Rather, researchers imagine them as shared among members of a particular community” (p. 25). To show this nature of scripts, Bell and Pomerantz use the example of a suburb. To many Americans, myself included, the concept of a suburb

brings with it pictures of developed communities on the outskirts of larger cities. Suburbs are generally perceived as safe, family-centered places to live, away from the dangers of the inner city. Pictures of children riding bikes and dads mowing lawns are common for this script. Suburbs normally constitute wealth, while inner cities are more prone to index poverty. However, this script is specific for America. In France, for instance, these scripts would be flipped, with wealth being concentrated in the city centers and poverty being indexed in the surrounding suburbs. Therefore, scripts are highly variable, and by no means stable across a population. Different experiences with scripts will alter an individual's perception of it.

Bell and Pomerantz (2016) further explain script opposition when they note, "For a text to be humorous, it must be compatible with two scripts that are opposed to each other in some way" (p. 25). And not only do the scripts have to be opposed to each other, but the speaker and listener must have access to these scripts. Often times, when humor fails, it is because one person in the exchange does not have access to a particular script. This is often the reason behind failed humor between L1 users of English and multilingual users of English (Bell, 2015; Bell & Attardo, 2010).

Although script opposition is found in all instances of humor, not all instances of script opposition are humorous. This fact is abundantly clear when young children are just figuring out how to tell jokes. When learning knock-knock jokes, young children will often try to create their own jokes, yet with little success. For example, this was a recent exchange between a friend's 6-year-old and myself:

Child: "Knock, knock."

Me: "Who's there?"

Child: "Hot dog"

Me: “Hot dog who?”

Child: “You’re a hot dog face!”

In this example, the child sets up an expectation for the joke to follow a standard pattern, as in most knock-knock jokes, but detours in the end into some sort of jab. The child first presents the script of “hot dog,” yet does not offer an opposing script that elicits laughter. Another example of opposing scripts not eliciting laughter is an often-used image by newspapers of a child’s toy in the midst of a war-torn area. This incongruity is meant to bring out feelings of concern, rather than of humor.

To see how the GTVH works in an actual joke, here is a joke that Bell used in her 2011 *TESOL Quarterly* article:

A man and a woman who had never met before found themselves in the same sleeping carriage of a train. After the initial embarrassment they both went to sleep, the woman on the top bunk, the man on the lower. In the middle of the night, the woman leaned over, woke the man and said, “I’m sorry to bother you, but I’m awfully cold and I was wondering if you could possibly get me another blanket?” The man leaned out and, with a glint in his eye, said, “I’ve got a better idea—just for tonight, let’s pretend we’re married.” The woman thought for a moment. “Why not,” she giggled. “Great,” he replied, “Get your own damn blanket!” (p. 139)

Starting from the first knowledge resource in the GTVH, there is not much to analyze in terms of the language being used. The text is in English, and there is a slight shift in formality in the final line. For the narrative strategy used, this joke is canned and takes on the form of a narrative, as in it follows a narrative sequence. The target, or “butt” of the joke, is the woman for being in the awkward situation with this stranger and the how she is spoken to in the end of the joke. The

logical mechanism used in this joke is that of pragmatic ambiguity that takes place in the different understandings of what married life actually entails. The script opposition used in this example is whether, or to what extent, married people have sex. For instance, the two scripts being opposed in this joke is that the phrase “let’s pretend that we’re married” could either be interpreted as an invitation for sex or as how people married for a long time (perhaps unhappily) treat each other in marriage. Although few scripts are universal, this joke would be understood by a wide audience due to the common understanding of the changes that take place during long-term relationships.

The Pragmatics of Humor

To further understand why much of the research concerning the linguistic study of humor is found within the field of pragmatics, it is important to consider how humor is a pragmatic feature. Bardovi-Harlig (2013) defines pragmatics simply as “the study of how-to-say-what-to-whom-when” (pp. 68-69). And while that definition is useful for a more general audience, or to explain the field to a family member or friend, Crystal (1997) defines pragmatics more thoroughly as “the study of language from the point of view of users, especially of the choices they make, the constraints they encounter in using language in social interactions and the effects their use of language has on other participants in the act of communication” (p. 301). Within a social interaction, there are different choices available to the speaker depending on the context, and, at times, the context is open for the speaker to tell a joke or make a witty comment or tease. Used appropriately, humor in an interaction can accomplish many different interactional goals, which will be explained below. Thus, humor is a pragmatic feature of language because it is a conversational choice that is available to speakers within interaction. To better understand the

different pragmatic features of humor, it is important to discuss the forms humor takes, its common functions, its interactional cues, and how humor is received and understood.

Forms of Humor

It is quite easy to think of different types of humor (See Table 1). For instance, the difference between a satirical take on the news, like many late-night TV shows specialize in, and a pun made about a politician is fairly distinct.

Table 1

Forms of Humor

Canned Jokes	Irony	Mockery
Narratives or anecdotes	Banter	Double Entendre
Puns	One-liners	Wordplay
Riddles	Self-deprecation	Teases
Satire	Hyperbole	Parody

There are even several taxonomies of humor that classify types and subtypes of humor (see Attardo, 1994; Chiaro, 1992; Dynel 2009; Katthoff, 2007; Long & Graesser, 1998; Nash, 1985).

While these taxonomies were helpful in building the survey instrument for the current study, they have limitations when working with sitcom humor. The task of categorizing the types of humor used within a humorous utterance becomes challenging due to humor's fluid nature. Indeed, Bell and Pomerantz (2016) noted, "Categories blend and overlap, and multiple forms may be used in a single humorous utterance" (p. 27). Thus, it is difficult to locate distinct examples of particular types of humor in recorded conversation.

This is a challenge for the current study. On one hand, it is difficult to find video examples of just one type of humor being used in a conversation, be it a television clip or otherwise. It is more likely that a clip will involve multiple forms. On the other hand, there could be an argument made that since humor is so rarely separated by type in conversation, then it would be unfair to try to study them as such. However, being that research on this topic is virtually non-existent, the benefits of knowing how multilingual users of English comprehend different types of humor has direct ties to language pedagogy. As mentioned in the previous chapter, humor has its place in the language curriculum, and information from this study could help shape what that place is.

Functions of Humor

Broadening the discussion of how humor works theoretically, according to the General Theory of Verbal Humor (Attardo, 1994), there has been a substantive amount of research that explores the various functions of humor within interactions. Underpinning this research, however, is the work done on speech acts – particularly the work of Austin (1962) and Searle (1969) – and the difference between illocutionary and perlocutionary speech acts. An illocutionary act is speaking a message to someone with a specific intention, for example to be funny. The perlocutionary speech act, on the other hand, seeks to produce an effect in the hearer. Some of those effects can be described here as the functions of humor. Martin (2007) boiled these functions down to three main categories: (a) stress relief and coping, (b) establishing and maintaining relationships, and (c) influencing the behavior of others. While not an exhaustive list, these are three of the most commonly cited functions of humor. I will take each of these in turn.

The first function of humor is to provide stress relief and a coping mechanism (Allen, 2014; Booth-Butterfield, Booth-Butterfield, & Wanzer, 2007; Branney et al., 2014; Heath & Blonder, 2003; Ladegaard, 2003; Matsumoto, 2011). Often times, humor is derived from serious topics such as death, politics, sex, and religion. At a funeral, for instance, it is not uncommon for family members to share laughs with other family members or guests. Laughter often reminds friends and family of the good experiences that they had with the deceased loved one. Sharing the experience provides a common bond as well that serves to both strengthen memory and increase bonding in a time of sorrow. Another interesting example of this function comes from Oring's (2003) article on engaging humor. Oring notes that over the twentieth century, there has been a decline in the sentimentality conveyed on American greeting cards. Rather, there has been an increase in humor usage to convey the same sentiment, even in hard situations.

Looking to an empirical study of how this function of humor is manifested in diverse situations, Allen (2014) observed a sexual education course in a New Zealand high school to study the function of humor within that space. Some of the expected responses to this sensitive subject matter were certainly expressed; for instance, Allen (2014) noted, "boys use sexual humour to consolidate heterosexual masculinities, gain peer status, undermine the teacher's authority, disrupt the classroom learning agenda and as a form of entertainment" (p. 397). However, the study concluded that the use of humor in this particular course helped to "create a climate conducive to learning by reducing possible tension and embarrassment around sexuality" (Allen, 2004, p. 397). Thus, one way humor can be used to relieve tension is when talking about sensitive, often embarrassing, subjects.

Another example looks at how college students in the US use humor as a coping mechanism and how that, in turn, provides them with additional benefits. Booth-Butterfield,

Booth-Butterfield, and Wanzer (2007) surveyed 186 undergraduate students on four empirical measures: humor orientation, job satisfaction, emotional expressivity, and coping effectiveness. The researchers measured humor orientation by using a 17-question survey (Booth-Butterfield & Booth-Butterfield, 1991) that looked at an individual's tendency to use humor in different social situations. This study showed that participants with a high humor orientation rating were correlated with both high coping abilities and job satisfaction. While these findings do not point to humor being the only factor for effective coping among college students, they do prove it as one way to accomplish communication goals while altering sad feelings.

The second broad function of humor that Martin (2007) outlined is humor's ability to help establish and maintain relationships (Boxer & Cortéz-Conde, 1997; Hay, 2000; Holmes, 2000, Norrick, 1993; Straehle, 1993). It's commonly believed that having a good sense of humor helps people make friends. It makes sense, then, that people use humor more in the presence of others than alone. In fact, research shows that when individuals use humor in a conversation, and that humor is positively received or supported with laughter or smiling, the humor user's laughter and smiling also increase (Chapman & Chapman, 1974; Young & Fry, 1966). When talking about this function of humor, it is almost unnecessary to go into detail: The fact that humor has the ability to lighten spirits is uncontested. Bell and Pomerantz (2016) noted that using humor helps "to increase our affiliation with those around us" (p. 29), and that holds true among close friends, surface-level acquaintances, and complete strangers (Fraley & Aron, 2004; Treger, Sprecher, & Erber, 2013).

Boxer and Cortéz-Conde (1997) expounded on this function of humor when they analyzed different conversational recordings. By looking at conversational joking and teasing examples, they found that humor often moves in one of two directions—either biting or bonding.

For instance, when a joke or tease is directed at a person who is a part of the immediate conversation, the effect can come across as more biting, or harsh. This is a common feature of conversation among groups of men; teasing one another is one way to show affection. On the other hand, conversational humor can also act as more affiliative, serving to bond the members of the conversation. This can be seen, for example, when employees gripe about their boss to each other. This humor directed at an “absent other” serves to strengthen in-group/out-group boundaries” (Boxer & Cortéz-Conde, 1997, p. 283).

Another example of how humor can serve to establish and maintain relationships comes from Hay’s (2000) study on the functions of humor in conversations of men and women, which serves as an expansion of Boxer and Cortéz-Conde’s (1997) study. Hay analyzed conversations between groups of males, females, and mixtures of males and females in New Zealand. The findings resulted in a taxonomy of different functions that humor plays within these different friend groups. While certainly not generalizable, being that the study only looked at one specific population, Hay (2000) found that men and women both use humor to establish and maintain solidarity within friend groups. One way this was accomplished was reminiscing on shared experiences, often resulting in an inside joke.

The third main function of humor described by Martin (2007) is its ability to influence individuals or groups (Boxer & Cortés-Conde, 1997; Fine & de Saucey, 2005; Holmes, 2000; Plester & Orams, 2008). This function is twofold in that research speaks to how humor can both influence behavior and accomplish some sort of social action. Much of this research comes from how humor is used in the workplace, especially the work of Holmes (2000, 2006) and Holmes and Marra (2002a, 2002b, 2002c). Discussing this function, Bell and Pomerantz (2016) noted how “playful speech can function as a way of gently socializing new or potential members to

group norms” (p. 30); in other words, playful speech can have a perlocutionary effect on a hearer. For example, as a new member of the English department at my current institution, I witnessed this function of humor first hand. After a department meeting discussing who would lead a volunteer trip for the department, a fellow colleague made a joke about how another new faculty member and I would be glad to do it. Everyone laughed because they had all been in the place in their career where they were new and quickly volunteered for anything. Therefore, the joke served to jab at our being new and our eager disposition to volunteer, while simultaneously supporting our status as in-group members.

As the example above illustrates, one way that humor is used to influence others’ behavior is to make people negotiate changing group dynamics. Haugh (2010) spoke of how teasing among a group of people, or what she refers to as “jocular mockery,” can index an affiliative or disaffiliative stance among members of the group. For instance, if a coworker complains to a group of colleagues about how much work he has to do, the other members of the group can use humor to either affiliate with that person’s complaint, whereby showing sympathy, or they can disaffiliate with that person’s complaint, whereby further marking in and out-group boundaries. If the members of the group respond in a way to affiliate themselves with the complainant, the target of the tease might be the boss who required the work or a non-present coworker who was not working hard enough. On the other hand, if the members of the group responded in a way to disaffiliate with the complainant, the complainant would be the target of the tease. Going too far, using humor in this disaffiliative stance can border on bullying.

Looking at the other side of this function of humor, Bell and Pomerantz (2016) noted, “Humor as a way of social action need not always have a cruel edge” (p. 30). In other words, humor’s ability to influence people goes beyond marking in- and out-group boundaries. Indeed,

humor is often used as a way to be polite. For instance, Yu (2013) speaks about how self-deprecating humor, or self-mockery, can function as a face-saving strategy. Self-mockery can either work to save one's face or another's face. One way I use self-mockery to save face is when speaking about my French language skills. Although I studied French in college and lived in France for a year, I never became highly proficient in the language. I quickly learned how to say phrases like "I'm really bad at French" as a preface for talking with someone. Even if the conversation went fine, that small bit of self-mockery would help me save face if the conversation became too challenged. Self-mockery can also save others' face. For example, I often use self-mockery when speaking to international students about technology challenges. As someone to whom technology, and especially online learning platforms like Blackboard and Moodle, do not come easily, I frequently use self-mockery about my own struggle to a student that is having a hard time navigating an online platform. By making fun of myself, I try to help the student save face.

To recap, we've seen that the literature of humor functions mainly falls within three categories that Martin (2007) outlined for us: (a) stress relief and coping, (b) establishing and maintaining relationships, and (c) influencing the behavior of others. Again, these categories are simply the most commonly cited functions of humor. It's easy to find clean examples of each of these functions; however, when looking at conversational humor, it's more common for instances to serve multiple functions. Moving forward, not only does humor serve various functions in conversation, but also it comes with various cues that signal humorous intent. The following section will review the literature on the different humor cues within conversation.

Humor Markers in Interaction

In conversational interaction, it is common for a speaker to signal whether or not an utterance should be received as humorous. Gironzetti (2017) defines these conversational markers as “non-necessary elements that frame the interpretation of a given utterance or communicative situation as humorous” (p. 405). Examples of different markers include body movements and gestures (Ford & Fox, 2010), repetition (Bertrand & Priego-Valverde, 2011), switching styles, codes, or registers (Holmes, 2000; Katthoff, 1999; Norrick, 2007), or even a lack of using an explicit cue (Attardo, Eisterhold, Hay, & Poggie, 2003; Flamson & Barrett, 2008), among others. While there are certainly many ways that we mark humor, reviewing them all would go beyond the scope of this study. Thus, this section will only touch on two of the most researched humor markers: laughter and style shifting.

Laughter is certainly one of the oldest topics of humor taken on by scholars (Bergson, 1911; Freud, 1916); however, the issue of whether or not it is a true marker of humor has been debated over the years. The opinion of laughter being a humor marker stemmed from some of the conversation analysis work of Sacks and Jefferson. In Sacks’s (1974) study where he analyzed the telling of a dirty joke between peers, he found that both laughter and delayed laughter were possible responses to humor. After that, Jefferson et al. (1977) began work on the transcription of laughter and found that laughter often occurs synchronously with humorous utterances. That is, laughter occurs not only after a humorous utterance, but sometimes before and during. Jefferson (1979) later argued that laughter can serve as a marker for humorous intent. In this, the speaker invites the audience to laugh as a way of signaling humorous intent.

Research on laughter has broadened over the years and more work has shown that laughter not only serves to mark or respond to humor. In fact, Provine (2000) found that laughter

is fundamentally a social phenomenon and rarely responds to anything resembling humor. In his study, he recorded hours of conversation that included laughter and found that only around 20% of laughter instances were in response to humor. Hay (2001) supports this position in her study by explaining how laughter is only one possible response to humor; however, sometimes it is not appropriate. In what she calls “troubles-talk,” responding to someone’s troubles with laughter is considered rude. For example, it’s okay for me to joke about my student loan debt or unfortunate medical condition, but it is not appropriate for others to respond in laughter. Hay (2001) noted, “The speaker can laugh at their own problems, but in general, the appropriate response to such humor seems to be an offer of sympathy” (p. 63). Thus, while laughter can certainly serve the purpose of marking a humorous utterance, it is not always the appropriate response. As Gironzetti (2017) put it, “the presence of laughter alone can be, at best, one of the cues used to frame a segment of conversation as humorous” (p. 407).

Laughter is certainly not the only way that humor is marked. Another way that people mark an utterance as humorous is by code, register, or style switching (Cromdal & Aronsson, 2000; Norrick, 2007; Takanashi, 2001). This is when the speaker purposefully alters his or her speaking style to accomplish a humorous goal. At my institution, a liberal arts university in the south, one way this often happens is when faculty purposefully switch to a stereotypical southern accent when conveying a point. Because a deeply southern accent can be used to portray ignorance, the use of it by highly intelligent people (i.e., university faculty) constitutes a switch in register that marks whatever is said in a humorous tone. An example of style switching to mark humorous intent comes from Takanashi’s (2011) study of Japanese style shifting. In her study, she examined the way that speakers in different contexts (i.e., professor/student, husband/wife, etc.) style shifted to perform imagined personas. These imagined personas were

initiated, or marked, by a style shift to indicate humor, and then the interlocutor could reciprocate by creating their own, complementary imagined persona in an effort to add to the humor. This is also what Attardo (2001) refers to as “mode adoption” and has been displayed in several studies (see Holmes & Marra, 2002b; Katthoff, 1999; Winchatz & Kozen, 2008). To relate this to the example used by the faculty at my institution, they often create an imagined persona of a deep south, ignorant character, and the interlocutor can choose to participate in that imagined persona by adopting the imagined character for themselves, whereby extending the humorous utterance, or they may choose to acknowledge the attempt at humor, but let it end there.

While there are certainly a multitude of ways we mark humor in conversation, little attention has been paid to whether humor markers are similar across cultures (Bell, 2007). When thinking about the topic of this study, the ability to recognize a speaker as marking an utterance as humorous is critical to comprehending and appreciating the humorous act. Humor used in sitcoms may come across clearer than in everyday interaction, and it is explicitly created to do so. The next section will delve more deeply into the pragmatic components of sitcom humor.

Sitcom Humor

Relatively little linguistic inquiry has concerned sitcom humor; however, Dynel (2011) helps explain the different pragmatic elements of what she called “film discourse” (p. 312). She defines this as “the characters’ utterances materialized in films, series and serials via monologues, dialogues and polylogues, which are the collaborative work of the whole film production crew” (p. 312). Thus, with this definition, the humor used in sitcoms is more layered than conversational humor between interlocutors. For instance, one level is the fictional world in which the characters interact with each other; another would be what Dynel (2011) calls the “recipient” level, which refers to how the audience responds to the production.

Because the humor in sitcoms seek to mirror everyday interactions, “viewers willingly forget about the production layer and become preoccupied with characters’ communication” (Dyner, 2011, p. 314). And film crews (writers, directors, actors, camera operators) produce content to achieve this end. When crews do this, they are enabling a “set of discursive (as well as cinematographic) techniques enabling the target viewer’s interpretive processes and arrival at meanings, according to the collective senders’ plan” (Dyner, 2011, p. 315). In this case, the “collective sender” is the entire film crew and the “target viewer” is a model viewer for the content, someone who is most likely to understand the ways in which humor is conveyed. Thus, based on this analysis, sitcom humor, while similar in form and content to conversational humor, is distinctly different. However, whether it be conversational or sitcom humor, research on humor comprehension is lacking. The next section will present a review of what we currently know.

Humor Comprehension

As mentioned earlier, applied linguistic research on humor has primarily focused on production, leaving issues related to comprehension under-researched (Bell, 2007; Bell & Pomerantz, 2016). While the fields of neurolinguistics and cognitive science have explored how the brain experiences humorous content (Bartolo et al., 2006; Chan et al., 2012; Samson, Zysset, & Huber, 2008), applied linguistic research on humor comprehension has been lacking. Bell (2007) notes one reason for this is “the difficulty inherent in inferring understanding from observed behavior outside of a controlled setting” (p. 368). Cognitive science, with its technological capabilities, is making strides in these “controlled settings,” yet the social sciences have been slower to produce knowledge in this area. While there is not a unified theory of humor comprehension available, several key researchers have theorized how humor comprehension

works. The work of Raskin (1985), Carrell (1997), and Hay (2001) have provided a groundwork for humor comprehension among L1 English speakers, while Bell (2007) explored how comprehension works multilingually. It is helpful to see them all on a continuum—each researcher expanded the previous one’s work. After reviewing these four theories, I will close this section by reviewing the few available and relevant studies concerning multilingual humor comprehension.

Raskin (1985), one of the first prominent voices in this conversation, viewed a person’s ability to understand and assess humorous instances as a part of that person’s linguistic competence. His notion of linguistic competence drew from the syntax work of Chomsky (1965) and the pragmatic work of Lakoff (1977), which he viewed as both important in explaining a person’s humor competence. However, Raskin did not go far in explaining how humor comprehension works, for he is best known for explaining how actual humorous texts work in his Semantic Script Theory of Humor (1985). One limitation of Raskin’s view of humor comprehension to the current study is that it lies within an L1 English speaker model that cannot fully speak to the topic of multilingual humor comprehension.

Carrell (1997) took Raskin’s theory a step further by breaking down humor comprehension into two distinct categories: joke competence and humor competence. Joke competence is a person’s ability to recognize that a joke, or other humorous utterance, has been said—without passing judgement on it. Humor competence, on the other hand, is a person’s ability to judge whether or not the joke, or other humorous utterance, was amusing. In Carrell’s theory, there is a disconnect between recognizing a joke and finding it funny. She sees it as a two-step process: first the utterance is recognized as a joke, then judgement is passed on whether or not it was funny. However, like Raskin (1985), this view of humor comprehension also comes

from a native speaker model, showing how an L1 speaker comprehends humor. While this understanding of humor comprehension does not account for multilingual users of English, Carrell's account of how humor often fails might offer some help. In her view, there are two reasons why humor fails: "Either the audience is unfamiliar with the form the joke text takes, or the audience is not in possession of one or more of the semantic scripts necessary to identify and subsequently process the text as a joke, or both" (Carrell, 1997, p. 179). Multilingual users of English often fail to understand humor because of these two reasons (Bell, 2015). The current study will be able to provide evidence of how difficult these different forms of humor are.

Hay (2001) pushed this discussion even further with her article on the pragmatics of humor support. In it, she expands Raskin's (1985) and Carrell's (1997) theories by introducing four implicatures of humor support. While not limited to just comprehension, although it is certainly a key element, humor support takes a comprehensive approach to how a person processes humor. The four implicatures that Hay (2001) offers are: "*recognition* of the humorous frame, *understanding* the humor, *appreciating* the humor, and *agreeing* with any message associated with it" (p. 55). The first three implicatures (recognition, understanding, and appreciation) can be understood as a "scalar relationship" (Hay, 2001, p. 67). This means that understanding requires recognition and appreciation required both understanding and recognition. In other words, there cannot be appreciation without understanding and recognition.

The first implicature is recognizing that something humorous was said. This is similar to Carrell's (1997) joke competence where the hearer, without passing judgment, acknowledges that something funny has been said. This is always the first step in comprehension. The second implicature, arguably the most important for the current study, is understanding the humor. By both recognizing the form the humor takes and having the appropriate script available, the hearer

comprehends what was said. Much is at stake in these first two implicatures when it comes to face-saving scenarios. It is quite likely that either the speaker or hearer will lose face if the joke fails (i.e., is not recognized and understood). For instance, Hay (2001) notes, “any joking activity presents a potential face threatening act for both the speaker (because it could fall flat) and the hearer (in that they might not ‘get the joke’)” (p. 68).

The third implicature is appreciating the humor. Once something humorous is recognized and understood, the hearer makes the choice to convey that understanding to the speaker. In other words, appreciation is the way we make humor comprehension known to interlocutors. Appreciation can take many forms, such as a polite “ha ha ha” when a coworker tells a corny joke, or a dry “I see what you did there” when a friend makes an awful pun. Appreciation does not always have to be affirming of the speaker; it can also be a way to show understanding, yet distance yourself from the speaker. For instance, if a speaker told a joke that made fun of a certain person or ethnic group, a hearer could show appreciation by sternly saying “that’s not funny.” This both conveys understanding and distances the hearer from the speaker. If the hearer did not respond in such a stern way, Hay’s (2001) fourth implicature would have been activated: agreement. Agreement is the “full support of humor” where the hearer, implicitly or explicitly, agrees with the humorous utterance and the message it is conveying (Hays, 2001, p. 72). In this sense, laughter at a humorous utterance can be understood as agreement of the message behind the humor.

Therefore, according to Hay (2001), humor comprehension is a four-stage process. First the hearer recognizes the humor being said, then she understands the message being conveyed, then she has options on how to make her comprehension known to the speaker, and by doing that she either agrees or disagrees with the message conveyed. However, all three of these theories of

humor comprehension (Carrell, 1997; Hay, 2001; Raskin, 1985) are based on an L1 model of linguistic competence, and while not necessarily a limitation, the scope of their studies did not seek to answer questions concerning multilingual participants. Because of this, Bell (2007) used the available literature on humor comprehension and applied it to cross-cultural interactions, in turn rethinking how multilingual humor comprehension works.

Using conversational data, Bell (2007) has added two important pieces to the comprehension puzzle when it relates to both the previous literature and multilingual participants. First, she made the observation that previous theories of humor comprehension have been primarily cognitive and individual. In other words, these theories have placed the work of comprehension solely in the individual's head. Bell (2007) explained it this way: "These models tend to view [humor comprehension] ... as similar to computer processing: in successful communication ideas are transferred from speaker to hearer, who reconstructs them in the same manner, that is, with the same understanding, as the speaker intended" (pp. 370-371). Seeing these theories as lacking, Bell (2007) suggests that "understanding and conversational abilities depend on situational factors, and in particular the other interlocutors"—thus arguing for a socially constructed view of humor comprehension (p. 371). Citing both Shae (1994) and Bremer et al. (1996), she explains how these two studies help illustrated the situated nature of cross-cultural interaction:

Both studies demonstrate how interaction can be constructed in more or less symmetrical and egalitarian ways, but that this depends largely on the native speaker, who has greater linguistic resources at hand. Some language practices may exclude the second language user, who then is positioned as lacking competence. He or she may have difficulty resisting this positioning, which then becomes reified. (Bell, 2007, p. 371)

Humor is a language practice that can be used to exclude multilingual users of English. Because the so-called native speaker is more experienced in the humor of the L1, any sign of misunderstanding on the part of the multilingual interlocutor signals a lack in competence. This often leads the L1 speaker to make unnecessary conversational adjustments to ensure comprehension, but these adjustments can also serve to marginalize the multilingual interlocutors as less competent.

The second contribution Bell (2007) has given is the finding that humor comprehension happens at “varying degrees” (p. 377). In other words, a hearer can still recognize and appreciate the humor, yet still not completely understand why the utterance was funny. This finding stands in opposition to Hay’s (2001) theory that recognition, understanding, and appreciation have a “scalar relationship,” meaning each implicature entails the previous one (p. 67). Conversational data from Bell (2007) shows a cross-cultural interaction where the L1 English speaker uses a script that his multilingual interlocutor did not fully possess, yet she offered a hearty laugh in response. When asked about the interaction, Bell (2007) noted that the multilingual participant explained how she didn’t fully understand the humor that was used, but she laughed because of the way the speaker told the joke. In this sense, the hearer showed appreciation for the humor without fully understanding it. This goes against Hay’s (2001) view that appreciation implies understanding. Bell’s (2007) study shows that humor comprehension is not an “all or nothing” venture among multilingual users of English; rather, it is a nuanced, socially constructed competence that develops in varying degrees.

Multilingual Humor Comprehension

While Bell’s work has certainly added to our understanding of multilingual humor comprehension, there are a handful of other studies that have also informed our understanding of

the topic; however, none of them seeks to provide a comprehension breakdown by type of humor. For instance, two recent studies approach the topic of multilingual humor but focus on textual instead of conversational humor. Shardakova (2016) specifically looked at American learners' reading comprehension of Russian textual humor. When she asked participants to locate instances of humor in various readings, Shardakova found that when compared to native Russian language speakers ($M=85$, $SD=15.7$), the American learners recognized significantly fewer instances of textual humor ($M=19$, $SD=9.4$). The study also showed significant differences in how learners understood different types of textual humor, such as those found in literary texts versus news articles.

In another study, Erdodi and Lajiness-O'Neill (2012) asked English, Hungarian, and bilingual speakers of both languages to rate how funny they found different jokes. The jokes used were centered around four themes: sex, ethnicity, homosexuality, and issues pertaining to Eastern Europe. The researchers found both between- and within-group differences in the funniness ratings. They noted,

there was a linear relationship between group membership and ratings of ethnic jokes, in the predicted direction: the English sample rated the stereotyped content as the least funny, whereas the Hungarian sample rated them as the most funny, with bilinguals in between (Erdodi & Lajiness-O'Neill, 2012, p. 465)

This finding shows how language can "influence people's expressed values in terms of both content and code" (Erdodi & Lajiness-O'Neill, 2012, p. 466).

Shardakova (2016) and Erdodi and Lajiness-O'Neill (2012) both used textual humor as a tool to study multilingual humor comprehension, and they both indirectly came to conclusions about how proficiency level affected humor comprehension. In a study that took this issue head

on, Ayçiçeği-Dinn, Şişman-Bal, and Caldwell-Harris (2017) started with the assumption that foreign language jokes are harder to understand and, in turn, considered less humorous. Using written jokes found on Turkish and English joke sites, the researchers asked their Turkish participants to read jokes in the two languages and rate both funniness and ease of understanding. The researchers found that participants who categorized their English language proficiency as high rated English language jokes as funnier than the low-proficiency group did. They also found that the funniness ratings of the English jokes increased linearly as the ease of understanding ratings increased, thus establishing a connection between the two variables. Speaking to this, the researchers note, “This suggests that reduced linguistic competence in a foreign language is a plausible explanation for lower humor ratings” (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017, p. 19). This study suggests that language proficiency is tied to multilingual humor comprehension in text-based humor.

Based on the available studies that explore multilingual humor comprehension, a few conclusions can be drawn. First, Bell (2007) found that appreciation of a humorous utterance does not entail that the hearer fully understood the meaning of the utterance. By using conversational analysis, she showed that appreciation of an utterance can “be achieved in varying degrees” (Bell, 2007, p. 384). Additionally, Bell (2007) showed that recognizing humor is often dynamic, in that it changes with learning new forms of humor and conversational styles. Second, several studies (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017; Erdodi & Lajiness-O’Neill, 2012; Shardakova, 2016) showed that multilingual humor comprehension can be tied to the hearer’s linguistic proficiency level. However, these three studies all used text-based humor for their stimulus, rather than audio or video examples. While text-based humor is important to understand, particularly when researching reading comprehension, so much of humor is

delivered in conversational settings that require the interlocutors to be able to show immediate comprehension.

Therefore, to situate the need of this study into the current research landscape, studies show that multilingual users of English fail to understand humor quantitatively more than native speakers of English (Bell & Attardo, 2010) and that these users fail due to either not being able to recognize the form of the joke or not have the appropriate script for understanding (Carrell, 1997). So, research suggests that this population finds humor difficult to understand, as well as suggests the reasons why this is so; however, that is where our knowledge stops. Additionally, there is currently little (if nothing) known about how different L2 and Bilingual users of English understand humor. The majority of studies focus on L1/L2 or L1/Bilingual, yet no study to date has explored any relationship between L2 and Bilingual. The current study seeks to add more context to this area by exploring how a multilingual population, including L2 and Bilingual users of English, understands specific types of humor presented to them in video clips.

Methodological Considerations

While the current study is novel in its aim to measure comprehension of different humor types through video clips, the use of video clips in L2 comprehension research is not new. Rose (2001) concluded that dialogue in films mimics naturally occurring speech fairly accurately, and he looked at the pragmatic uses of compliments and responses. Shively, Menke, and Manzón-Omundson (2008), on the other hand, used clips of Spanish language films to measure Spanish students' perceptions of irony. And more recently, Kim (2014) used clips from the sitcom *Friends* to teach sarcasm to L2 Korean students. Thus, the precedent for using film/television clips for educational purposes has been set.

While survey methodology is not new to the broader field of humor research (see Fink & Walker, 1977; Crawford and Gressley, 1991; and Nueliep, 1991), it is certainly an underutilized method of inquiry in regards to multilingual humor comprehension (see Prichard & Rucynski Jr., 2017; and Shardakova, 2016), and perhaps a non-existent method in regards to verbal humor comprehension. When writing about needed areas of humor research, Bell and Pomerantz (2016) noted, “we are unable to gauge the potential difficulty of different types of humor (if any), despite the publication of classificatory schemes that purport to do this (e.g., Deneire, 1995)” (p. 194). I believe that by designing a survey that incorporates video clips, then asks comprehension questions, we can begin to build on this thin area of multilingual humor comprehension research.

Chapter Summary

In this chapter, I have given a detailed pragmatic overview of humor, starting from theoretical issues, then moving to forms, functions, and markers in conversation, and finally narrowing the scope to the topic at hand: multilingual humor comprehension. Most importantly for the current study, this review of literature has revealed that multilingual users of English struggle to comprehend humor for two reasons, either they lack the needed script associated with the joke, or they do not recognize the form the joke takes (Carrell, 1997). My study seeks to explore the latter by designing a survey with video clip examples of different types of conversational humor. Additionally, my study is joining other successful studies that have used survey methodology (Prichard & Rucynski Jr., 2017; and Shardakova, 2016), yet it is unique in that it is measuring responses to verbal instances of humor rather than textual ones. By focusing on humor types and employing a survey methodology, my study may add the growing field of multilingual humor research.

In the next chapter, I detail the methodology I intend to use to answer my research questions.

CHAPTER 3

METHODOLOGY

The purpose of this study is to measure how multilingual users of English comprehend distinct types of sitcom humor, specifically: sarcasm, wordplay, and teasing. To guide this study, I proposed the following research questions and hypotheses:

1. Is humor type a stable category of analysis?

H₀: Humor type is not a stable category of analysis.

H₁: Humor type is a stable category of analysis.

2. Is there a significant difference in how L1, L2, and bilingual users of English categorize types of humor?

H₀: There is no significant difference in how L1, L2, and bilingual users of English categorize types of humor

H₁: There is a significant difference in how L1, L2, and bilingual users of English categorize types of humor

3. Is there a significant difference in how funny L1, L2, and bilingual users of English rate different types of humor?

H₀: There is no significant difference in how funny L1, L2, and bilingual users of English rate different types of humor.

H₁: There is a significant difference in how funny L1, L2, and bilingual users of English rate different types of humor.

4. Is there a significant difference in how L2 and bilingual users of English comprehend different humor types?

H₀: There is no significant difference in how L2 and bilingual users of English comprehend different humor types.

H₁: There is a significant difference in how L2 and bilingual users of English comprehend different humor types.

In this chapter, I detail the methodology followed to collect and analyze the data to answer the above research questions. This chapter is organized to first describe my research design, participants, instrument design and validation, and methods of data collection. After that, I briefly describe my approach to data analysis, and I end with a discussion of the study's limitations.

Research Design

Owing to a general lack of knowledge about multilingual humor, as well as a dearth of studies that use surveys to measure humor comprehension, a quantitative research design was used in this study. Like all research designs, there are advantages and disadvantages to this approach. Dörnyei (2003) notes that the surveys are frequently used in applied linguistic research due to “their unprecedented efficiency in terms of (a) researcher time, (b) researcher effort, and (c) financial resources” (p. 9). These advantages make it possible for a survey, such as the one used in this study, to be distributed to hundreds of participants around the globe. The disadvantages, mostly having to do with the quality of the participants' responses, will be discussed in the limitations section below. To measure the participants' comprehension of different types of humor, I created a survey that includes multiple imbedded video clips. The clips are from popular television series and each provide an example of a different type of humor: sarcasm, wordplay, and teasing. Participants will watch a clip, then answer a series of questions about the clip.

Participants

The participants for this study are L1(N=576), L2 (N=90), and bilingual (N=222) users of English. The L2 and bilingual groups do not hold English as their first language. Operationally defined, these two samples hold, at minimum, a proficiency level that would allow the individuals to understand the informed consent and questions on the survey. The instrument had demographic question asking participants to rate their proficiency in speaking and understanding English.

Amazon Mechanical Turk

I used Amazon's Mechanical Turk (MTurk) service to recruit and survey participants. MTurk is an online labor market that Amazon created in 2005 to provide the recruitment of workers to complete Human Intelligence Tasks (HITS), or tasks that are unable to be automated. A 2015 World Bank report estimated that there were close to 500,000 registers workers on MTurk; however, it is not clear how many of them are active. The way it works is people set up a task that needs participants, such as a survey, and then set a payment amount, then buys a set number of participants. Studies have been done that underscore the value of the service, in that quality work can be done for minimal cost (Horton & Chilton, 2010) and that the reliability of the responses are on par with traditional methods of data collection (Buhrmester, Kwang, & Gosling, 2011). My participants were located all over the globe. MTurk has a way of setting up certain filters to make sure the participants who take the survey will indeed match my participant criteria.

One major draw of MTurk is its workers' anonymity. Each worker is only known by an ID number. However, several demographic studies have been published that help to paint a clearer picture behind the large workforce that Amazon employs. One such study surveyed 573

workers as found that “57% of MTurk workers are from the United States, while 32% are from India” (Ross, Irani, Silberman, Six, & Tomlinson, 2010, p. 2). The study found that the average age of worker was 31, 66% have a college degree, and 33% were students. Therefore, overall, the type of worker one can expect is both international and highly educated. My participant makeup was consistent with Ross et al.’s (2010) study.

In the end, I had three participant samples – L1 English users, L2 English users, and Bilingual English users. The first sample (N=576) were composed of participants located in the US and were paid thirty cents for their participation. While there was not a question that asked participants’ first language, it was assumed that the majority of the sample were L1 English speakers.

The second and third samples came from one distribution (N=312) and participants were paid forty-five cents. I intentionally cast a wide net for possible participants, trying to achieve a diverse sample of languages. After the results were in, I was able to form groups for analysis. There was a large group of participants from India (N=222), represented by Tamil, Hindi, and Malayalam speakers. Since English is an official language of India and taught in the educational system (NCERT, 2006), as well as the high levels of English proficiency reported, I decided to label this group as bilingual. The remainder of the participants (N=90) came from contexts where English is not a primary language, so I labeled this group L2 users of English. Table 2 gives the language groups represented in the L2 sample.

Table 2

Language Representation in the L2 Sample

Arabic	Indonesian	Portuguese
Bosnian	Italian	Romanian
Bulgarian	Japanese	Russian
Chinese	Malay	Spanish
Dutch	Persian	Turkish
French	Polish	Vietnamese
German		

For analysis purposes, a data set containing equal numbers of each language group was made (L1=90, Bilingual=90, L2=90). This distribution of multilingual participants is consistent with Pavlick et al.'s (2014) findings in their study of the language demographics of MTurk. Specifically, the largest populations of MTurk workers reside in the US and India, which is consistent with my participant make up.

Instrument Design & Validation

The current study used a survey to test comprehension of three different types of humor: sarcasm, wordplay, and teasing. However, several methodological decisions had to be made before the survey could be designed. First, the types of humor had to be decided, then video examples of each type of humor had to be found, then those examples had to be validated to see if there was some agreement on how each clip was categorized. This section will discuss those methodological choices.

Types of Humor

There are many types of humor that could be tested, but to limit the scope and feasibility of the study, I have chosen to measure comprehension of sarcasm, wordplay, and teasing. These types were chosen based on their pervasiveness in everyday interaction and ease of finding clips from television series. Table 3 below gives both the operational and verbal definitions of each.

Table 3

Definitions of Humor Types

Humor Type	Operational Definition	Verbal Definition
Sarcasm	When a speaker says one thing but means the opposite in order to hurt someone's feelings or to criticize something in a humorous way.	To humorously criticize by saying one thing but meaning something else.
Wordplay	When a speaker makes a joke about the meanings or sounds of words.	Joking about the meanings or sounds of words.
Teasing	When a speaker, or group, laughs at someone or says unkind things about a person, either to be funny or upset the person.	To make fun of someone by lightly laughing at or being unkind to her/him.

I originally planned to explore puns, yet after data collection I decided that since puns are a type of wordplay (Dynel, 2009), then it could be subsumed under the wordplay humor type.

Video Examples

Finding video examples of each type of humor consisted of hours of searching YouTube. I found two video examples for each type of humor, totaling six videos. All of them were from popular US television sitcoms: *Friends*, *The Office*, *Big Bang Theory*, *30 Rock*, and *Seinfeld*. The table below briefly summarizes each video and which type of humor it represents.

Table 4

Video Example Summaries

Humor Type	Video Name	Short Summary	Video Length
Sarcasm	Baby Locked in the Apartment (from the TV show <i>Friends</i>)	In this scene, a man and woman are locked out of their apartment, but their sleeping baby is inside. The woman is starting to get very worried and imagining dangerous scenarios about what could happen to the baby. The man responds by making up even more extreme possibilities in order to be funny.	01:21
Sarcasm	Solving Apartheid (from the TV show <i>30 Rock</i>)	In this scene, a man and woman are talking. The man is complaining about how he must fast from food for a colonoscopy. The woman adds that one time she fasted to solve apartheid (segregation in South Africa).	00:23
Wordplay	Salsa/Seltzer (from the TV show <i>Seinfeld</i>)	In this scene, two men begin a conversation about salsa. They joke how a Spanish person would have trouble distinguishing between "salsa" and "seltzer."	00:32
Wordplay	Choosing Daycare (from the TV show <i>The Office</i>)	In this scene, a husband and wife discuss a possible daycare for their daughter but are worried about it being difficult to get in to.	00:24

Teasing	Lactose Intolerant (from the TV show <i>Big Bang Theory</i>)	In this scene, a group of friends is sitting around a table in a restaurant. A woman orders for her boyfriend but doesn't know he is lactose intolerant. The rest of the table knows this about him and starts making crude jokes about how milk products give him gas.	01:12
Teasing	Mocking Gabe (from the TV show <i>The Office</i>)	In this scene, a group of office workers begin to mock a co-worker. Several people make exaggerated impressions of him to his face.	01:05

Humor Categorization Test

Once I decided on the types of humor to be studied and the video clips to exemplify them, I had to test the validity of the video clips. This took the form of an IRB approved survey (IUP, log # 18-181-ONLINE). that I called the Humor Categorization Test, and it served two primary purposes. First, it was to test if there was agreement on the categorization of the clips (i.e. that the *Friends* clip was an example of sarcasm, and so on). Second, and more importantly, the survey measured how consistent the categorization of humor was across a varied US population of participants. This part is important because the overall aim of this dissertation is to test how multilingual users of English comprehend these clips, so understanding how a US population views these examples will be important in possibly comparing population types. The results from this survey populated my L1 group.

The results showed that even though there was agreement among the majority of participants in how they categorized the videos, there was also a high degree of variability within

their choices. The findings both served to validate my video clips and show how an L1 English speaking sample understood the clips. The findings of the Humor Categorization Test will be used in conjunction with the multilingual data to show how different language groups comprehend different types of humor.

Humor Comprehension Survey

Even though the Humor Categorization Test showed the examples of humor to be unstable in many ways, it also showed how one population (L1 speakers of English) understood those examples of humor. Knowing this information helped me move forward with the primary goal of this study: to test humor comprehension among multilingual users of English. Thus, I developed the Humor Comprehension Survey (Appendix B) to accomplish this goal. This survey looks quite similar to the Humor Comprehension Test, with the same questions about funniness and humor type, but had three important questions added. After watching each video, the participants were asked to rate the degree to which they agreed with the following statements:

- I understood the language used in this video
- The characters in this video intended to be funny
- I understood the humor used in this video

Participants were given a 5-point Likert scale from Strongly disagree to Strongly agree. These questions measured comprehension of both language, humor, and intention.

Procedures for Data Collection

What follows is the steps I took to collect my data through MTurk. The entire data collection process was authorized and overseen by the Indiana University of Pennsylvania's Internal Review Board (IRB) (IUP, log # 18-181-ONLINE).

Humor Categorization Test (L1 Sample)

The purpose of the Humor Categorization Test (Appendix A) was to both serve as a validating measure for my video examples and to measure how an L1 English speaking sample would respond to three types of humor. Once the survey was created, I submitted it to the IRB for approval. Upon approval, I set up my HIT on MTurk. I made it where only participants with IP addresses from the US could respond to my survey. I paid each participant thirty cents for their work and ended up with 576 responses. It took a little more than a day to receive the responses.

Humor Comprehension Survey (Bilingual & L2 Sample)

After the 3-chapter meeting, I created the Humor Comprehension Survey (Appendix B) for my multilingual population. Seeing as how I only had to add a few new questions to the survey, I simply had to request a change in my original IRB protocol. Once it was approved, I created a new HIT on MTurk. Because the goal was to recruit multilingual users of English, I set the parameters to where only participants from non-English speaking countries could respond to the survey, excluding countries like the US, Canada, Australia. I paid each participant forty-five cents for their work and ended up with 312 responses. It took three days to receive the responses.

Data Analysis

After I collected my data, I made three group for analysis: L1, L2, and Bilingual users of English. Before all inferential statistics done on this study, the appropriate descriptive statistics were first run to test for normality. For the humor categorization questions, I had to first test whether there was a systematic relationship between the two variables of humor categorization and language group. Five of the six videos suggested a significant relationship between the two variables, so the appropriate post-hoc tests were run to further clarify the differences found in

how the language groups categorized the clips. Additionally, three Pareto analyses were run to better visualize how each language group categorized the video clips. These analyses helped to answer the first two research questions.

To answer the third research question, six one-way ANOVAs were run to test the difference between how funny each language group rated the videos. Significant differences were found in four of the six videos and the descriptive statistics were used to clarify the differences found.

To answer the last research question, six one-way ANOVAs were run on the question measuring language comprehension and another six one-way ANOVAs were run on the question measuring comprehension of speaker intent. Significant differences were found in only one of the videos and the descriptive statistics were used to clarify the differences.

Chapter Summary

In this chapter, I provided the blueprint by which I measured humor comprehension among multilingual users of English. I started by explaining the research design, then described my participants and my sampling procedure. I then explained how I choose the types of humor to measure and the video examples of each. After those examples were chosen, I conducted a validation survey to make sure the video clips were working a helpful way. The results showed that videos, although problematic on several levels, generally worked for my purposes. From there, I moved on to explain my main survey instrument. I then overviewed my data collection and analysis, and finished with the study's limitations.

The next chapter will discuss the results of my study.

CHAPTER 4

RESULTS

The purpose of this study is to measure how multilingual users of English comprehend distinct types of sitcom humor, specifically: sarcasm, wordplay, and teasing. Humor comprehension is multifaceted and these results seek to paint a clearer picture of what humor comprehension involves. In this chapter, I start by presenting the results in relation to different facets of humor comprehension. The results will show how comprehension involves humor categorization, funniness ratings, language comprehension, and awareness of speaker intention. All analyses were computed using SPSS.

Humor Categorization Across Language Groups

One aspect of humor comprehension that this study addressed is how participants categorize different types of humor. The purpose of this section is to paint a clearer picture about what this looks like across language groups. The survey asked participants to watch six video examples and then categorize which type of humor was most represented in each clip. Overall, I found that there were several differences in how the three language groups categorized the six videos. Using the merged data set with equal groups (L1=90, Bilingual=90, L2=90), Table 5 shows the descriptive statistics for how each video was categorized.

Table 5

Language Groups' Categorization of the Six Videos Using Equal Groups

	L1	Bilingual	L2
SARC1			
Sarcasm	44	19	52
Wordplay	7	20	1
Teasing	13	18	6
Scripted Joke	18	18	17
Pun	3	2	1
Deadpan	2	3	0
Self-	0	7	2
Deprecating			
Slapstick	3	3	11
SARC2			
Sarcasm	36	20	36
Wordplay	9	6	4
Teasing	14	15	21
Scripted Joke	14	20	15
Pun	2	8	2
Deadpan	4	6	5
Self-	8	9	5
Deprecating			
Slapstick	3	6	2
WP1			
Sarcasm	5	5	4
Wordplay	58	37	75
Teasing	11	10	2
Scripted Joke	6	22	2
Pun	3	10	6
Deadpan	1	0	0
Self-	1	3	0
Deprecating			
Slapstick	5	3	1
WP2			
Sarcasm	17	13	16
Wordplay	20	16	11
Teasing	3	7	3
Scripted Joke	12	20	17
Pun	19	9	24
Deadpan	12	8	1
Self-	6	12	17
Deprecating			
Slapstick	1	5	1

TEASE1			
Sarcasm	9	8	6
Wordplay	7	15	1
Teasing	58	37	61
Scripted Joke	8	13	14
Pun	2	6	3
Deadpan	2	5	2
Self-	2	4	1
Deprecating			
Slapstick	2	2	2
TEASE2			
Sarcasm	4	4	5
Wordplay	10	16	13
Teasing	37	18	27
Scripted Joke	14	18	8
Pun	3	10	5
Deadpan	10	7	12
Self-	8	11	8
Deprecating			
Slapstick	4	6	12

Table 5 shows us several things. First, the L1 and L2 groups seem to broadly have a clear majority choice for each video. However, the Bilingual sample seems a bit more diverse in its choices, which hints at this group being different from the first two. Second, it is interesting to see how there are very few categories with zero selections. This could either suggest that participants vary widely in how they categorize humor – which is true – or that participants in MTurk might choose a category at random to complete the survey faster. However, these descriptive data only tell part of the story. Inferential statistics are needed to decide whether or not these observed differences are systematic.

This section will first identify the relationships found between language groups and categorization using a Chi-Square analysis with the needed post-hoc tests. Then, a Pareto analysis will be used to show how the majority of participants in each language group

categorized the videos. Finally, a second Chi-Square analysis will clarify our view of categorization even more.

Differences Between Language Groups

To start, I had to find out whether there was a systematic relationship between language group and humor categorization. Using the data set with equal groups (L1=90, Bilingual=90, L2=90), a Chi-Square analysis was run on each video example. The Chi-Square test is used to test if a relationship exists between two variables – in this case language group and humor categorization. Table 6 shows the results from each video. A significant p-value indicates that there is a systematic relationship between how language groups categorize the videos and the outcomes are not by pure chance.

Table 6

Chi-Square Analysis of Language Group and Humor Categorization

Video Example	N	df	X^2	p-value
SARC1	270	14	61.60	<.0001
SARC2	270	14	20.50	.115
WP1	270	14	53.74	<.0001
WP2	270	14	32.98	.003
TEASE1	270	14	28.19	.013
TEASE2	270	14	22.99	.061

Based on Table 6, we can see that this analysis suggests a systematic relationship between language group and humor categorization in SARC1, WP1, WP2, and TEASE1 as noted by the significant p-values. However, the Chi-Square analysis does not show us where these differences lie. Thus, to locate these differences, several post-hoc tests were run. Because the data was not normally distributed, a Kruskal Wallace H Test was run to test the difference between language group and humor categorization. As shown in Table 7, there were significant

differences found in how the language groups categorized the first three videos taken on the survey.

Table 7

Kruskal Wallace H Tests to Test Difference Between Language Groups and Humor Categorization

Video Example	N	df	X²	p-value	Mean Rank
SARC1	270	2	10.46	.005	L1=125.22 Bi=156.24 L2=125.03
SARC2	270	2	12.19	.002	L1=124.92 Bi=158.31 L2=123.27
WP1	270	2	25.49	.0001	L1=132.08 Bi=162.45 L2=111.97

Additionally, seeing that categorization of the first three videos on the survey were found significantly different across language groups, three two-group Mann-Whittney U tests were run to test the differences between how each pair of the groups (L1/Bilingual, L1/L2, and Bilingual/L2) categorized SARC1, WP1, and SARC2. This analysis shows us exactly where those differences lie. The results are shown in the table below.

Table 8

Mann-Whitney U Results Between Language Groups

Lang. Groups	N	Mean Rank	U	p-value	r
SARC1					
L1/Bilingual	180	L1 79.76 Bilingual 101.24	3083.5	.004	.21
L1/L2	180	L1 90.96 L2 90.04	4008.5	.897	.01
Bilingual/L2	180	Bilingual 100.51 L2 80.49	3149.5	.007	.20
WP1					
L1/Bilingual	180	L1 80.16 Bilingual 100.84	3119.5	.004	.22
L1/L2	180	L1 97.42 L2 83.58	3427.5	.021	.17
Bilingual/L2	180	Bilingual 107.11 L2 73.89	2555.0	<.0001	.37
SARC2					
L1/Bilingual	180	L1 79.56 Bilingual 101.44	3065.0	.004	.21
L1/L2	180	L1 90.87 L2 90.13	4017.0	.922	.01
Bilingual/L2	180	Bilingual 102.37 L2 78.63	2982.0	.002	.23

Based on this analysis, it appears that the Bilingual group is the source of the differences. In each pairing, the Bilingual group was significantly different from the other two groups. However, based on Cohen's effect size, the power (r) of the difference with the Bilingual group is small to medium.

Verbal Explanation of Analyses

In terms of humor categorization, I used the Chi-Square analysis to test if there there was a systematic relationship between the language group and humor categorization variables. The test showed that, indeed, there was a relationship between the two variables, but that is where the test's results end. To see if there were any differences with the videos, several post-hoc tests

were run, such as the Kruskal Wallace H test and the Mann-Whitney U test. From those post-hoc tests, differences were found in first three videos on the survey (SARC1, WP1, SARC2), and the differences were primarily due to how the Bilingual group categorized the videos. However, even though these tests clarified the differences that exist between groups, they do not tell us much about what categories were used to label each video.

Differences Between Humor Categorization Choices

Overall, there was a wide degree of variance in humor categorization across the three samples. To explain the variance, I used a Pareto analysis to show how each video example was categorized. This simple analysis operates on the understanding that for many phenomena, the top 20% of categories make up 80% of the frequency of the data. This way of viewing the results paints a clearer picture of how each sample categorized the video clips. Table 9 shows the results of the L1 sample. The bolded titles at the top of the table represent the different video examples and the following categories and percentages are the participants' top choices.

Table 9

Pareto Analysis: L1 Sample

SARC1	SARC2	WP1	WP2	TEASE1	TEASE2
Sarcasm 55.2	Sarcasm 44.4	Wordplay 74.1	Wordplay 43.2	Teasing 65.1	Teasing 48.6
Scripted Joke 20.1	Teasing 15.8	Teasing 7.3	Scripted Joke 18.1	Scripted Joke 10.8	Scripted Joke 10.9
Teasing 10.4	Scripted Joke 14.4		Sarcasm 15.3	Sarcasm 6.9	Wordplay 10.1
	Self-Deprecating 8.9		Deadpan 11.8		Deadpan 8.3
					Self-Deprecating 7.3

The core categorization based on my analysis of humor types was found to have the largest frequency of categorization. Some were quite clear, such as the first example of wordplay (WP1), but others were not so, such as the second example of sarcasm (SARC2). Generally, this shows that the L1 sample categorized the videos according to the correct categories, but it also showed a high degree of variation, specifically in the SARC2, WP2, and TEASE2 examples. Each of the second examples (SARC2, WP2, TEASE2) received a more varied response and had more categories used to describe them. Additionally, the wordplay examples received both the highest (WP1=74.1) and lowest (WP2=44.2) scores. Overall, there is a clear interplay between sarcasm, teasing, scripted jokes, and wordplay in this sample.

Although the majority of the L1 sample chose the correct humor type for each example, the bilingual sample used more categories to describe the videos. The next table shows the results from the bilingual sample.

Table 10

Pareto Analysis: Bilingual Sample

SARC1	SARC2	WP1	WP2	TEASE1	TEASE2
Wordplay 25.68	Scripted Joke 22.07	Wordplay 55.41	Wordplay 25.23	Teasing 44.59	Wordplay 26.58
Sarcasm 22.97	Sarcasm 18.02	Scripted Joke 21.17	Scripted Joke 22.07	Wordplay 19.37	Scripted Joke 20.27
Scripted Joke 22.27	Teasing 17.57	Teasing 9.46	Sarcasm 13.51	Scripted Joke 13.96	Teasing 18.92
Teasing 19.37	Wordplay 14.86		Deadpan 13.06	Sarcasm 8.56	Self- Deprecating 13.96
	Deadpan/ Slapstick* 9.01		Self- Deprecating 12.16		Slapstick 7.21

*In this case, both Deadpan and Slapstick received 9.01% of the ratings.

The bilingual sample was, by far, the most varied among the three groups, which is consistent with the analyses between language groups previously reported. For instance, this group used five categories to describe three of the videos (SARC2, WP2, TEASE2) and four to describe SARC1 and TEASE1. They also seemed to struggle with categorizing sarcasm – more people categorized SARC1 as wordplay and SARC2 as a scripted joke. Seen another way, the bilingual group categorized three of the videos similarly to the L1 group and three as different than the L1 group. Like the L1 group, however, the bilingual group also used more categories to describe SARC2, WP2, and TEASE2. Also like the L1 group, there is a clear interplay between sarcasm, teasing, scripted jokes, and wordplay in this sample.

The third group is the L2 population, and as the table below shows, it is quite similar to the L1 sample.

Table 11

Pareto Analysis: L2 Sample

SARC1	SARC2	WP1	WP2	TEASE1	TEASE2
Sarcasm 57.78	Sarcasm 40.0	Wordplay 90.0	Wordplay 38.89	Teasing 67.78	Teasing 30.0
Scripted Joke 18.89	Teasing 22.33		Scripted Joke 18.89	Scripted Joke 15.56	Wordplay 20.0
Slapstick 12.22	Scripted Joke 16.67		Self-Deprecating 18.89		Deadpan 13.33
	Wordplay 14.86		Sarcasm 17.78		Slapstick 13.33
					Scripted Joke/Self-Deprecating* 8.89

*In this case, both Scripted Joke and Self-Deprecating received 8.89% of the ratings.

In this sample, the correct humor type was the most dominant for each example. Scripted joke was the second highest score for three of the videos (SARC1, WP1, and TEASE1). The highest

ranking of all three samples is the L2 group's rating of WP1 (90.0), which is the only instance where a second category is not needed to reach the Pareto analysis' 80% mark. Like the previous two groups, the L2 group also used more categories to describe SARC2, WP2, and TEASE2. Additionally, like the previous two samples, there is a clear interplay between sarcasm, teasing, scripted jokes, and wordplay in this sample.

Overall, the results from the three Pareto analyses clarified the differences in how three samples categorized the video clips. There was a high degree of variability among each sample and some trends emerged. First, the second examples of each type of humor (SARC2, WP2, TEASE2) received the most varied responses. The participants used more categories to describe the second examples than the first ones. Second, WP1 was the highest rated video example across all three samples (L1=74.1, Bilingual=55.4, L2=90.0). Third, all three samples showed that sarcasm, wordplay, teasing, and scripted jokes were the most salient categories used, thus suggesting an interplay between these categories.

Being that the categories of sarcasm, wordplay, teasing, and scripted jokes were the most common types of humor used to describe the videos, I wanted to see if there was a systematic relationship between these prominent categories. To test this, I ran a Chi-Square analysis using the categories that were shared across each group. This is a narrower analysis that paints a clearer picture of what choices the three samples were making. As Table 12 shows, language group is a systematic variable that functions above the level of chance for five of the six videos.

Table 12

Chi-Square Results of Humor Categorization Between Language Groups' Top Choices

Video Example	df	X^2	p-value
SARC1	4	51.99	<.0001
SARC2	6	21.85	<.0001
WP1	2	26.73	<.0001
WP2	6	10.37	.11
TEASE1	4	37.56	.0001
TEASE2	6	37.82	.0001

However, this analysis only tells us that a relationship exists. The descriptive data from the three Pareto analyses help to show where those differences appear in each video.

SARC1. For the first video of the survey, the L1 and L2 samples were nearly the same in their categorization – both choosing sarcasm and scripted jokes the most. However, they differed in the third category they chose, with the L1 group choosing teasing and the L2 group choosing slapstick. The majority of the Bilingual group, on the other hand, categorized the first video as wordplay (25.68%), with the second highest category of sarcasm being slightly below that at 22.97%. This shows similar categorization among the L1 and L2 groups, but much different categorization among the Bilingual group.

SARC2. The categorization of SARC2 followed a similar pattern as SARC1. The L1 and L2 groups were quite similar in the categories they chose to describe the video, with the top three choices being sarcasm, teasing, and scripted jokes. A slight majority of the Bilingual group, however, categorized the video as a scripted joke (22.07%), with the second highest category being sarcasm (18.02%). Again, the Bilingual group is the outlier among the three samples.

WP1. Even though WP1 was the most successfully categorized video among the six, there was still a significant relationship found between language groups and the its categorization. 74.1% of the L1 group and 90% of the L2 group categorized it as wordplay,

while only 55.41 percent of the Bilingual group did. For the more varied Bilingual group, 21.17% chose scripted joke while 9.46% chose teasing.

WP2. Even though WP2 was one of the least successfully categorized videos, there was no significant relationship found between language group and this video's categorization. So, for this video, we cannot talk about any differences between the groups.

TEASE1. For TEASE1, again, the L1 and L2 group were nearly the same with teasing and scripted joke being their top choices. The Bilingual group, however, was more varied in their categorization. The majority of the Bilingual group chose teasing (44.59%), but wordplay (19.37%) and scripted joke (13.96%) also were present.

TEASE2. TEASE2 offered the most diverse categorization among the three groups. Even the L1 and L2 groups, groups that were quite similar in the previous five videos, were different. For example, the top three categories used by the L1 group were teasing, scripted joke, and wordplay, while the top three categories for the L2 group were teasing, wordplay, and deadpan. The Bilingual group were different from the L1 and L2 groups by choosing wordplay, scripted joke, and teasing to describe the video.

Verbal Explanation of Analyses

Seeing as how four humor categories (sarcasm, wordplay, teasing, scripted joke) were overlapping across all video examples, I ran Chi-Square analysis to see if there was a systematic relationship among the four categories. The results showed that there was a significant relationship found in five of the six videos, and I used the descriptive data in the Pareto analyses to describe those relationships.

Summary of Humor Categorization Findings

Seeing that this study posits that humor categorization is one facet of humor comprehension, the results thus far show us that 1) there is a systematic relationship between the language group and humor categorization variables, 2) differences were found in first three videos shown on the survey (SARC1, WP1, SARC2), and 3) the differences are primarily due to how the Bilingual group categorized the videos. The three Pareto analyses then clarified exactly where those differences occurred in terms of category choice.

Consequently, these results allow us to answer the first two research questions. The first asks if humor type is a stable category of analysis. The Pareto analyses show us how varied the participants were in categorizing the video examples. Even the L1 group, the audience that the examples were originally marketed to, showed high degrees of variance in their choices.

The second research question asked if there were significant differences in how L1, L2, and Bilingual participants categorized different types of humor. Overall, there was significant difference found in how the three groups categorized the first three videos taken on the survey: SARC1, $X^2(2) = 10.46, p = .005$, with a mean rank score of 125.22 for the L1 group, 156.24 for the Bilingual group, and 125.03 for the L2 group; WP1, $X^2(2) = 25.49, p = .000$, with a mean rank score of 132.08 for the L1 group, 162.45 for the Bilingual group, and 111.97 for the L2 group; SARC2, $X^2(2) = 12.19, p = .002$, with a mean rank score of 124.92 for the L1 group, 158.31 for the Bilingual group, and 123.27 for the L2 group. The Mann-Whitney U test (Table 5), as well as the Pareto analysis (Table 7), clarified that the Bilingual group was the main source of the difference.

Turning to another facet of comprehension, the next section will present the results of how funny each group rated the videos.

Funniness Ratings Across Language Groups

In addition to asking participants to categorize the videos, the survey also asked them to rate how funny each video was. Participants were given a 5-point Likert scale where 1 meant “Not at all funny” and 5 meant “Very funny. Looking at the descriptive data in Table 13, a few observations can be made. First, the first examples of each humor type were rated higher than the second examples across all three samples. Second, SARC1 and TEASE1 were rated the funniest among the samples. Third, the Bilingual group rated all but one video (SARC2) as funnier than the other two samples, perhaps suggesting a better sense of humor.

Table 13

Means and Standard Deviations for Funniness Ratings

Language Group	<i>M</i>	<i>SD</i>	N
SARC1			
L1	3.39	1.13	90
Bilingual	3.56	1.02	90
L2	3.39	1.29	90
SARC2			
L1	2.37	1.29	90
Bilingual	2.28	1.14	90
L2	1.90	1.13	90
WP1			
L1	2.99	1.27	90
Bilingual	3.44	1.08	90
L2	2.70	1.35	90
WP2			
L1	2.28	1.31	90
Bilingual	2.43	1.21	90
L2	2.40	1.36	90
TEASE1			
L1	3.11	1.35	90
Bilingual	3.62	1.14	90
L2	3.53	1.27	90
TEASE2			
L1	2.33	1.22	90
Bilingual	2.90	1.26	90
L2	2.22	1.28	90

However, inferential tests are needed to confirm whether these observed differences are systematic. Using the data set with equal group numbers, six one-way ANOVAs were run on each of the videos to test for difference among the three language groups. Overall, the results showed significant differences in how funny four of the six videos were rated between the language groups. Additionally, like in the categorization section, the bilingual group appears to be the reason for the differences. The next sections report the results from the one-way ANOVAs run on each video.

SARC1

Since the assumption of homogeneity of variance was not met for this video, I used the obtained *Welch's* adjusted *F* ratio, *Welch's* $F(2, 176.44) = .709, p = .49$. There were no significant differences found between how funny each language group rated this video; however, this was the highest rated video of the six. Participants generally viewed this video as the funniest.

SARC2

For SARC2, there were significant differences found between groups, $F(2, 267) = 3.91, p = .021$. The post-hoc Bonferroni test located the difference to be between the L1 and L2 groups ($p = .03$). There were no significant differences found with the Bilingual group.

WP1

Since the assumption of homogeneity of variance was not met for this video, I used the obtained *Welch's* adjusted *F* ratio, *Welch's* $F(2, 176.34) = 8.80, p = .001$. There were significant differences found between groups. The Tamhane post-hoc test showed the difference to be with the Bilingual group. There were significant differences between the Bilingual group and the L1 group ($p = .03$) and between the Bilingual group and the L2 group ($p = .000$).

WP2

For WP2, there were no significant differences found between groups, $F(2, 267) = .36, p = .70$.

TEASE1

Since the assumption of homogeneity of variance was not met for this video, I used the obtained *Welch's* adjusted *F* ratio, *Welch's* $F(2, 177.15) = 4.07, p = .019$. There were significant differences found between how funny each language group rated this video. The Tamhane post-hoc test showed the difference to be between Bilingual group and the L1 group ($p = .02$). This video was also one of the highest rated videos, coming in second highest after SARC1.

TEASE2

For TEASE2, there were significant differences found between groups, $F(2, 267) = 7.57, p = .001$. The post-hoc Bonferroni test located the difference to be with the Bilingual group. There were significant differences between the Bilingual group and the L1 group ($p = .008$) and between the Bilingual group and the L2 group ($p = .001$).

Verbal Explanation of Analyses

The ANOVA test analyzes variance in a data set. These ANOVA tests were run to test if there were any differences between how funny each sample rated the videos. Significant differences were found in four of the six videos, as described above.

Summary of Funniness Ratings Across Humor Groups

Looking at the descriptive statistics of funniness ratings (Table 10), the Bilingual group generally rated the videos higher than the other two groups. However, those differences were only significant in three of the videos (WP1, TEASE1, and TEASE2). Additionally, there was a significant difference found between the L1 and L2 group for SARC2. Finally, there were no

significant differences found between groups for SARC1 and WP2. These results allow us to answer the third research question that asks if there are significant differences between how L1 and multilingual participants rate different types of humor. Turning to another facet of humor comprehension, the next section will present the results for language comprehension among multilingual participants.

Multilingual Comprehension Across Language Groups

In addition to asking participants to rate how funny they considered each video, the survey sent only to multilingual participants included one question on language comprehension and another on speaker intention. The results show high levels of understanding for both questions, but only two instances of significant difference. Additionally, unlike the previous tests, the data set used for the following results included the full sample of Bilingual participants (N = 222) and the full sample of L2 participants (N = 90).

Language Comprehension

The language comprehension question asked rate the degree to which they agreed with the statement: I understood the language used in this video. For the 5-point Likert scale, 1 represented “Strongly disagree” and 5 represented “Strongly agree”. As table 14 shows, there were high levels of language comprehension for both groups, although the L2 group scored slightly higher than the Bilingual group.

Table 14

Means and Standard Deviations of Multilingual Language Comprehension

Language Group	<i>M</i>	<i>SD</i>	N
SARC1			
Bilingual	4.15	.815	222
L2	4.30	.917	90
SARC2			
Bilingual	3.95	.936	222
L2	4.00	1.091	90
WP1			
Bilingual	4.23	.818	222
L2	4.40	.884	90
WP2			
Bilingual	3.89	1.041	222
L2	4.12	1.130	90
TEASE1			
Bilingual	4.13	.870	222
L2	4.44	.721	90
TEASE2			
Bilingual	3.83	1.031	222
L2	3.83	1.211	90

To test if there were any significant differences between the two groups, six one-way ANOVAs were run for each video. However, only the TEASE1 video showed a significant difference between the two groups, $F(1, 310) = 9.16, p = .003$. In this case, the L2 understood the language in the video better than the Bilingual group.

Understanding of Speaker Intention Across Language Groups

The speaker intention question asked rate the degree to which they agreed with the statement:

The characters in this video intended to be funny. For the 5-point Likert scale, 1 represented “Strongly disagree” and 5 represented “Strongly agree”. As table 12 shows, there were high levels of speaker intention comprehension for both groups, and unlike the language comprehension results, the groups were more diverse in their scores – the Bilingual group understood three videos more than the L1 group and vice versa.

Table 15

Means and Standard Deviations of Multilingual Speaker Intention Comprehension

Language Group	<i>M</i>	<i>SD</i>	N
SARC1			
Bilingual	4.27	.795	222
L2	4.39	.831	90
SARC2			
Bilingual	3.51	1.217	222
L2	3.28	1.245	90
WP1			
Bilingual	4.24	.814	222
L2	4.40	.747	90
WP2			
Bilingual	3.56	1.201	222
L2	3.49	1.326	90
TEASE1			
Bilingual	4.18	.886	222
L2	4.61	.665	90
TEASE2			
Bilingual	3.83	1.091	222
L2	3.81	1.059	90

To test if there were any significant differences between the two groups, six one-way ANOVAs were run for each video. However, only the TEASE1 video showed a significant difference between the two groups, $F(1, 310) = 16.962, p = .000$.

Chapter Summary and Review of Results

Humor comprehension is a multifaceted competency. The results presented in this chapter helped to present a broader conception of multilingual humor comprehension. I will close this chapter by reviewing the major results by answering each research question.

Research Question 1

The first research question asked whether humor type is a stable category of analysis. By asking participants to categorize each video, the results showed the categorization across videos to be highly varied. The Pareto analyses (Tables 6, 7, and 8) show us how varied the participants

were in categorizing the video examples. Even the L1 group, the audience that the examples were originally marketed to, showed high degrees of variance in their choices. Further, the L1 and L2 group, even though they were not significantly different, still showed a high degree of variability, and the fact that the Bilingual group was significantly different from the L1 and L2 groups does not negate this fact. Therefore, because of this, the data suggests that humor type is not a stable category of analysis.

Research Question 2

The second research question asked if there were significant differences in how L1, L2, and Bilingual participants categorized different types of humor. Overall, there was significant difference found in how the three groups categorized the first three videos taken on the survey: SARC1, WP1, and SARC2. The Mann-Whitney U test (Table 5), as well as the Pareto analysis (Table 7), clarified that the Bilingual group was the main source of the difference. Therefore, it is fair to say that there were significant differences found in how L1 and multilingual participants categorized different types of humor.

Research Question 3

The third research question asks if there are significant differences between how L1, L2, and Bilingual participants rate different types of humor. The descriptive statistics of funniness ratings (Table 10) suggest the Bilingual group generally thought the videos were funnier than the other two groups did. However, those differences were only significant in three of the videos (WP1, TEASE1, and TEASE2). Additionally, there was a significant difference found between the L1 and L2 group for SARC2. Finally, there were no significant differences found between groups for SARC1 and WP2. The data suggests that there were significant differences found across all humor types (sarcasm, wordplay, and teasing).

Research Question 4

The fourth research question asks about difference in humor comprehension across groups and humor types. The two survey items on language comprehension and speaker intention help to answer this question. The descriptive data on these two items (Tables 11 and 12) show quite high ratings of both language comprehension and understand of speaker intention. However, the only significant difference between the Bilingual and L2 group was found in the TEASE1 video.

The next chapter will seek to add more context to these results by explaining their importance to the field of humor studies and L2 pragmatics.

CHAPTER 5

INTERPRETATION AND CONCLUSIONS

The purpose of this study is to measure how multilingual users of English comprehend distinct types of sitcom humor, specifically: sarcasm, wordplay, and teasing. The results showed differences within the multilingual participants (i.e., between how L2 and Bilingual samples understood humor), and suggested similarities between the L1 and L2 samples. In this chapter, I will first discuss the two primary areas of my findings concerning multilingual humor comprehension: humor categorization and funniness ratings. For the first, I begin with an interpretation of the findings, then discuss the challenges of researching humor types, thus reinforcing the instability of humor as a category of analysis. After that, I show how categorization can be viewed through the lens of Attardo's (1994) General Theory of Verbal Humor. Next, I discuss the findings about funniness ratings and discuss what funniness ratings can tell us about humor comprehension among three diverse samples. After that, being that the Bilingual group was the source of the most difference in this study, I suggest reasons for why this is so. I close the chapter with what I see as the study's contribution to the fields of humor studies and pragmatics, as well as implications for future research.

Humor Categorization

The following is a discussion concerning humor categorizing across different samples of participants.

L1 Sample

Looking at the Pareto analysis (Table 9), the majority of L1 participants categorized the videos according to the desired humor type; however, the percentages of these choices ranged greatly from 43% (lowest) in WP2 to 74% (highest) in WP1. First, and most generally, the

analysis shows that there is some degree of variation over the categorization of humor type among a L1 English speaking sample. This is quite interesting in itself and it shows that humor categorization is not monolithic among a culture. Thus, if the categorization of these clips varies among the culture the clips were originally meant for, then it would be safe to expect a high degree of variability among the Bilingual and L2 samples of participants. Second, the category of Scripted Jokes came in second place for 4 of the 6 video examples, which suggests this category has a wide overlap with the other humor categories. My speculation is that this is because the video examples all come from “scripted” television shows. It makes sense that participants would categorize these jokes as scripted due to this fact.

Third, the wordplay category received the worst categorization judgement – they had both the highest and lowest scores. The first wordplay example (“Salsa/Seltzer”) received the highest rating at 74%. I think that this example of wordplay was clear to participants because the entire clip centered on two men using funny voices to say the same word over and over again. The second example of wordplay (“Choosing Daycare”) received the lowest rating at 43%. The Pareto Analysis showed that participants used four types of humor to categorize this clip: Wordplay, Scripted Jokes, Sarcasm, and Deadpan. As mentioned, Scripted Jokes were present among all clips, probably because this is a scripted television show. As for sarcasm, the main character Jim is widely known to be a sarcastic character, often using sarcasm in interaction. So, perhaps prior knowledge of the character could have swayed participants rating. And as for Deadpan, the humor delivered in the clip was understated and without laughter, so the wordplay in the clip could have been viewed as delivered in a deadpan manner. There also could be a timing effect for this clip because the instance of wordplay occurred at the very end of the clip.

Bilingual Sample

Unlike the L1 group, the Bilingual sample (Table 10) only categorized three of the videos according to the desired humor type (WP1, WP2, TEASE1). Several observations can be made from the Pareto analysis. First, this group had the most varied categorization judgments across the three samples. For instance, the highest percentages in four of the videos (SARC1, SARC2, WP2, TEASE2) were all in the 22%-26% range, suggesting high variability and little agreement among the sample.

Second, the sample seemed to have difficulty categorizing the two sarcasm examples. For SARC1, 25.68% of the sample categorized the clip as wordplay, with sarcasm coming in second highest at 22.97%. With SARC2, 22.07% of the sample categorized the clip as scripted joke, with sarcasm following at 18.02%. The same four categories were used to describe the sarcasm examples: wordplay, sarcasm, scripted joke, and teasing. While sarcasm and scripted joke can be understood considering the discussion on the L1 sample, the other two categories are more confounding. In some sense, the biting nature of sarcasm could possibly be construed as a form of teasing, but I cannot reason why the sample selected wordplay as the highest category for SARC1.

Third, the second examples of each video (SARC2, WP2, TEASE2) all needed more five categories to hit the Pareto analysis' 80% mark. Being that the sample was highly varied in their categorization of these videos suggests a strong disagreement. Overall, the Bilingual sample's choices were more difficult to rationalize than the L1 or L2 samples. It's possible that the participants simply guessed in their answers.

L2 Sample

The L2 sample (Table 11) was quite similar to the L1 sample in their categorizations. For instance, like the L1 sample, the L2 sample categorized all six videos according to the desired humor type; however, the percentages of these choices ranged greatly from 30% (lowest) in TEASE2 to 90% (highest) in WP1. First, the analysis showed that the L2 sample had the best categorization of three of the videos across all samples. SARC1, WP1, and TEASE1 all received higher percentages on the Pareto analysis than the L1 sample, thus suggesting a better understanding of those three videos. Second, 90% of the L2 population categorized WP1 as wordplay, making it the clearest example among all the videos. I think the reason for this is the simple nature of the video. The participants did not need to know the characters or plot to be able to label the type of humor exemplified.

Third, like all three samples, the TEASE2 video received the worst categorization among the videos. Only 30% of the L2 sample categorized it as teasing. Nearly the same amount (20%) categorized it as wordplay. This could possibly be due to a short section of the scene where one character (Kevin) is teasing another character (Gabe) about how Gabe uses the word “ciao.” Participants may have thought this was the point of the video. Deadpan was the next highest category, which is understandable given the dry humor used in the office, as well as the lack of laugh track. After that, scripted joke and self-deprecating are tied at 8.89%. As mentioned before, it makes sense that participants categorize any of the videos as scripted joke because they are all scripted sitcoms. Additionally, several characters in *The Office* often use self-deprecating humor, especially the central character in the clip, Gabe.

Challenges of Researching Humor Types

Seeing as how the three samples categorized the videos in significantly different ways, and seeing the number of choices used to describe each video, the data suggests that humor categorization is a complicated endeavor. For the current study, it is possible that the video examples were not as clear as they could have been; some may have included multiple types of humor. Indeed, the three Pareto analyses confirmed Norrick's (2003) warning about categorizing humor when he noted, "[it] is neither possible nor sensible, because the forms [of humor] naturally fade into each other in conversation" (p. 1338). The world is messy, and people do not always make the choices you expect them to make. However, operating from standpoint that the videos were acceptable, I believe that the challenges present may have to do with the defining the categories.

First, both the terms used in the categories and definitions of the categories could be problematic in terms of cross-translatability. That is, even if a category is defined, the definition uses words that could be misconstrued or understood completely different than intended. Goddard (2018) reviewed recent scholarship on conversational humor and found "a profusion of ordinary English words in its informal descriptive vocabulary" (p. 489). Citing five scholars' definitions of humor categories (i.e. teasing, quip, banter, humor, and amusement), he observed that the definitions used for each involved "a maze of interrelated and overlapping English terms and no attempt whatever to be systematic" (p. 489). For example, Goddard (2018) shows how Holmes and Mara's (2002) definition of *quip* ("a short, witty but also ironic comment about the on-going transaction or topic under discussion" [p. 75]) depends on undefined terms like "witty" and "ironic," as well as the technical term "on-going transaction." These terms are complex in themselves and could easily be prone to misinterpretation. Going further, Goddard (2018) notes,

Surprising as it may be to many Anglophone scholars, semantically complex terms like “joke” and “tease,” “wit” and “humor,” are English-specific in their meanings to a greater or lesser degree. Not one of them has precise equivalents even across a sample of major Indo-European languages, such as French, German, and Russian, let alone across the diverse languages of the world. (p. 491)

Therefore, inspecting my own definitions through this framework could possibly suggest a reason for the diverse range of responses received for each video.

For example, my participants were asked to categorize the videos they watched, and I gave concise, verbal definitions of each humor type. For example, I defined wordplay as “joking about the meanings or sounds of words.” In that definition, I use the term “joking” as a commonly understood term. However, Goddard (2018) explained how some languages, such as French, do not have precise equivalents to the verb “to joke.” He explains how French has two verbs (*plaisanter* and *rigoler*) that are similar, but are not exact semantic matches. Similarly, I define teasing as “to make fun of someone by saying unkind things to him/her.” Again, Goddard would note that French also does not have a clear word for tease – it could encompass two verbs, one of which (*plaisanter*) is the same verb used to mean “to joke.” Thus, thinking about how differently my three samples categorized the six videos, it is worth considering the possible disconnect between the definitions used and the linguistic background of the participant.

However, I think it is equally important to reconsider the participants themselves, particularly that there was a high level of English proficiency across all three samples. It is possible that highly proficient English speakers also carry with them the semantic knowledge behind these different conversational humor terms. This variable could depend on the quality of English instruction received by the participant. It should also be stressed that even though the

definitions used in this study could potentially be problematic in their semantic underpinnings, the statistical analyses used to explain the participants' choices point to one of the study's clear strengths – something rare among this type of research.

Broadening the scope of inquiry from the definitions of each humor type, the next section discusses how the findings on humor categorization can be viewed through the lens of humor theory.

Linking Humor Type and Comprehension to the General Theory of Verbal Humor

In Chapter 2, I discussed Attardo's (1994) General Theory of Verbal Humor (GTVH). To briefly recap, the GTVH proposes six hierarchical Knowledge Resources that must be present to produce humor (see Figure 1). *Language* refers to what is needed to verbalize the text. This Knowledge Resource takes into account the phonetic, morphosyntactic, and pragmatic elements that constitute a humorous utterance. Moving up the hierarchy, *narrative strategy* refers to the type, or genre, of humor used in an utterance. For instance, a person may choose to speak a riddle, pun, or story joke, which all use different narrative strategies. The *narrative strategy* can be linked to humor categorization. The *target* is best defined as the "butt" of the joke; however, not all jokes have a target, which makes this the only Knowledge Resource that is not required in a humorous utterance. The *situation* is simply what the joke is about, or the context of the joke, including information about setting, characters, and events. Next, the *logical mechanism* is the tool by which two opposing scripts are brought together. In other words, this is the way humor is created. Finally, the last Knowledge Resource is *script opposition*, which lies at the core of all humorous instances. Bell and Pomerantz (2016) explain script opposition when they note, "For a text to be humorous, it must be compatible with two scripts that are opposed to each other in

some way” (p. 25). And not only do the scripts have to be opposed to each other, but the speaker and listener must have access to these scripts.

While Attardo’s (1994) GTVH has primarily been viewed as a theory to explain why something is funny, I propose that it could also serve as a model for humor comprehension. Indeed, one could see how each of the Knowledge Resources serve as barriers to comprehension, and it is only through an understanding of each that comprehension takes place. However, I will show through the following example that *narrative strategy* (i.e. humor categorization) may not be necessary for comprehension.

In WP2, a scene from *The Office*, a husband and wife discuss a possible daycare for their baby daughter, but are worried about it being difficult to get in to. Joking about the possibility of not being accepted, the husband states, “there’s always the army...the infantry.” Moving up the Knowledge Resources, the *language* used in this in English and is primarily discussing the topics of new parenthood. The *narrative strategy* used to convey humor was the use of a pun by the father. There is not a direct *target*, or butt of this joke. The *situation* is that a husband and wife work together at the same company and are pregnant with their first child. The two are discussing daycare options for when the mother is ready to return to work. The *logical mechanism* here uses a pun to accomplish the humorous intent. In this case, the father makes a comment about the army and uses the word “infantry,” which shares phonological similarity to the word “infant,” which is relevant to their conversation about daycare. Thus, the *opposing scripts* used in this joke are that of a newborn infant and the military. Understanding each of the Knowledge Resources behind WP2 would ensure comprehension of the humor used in the clip.

However, perhaps an understanding of each Knowledge Resource is not required for comprehension. If we thought of the GTVH as a model for comprehension, one outlier in that

line of thinking would be the *narrative strategy*, which basically serves to label the humorous utterance. The findings of the study across all three samples showed a high degree of understanding for both language and speaker intent; however, there was a high degree of variability in participants' categorizations of the clips. Therefore, this could suggest being able to categorize examples of humor is not a significant factor in comprehension.

Funniness Ratings

The following is a discussion concerning the funniness ratings across different samples of participants.

L1 Sample

The descriptive data of the funniness ratings (Table 13) show some interesting trends. First, the highest rated video for this sample was in the three range (SARC1 = 3.39), so based on the average scores, none of the videos were considered highly funny. I imagine this finding is due to the clips themselves rather than the types of humor they illustrate. This study was not designed to explore which types of humor were rated funnier than others; I think it is more fair to attribute this finding to personal preference. Second, SARC1 was rated the funniest video for this sample. SARC1 was a scene from *Friends* and the sarcasm used in the video followed an outlandish narrative structure between the two characters. Perhaps a combination of this narrative structure and the sitcom's popularity pushed it to the top of the list in terms of how funny the sample rated it.

Third, the first examples of each humor type (SARC1, WP1, and TEASE1) were all rated funnier than the second examples of each type. While there could be several reasons for this, including the order in which they appeared on the survey, I think that one reason is that each of these first examples (SARC1, WP1, and TEASE1) is that each of these sitcoms (*Friends*,

Seinfeld, *Big Bang Theory*) all include laugh tracks. As this is a trend across all three samples, I will address the research on this phenomenon below. Lastly, there was a significant difference found between the L1 and L2 samples in how they rated SARC2. In general, SARC2 was the lowest rated video across all three samples; it was also the shortest in length. Perhaps the clip did not allow enough time to engage participants in the scene.

Bilingual Sample

Like in this categorization questions, the Bilingual group appeared to be the primary source of difference in how funny they found each video in comparison to the other two samples. Several trends appeared in across this sample. First, and most interestingly, the Bilingual group rated five out of the six videos as funnier than the other two samples. The only video they did not rate funnier was SARC2, which again was the least funny video across all three samples. This could suggest that the Bilingual group had the best sense of humor among the three samples. Second, the highest rated video for this sample was TEASE1, which was from *The Big Bang Theory*. One interesting consideration about this finding is that TEASE1 was the only video that included an Indian actor; perhaps that influenced this sample's rating.

Third, I find that the Bilingual sample's comprehension of the sarcasm examples somewhat conflicting. For the categorization findings, the Bilingual group had difficulty categorizing sarcasm; however, there were no significant differences in how funny this sample rated the sarcasm examples. This suggests that categorization and funniness are independent aspects of comprehension. Finally, the Bilingual group rated WP1, TEASE1, and TEASE2 significantly different than the L1 and L2 samples. Although there could be several reasons for these differences, some research suggests that multilingual participants rate humor more favorably simply because they understand it, which I will explain below.

L2 Sample

In some ways, I find the L2 sample most peculiar among the three samples. I expected there to be more differences between it and the L1 sample, but that was not the case. All in all, the L1 and L2 samples looked quite similar (exact in the case of SARC1 rating). As for trends that can be observed, the L2 and Bilingual group both rated TEASE1 the funniest among the six samples. TEASE1 is a scene from *The Big Bang Theory* and this finding suggests that this show quite popular across the globe. One fan site cited that *The Big Bang Theory* is showed in at least 77 countries worldwide (Fandom).

Second, the L2 sample seemed to fall right in the middle in terms of how similar their ratings were to the L1 or Bilingual samples – they were closer to the L1 samples for three videos and closer to the Bilingual sample for three videos. Third, like the previous two samples, the L2 sample rated the first examples (SARC1, WP1, TEASE1) higher than the second examples (SARC2, WP2, TEASE2). This is mostly likely due to the presence or absence of a laugh track. Finally, there was one significant difference found between how the L1 and L2 group on how they rated SARC2. As I explained above, this could be due to the length of the video – it was possibly too short.

The Effects of a Laugh Track

One finding across all three samples was that the videos that included a laugh track (SARC1, WP1, TEASE1) were rated funnier than those without. Of course, the differences could be due to the videos themselves and the participants preference towards them; however, the literature on the effects of laugh tracks on audiences help to shed light on this finding. First, thinking back to how sitcom humor is produced to deliver humorous results, the laugh track is an important part of that process. In a way, the laugh track is another tool of the production team to

accomplish the goal of making people laugh. The research behind that idea is sound – several scholars have suggested that simply hearing laughter can cause a person to react in kind (Cialdini, 1993; Provine, 1996).

In terms of the relationship between laugh tracks and humor ratings, research is mixed and the findings of the current study do not help to clarify it much. Some studies have shown that laugh tracks have no impact on humor ratings (Chapman, 1973; Pistole & Shor, 1979) and others have shown the opposite (Lawson et al., 1998; Porterfield et al., 1988). Platow et al.'s (2005) study clarifies the matter more when by showing that participants rate material more favorably when “they heard in-group laughter rather than out-group laughter or no laughter at all” (p. 542). Seeing that all of the videos used in the current study were from the US, the in-group could be considered a US audience; however, all three samples rated the laugh track videos higher than the non-laugh track videos, which is not consistent with Platow et al.'s (2005) study. Overall, in the case of the current study, the findings suggest that the laugh track does have an impact on how funny diverse samples of participants rate the videos.

The Effect of Comprehension on Funniness Ratings

Understanding that humor is notoriously difficult for multilingual users of English, I expected the multilingual groups to rate the videos as less funny than the L1 sample did. However, two interesting findings in the study were 1) that the L1 and L2 samples were somewhat similar in their funniness ratings, and 2) that the Bilingual sample generally rated the videos funnier than the L1 and L2 groups. Taking the previous discussion about the effects of the laugh track to account, I think that Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris (2017) suggest a reason for such a positive funniness ratings among the L2 and Bilingual samples. In their study about whether jokes are funnier in a native or foreign language, they suggested that

one factor that influences funniness is simply linguistic comprehension. In other words, “in a foreign language, people find a joke funny primarily when they are able to easily understand it” (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017, p. 20). Their study showed how the jokes were systematically rated funnier as the ease of understanding increased.

The multilingual participants in the current study generally had high ratings for understanding the language used in the videos. Thus, taking Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris’ (2017) study into account, the funniness ratings could have been influenced simply by the participants understanding the language used in the videos. However, that still does not explain why the Bilingual sample generally rated the videos as funnier than both of the other samples. The next section will seek to explain how culture could have been a driving force behind those ratings.

The Factor of Culture with the Bilingual Sample

Taking the above results into consideration, it is clear that the Bilingual sample was systematically different than the L1 and L2 samples in the ways they categorized and rated the videos. However, the survey used in this study cannot account for the difference found with the Bilingual sample. The current study focused more on the linguistic factors effecting humor comprehension, and the language and speaker intention ratings among the Bilingual sample were generally high, which suggests that the reasons for the differences may not be linguistic in nature, but rather cultural. The Bilingual sample was made up of three language groups all found in India: Tamil ($n=115$), Malayalam ($n=38$), and Hindi ($n=40$). Although this study cannot speak to the exact reasons for the differences, this section will help contextualize this population in hopes of establishing possible cultural influences.

India is a massive country, which makes it quite difficult to generalize any results. It is rarely appropriate to say “Indians do this” or “Indians do that.” It is important for researchers to take into account its size and linguistic diversity when offering results on Indian participants. One reason for why the differences found in the Bilingual sample may be cultural instead of linguistic is the fact that the three languages represented in this sample are incredibly different from each other. The map below shows which parts of the country these three languages are primarily spoken.

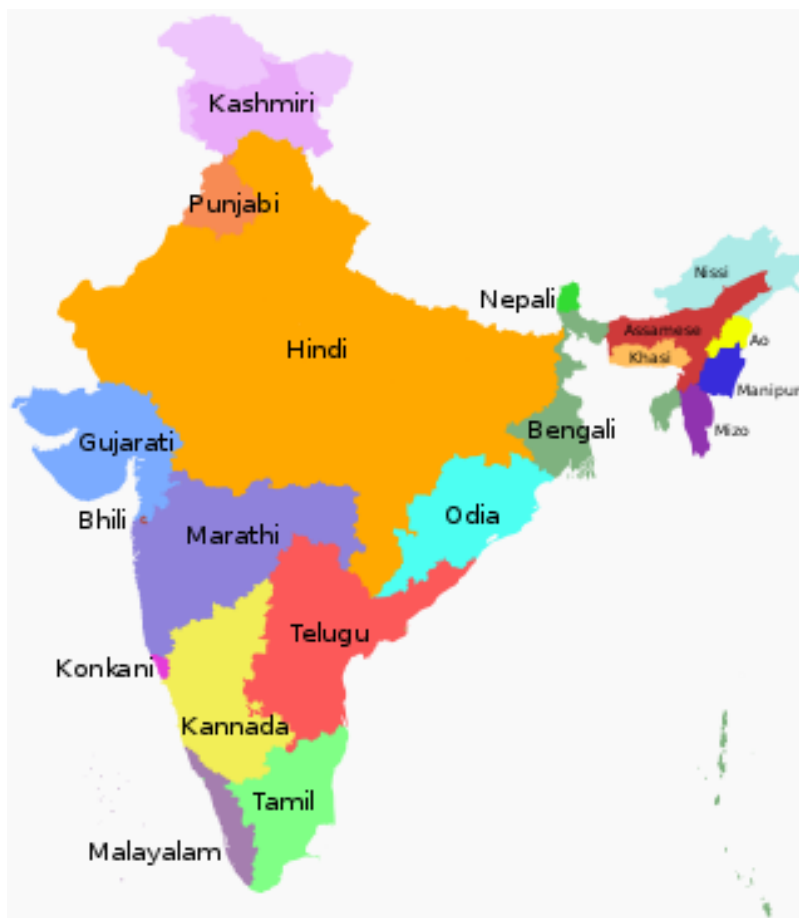


Figure 2. A map of the languages of India. Retrieved from

https://en.wikipedia.org/wiki/List_of_languages_by_number_of_native_speakers_in_India

Looking at the map in Figure 2, one observation is how far apart Hindi speakers are from Tamil and Malayalam speakers, thus indicating a north/south divide. That divide also exists between

the three languages. For instance, Hindi is an Indo-Aryan language, while Tamil and Malayalam are both Dravidian languages. Each of the regions these languages are spoken come with their own distinct cultural identity, which makes it harder to make generalizations among them.

However, even though these three languages are distinct from one another, one unifying element is the national educational system and its policies on English language teaching. The role of English in India has a troubled past, with origins dating back to British colonialism. Today, however, globalization is the driving force behind English language learning in India. For example, India's *National Council of Educational Research and Training (NCERT)* wrote in position paper that "English is in India today a symbol of people's aspirations for quality in education and a fuller participation in national and international life... The visible impact of this presence of English is that it is today being demanded by *everyone* at the very *initial* stage of schooling" (emphasis in original, 2006, p. 1). Thus, the government promotes the teaching of English at a very young age; however, the quality of instruction has proven to be poor – emphasizing academic literacy skills over communicative ones (Thiyagarajan, 2008). This is why even though English is a national language and is taught across the whole country, it is difficult to accurately assess the number of proficient English speakers in the country. Bhattacharya (2017) shows how current scholars cannot agree on this number, which ranges from 1% (National Knowledge Commission, 2000) to 20% (Crystal, 2003). However, even though the demographic data on English usage in India lacks consensus, it is clear that the role of English in India has practical benefits for its citizens.

Put simply: knowing English in India helps a person succeed. Azam et al.'s (2013) supports this when they found that Indian men who spoke English fluently earned 34% more than non-English speaking Indian men. Thus, English proficiency is highly coveted and sought

after; however, it is normally only available to a certain socio-economic class. Indeed, Bhattacharya (2017) notes, “English is today aligned with privileged urban networks within India, with the middle and upper classes, and, consequently, as in colonial times, with the ruling elite” (p. 2). While not universal, there seems to be link between English proficiency and socio-economic status.

The participants in my study can be assumed to fall into a higher socio-economic status by virtue of their high levels of English proficiency. This may also contribute to them watching more entertainment from the US. This analysis is consistent with what research tells us about MTurk participants. Therefore, knowing more about the Bilingual population gives us a clearer point of entry for future research, which should definitely focus on the cultural aspects humor comprehension.

Conclusions

Thinking back to the discussion at the beginning of Chapter 1 about how we often assume differences in pragmatic research, the findings of this study help to challenge that assumption in a few ways. First, I assumed that the L1 sample would rate the videos as funnier than the L2 or Bilingual samples, seeing as how the sitcoms used in the study were all from the US. I could not have been more wrong. The findings actually showed that Bilingual sample rated the videos funnier than both the L1 and L2 groups. Additionally, the L1 and L2 samples were quite similar in their ratings. Second, the categorization results also suggested more similarities than differences. All three of the samples were varied in how they categorized the video clips, with the L2 sample even rating some of the videos more accurately than the L1 sample.

Additionally, the findings complicate the use of the term *multilingual* as a participant descriptor. While the term is the most ideologically generous way to describe the those for whom

English is not their first language, the current study showed how differences within multilingual participants should not be overlooked. The findings of this study suggest differences between L2 and Bilingual users of English, which is an area ripe for research.

Toward a Theory of Global Humor

Overall, I think these findings suggest a global sense of humor that has developed with the spread of US-based entertainment. Perhaps the spread of US sitcoms abroad has, in a way, indirectly taught multilingual users of English how to understand and appreciate different forms of humor. Indeed, Pennycook (2007) noted, “it is hard to see how we can proceed with any study of language, culture, globalization and engagement without dealing comprehensively with pop culture” (p. 81). While still premature in its development, I believe the results of this study lay a groundwork for a new theory of global humor. Indeed, by exploring the sociolinguistic pressures present in the MTurk workforce, we are able to identify how and why a global stratum of society understand sitcom humor.

The results showed that the L2 and Bilingual participants both had high levels of humor comprehension; however, although we do not know why this is so, taking a look at the demographic data surrounding the Mturk population may offer some insights. According to Ross et al. (2010), who’s demographic study surveyed 576 workers, Mturk workers are young, educated, and global. The study found that the average age was 31. That fact, coupled with the 33% of the study’s participants were students, points to a young stratum of society accounting for a large section of MTurk’s workers. The study also confirmed that 66% of the workers held college degrees; which, coupled with how many were current students, points to a highly educated group of workers. Finally, the study found that 57% of workers were located within the US, meaning a large number of workers reside outside the US. My own L2 and Bilingual

participant samples support the fact that there is a healthy international supply of workers available on MTurk. Knowing the demographic makeup of the MTurk platform helps me to further narrow the parameters of what a new theory of global humor could entail. Something about this demographic section of society finds it manageable to understand US sitcom humor. However, demographic data only tells us so much. To answer questions of how and why, one needs to explore possible sociolinguistic pressures that may be present across this stratum of society.

One of these pressures pertains to how economics factors into the equation. In her chapter “Language as Resource in the Globalized New Economy,” Heller (2013) writes about how there is a growing new economy where language plays a pivotal role. With the emergence of a more globalized society over the latter half of the nineteenth and early part of the twentieth centuries, Heller observed that industries are requiring their workers to come equipped with more linguistic resources now than was once required. She notes that this new economy “make[s] language central, both as a process and as a product of work” (Heller, 2013, p. 352). Language being a more primary part of workspaces across the world motivates workers to add to their linguistic resources. If a worker can be more successful by knowing more than one language, especially if that other language is English, that is a clear economic motivation – which could point to a reason why this unique population of young, educated, and global individuals are consuming US-based sitcom entertainment. Perhaps these young people are learning different forms of humor by watching TV. I remember meeting a woman from Moldova once who had impeccable English skills – to the point where I assumed she spent much of her life in the US. When asked how she spoke English so well, she said that she watched US cartoons growing up that taught

her, among other things, different forms of humor. Like I discussed in Chapter 2, sitcom humor is designed for the jokes to succeed, and that makes them great resources for language learners.

While economic factors are only one possible sociolinguistic pressure contributing to the reasons why this population easily understands US sitcom humor, others need to be explored as well. I believe that by exploring a range of other pressures, a new theory of global humor can be established. Adding to this discussion of general conclusions, the following is a discussion of the conclusions that can be made based off of each research question.

Research Question 1

The first research question asked whether humor type is a stable category of analysis. By asking participants to categorize each video, the results showed the categorization across videos to be highly varied across three diverse samples of participants. Humor is inherently creative and subjective, so achieving 100% consensus on categorization will most likely always be impossible. Every person brings with them a world of lived experiences, and English language experiences may only constitute a small fraction. Even the L1 group, the audience that the examples were originally marketed to, showed high degrees of variability in their choices. Further, the L1 and L2 group, even though they were not significantly different, still showed a high degree of variability, and the fact that the Bilingual group was significantly different from the L1 and L2 groups does not negate this fact. Therefore, because of this, the data suggests that humor type is not a stable category of analysis across diverse samples of participants.

Looking at the results of the current study, I think the trend that researchers have been calling for more research on how multilingual users of English understand different types of humor (Bell, 2016, Bell & Skalicky, 2018; Goddard, 2018) is a bit naïve. The assumption behind those calls is that humor might fit into nice, neat categories, and we can then use the information

about those categories for various purposes, such as pedagogy. However, this study showed that people often view humor in different ways, which should serve as a caution for those calling for more categorization research.

Research Question 2

The second research question asked if there were significant differences in how L1, L2, and Bilingual participants categorized different types of humor. Overall, there was significant difference found in how the three groups categorized the first three videos taken on the survey: SARC1, WP1, and SARC2. The Mann-Whitney U test (Table 5), as well as the Pareto analysis (Table 7), clarified that the Bilingual group was the main source of the difference. Therefore, it is fair to say that there were significant differences found in the three samples categorized different types of humor.

The recent calls for more understanding about multilingual humor comprehension of humor types are based in the realm of pragmatic instruction. As I mentioned, these calls may be uninformed in their assumptions. However, we know that explicit teaching of pragmatic components of a language are effective (Taguchi, 2015), which suggests that the explicit teaching of forms of humor could be effective too. For example, Bell & Skalicky (2018) suggest that “basic research must be conducted to understand how L2 users process, perceive, understand, and are able to produce humor... These issues must be explored with respect to different types of humor (e.g., pre-scripted jokes, sarcasm, teasing)” (p. 126). Work on the pragmatic instruction of humor types has already been shown to be effective. For example, Kim’s (2014) study shows how to teach sarcasm by using clips from *Friends*. I think my study shows how humor could be an effective tool for language instruction. In fact, international students at US universities are not, in many ways, unlike the average MTurker. They are

educated, young, and diverse. Knowing that the MTurk sample enjoyed and understood the video examples, there is no reason not to incorporate sitcoms into language classrooms.

My study both extends and complicates the current call for more research into humor type comprehension. On the one hand, my results are novel in that they show how three diverse samples of participants categorize different example of sitcom humor, whereby exposing the complexities behind this call: all three samples understood the videos in different ways. However, on the other hand, the knowledge gained from my study may not have direct implications to classroom pedagogy, which was the original impetus behind the call for more research on humor types. The categorization results of my study show the complexities behind the information wanted by language educators and, at best, expose more questions than answers.

Research Question 3

The third research question asks if there are significant differences between how L1, L2, and Bilingual participants rate different types of humor. The descriptive statistics of funniness ratings (Table 10) suggest the Bilingual group generally thought the videos were funnier than the other two groups did. However, those differences were only significant in three of the videos (WP1, TEASE1, and TEASE2). Additionally, there was a significant difference found between the L1 and L2 group for SARC2. Finally, there were no significant differences found between groups for SARC1 and WP2. The data suggests that there were significant differences found across all humor types (sarcasm, wordplay, and teasing).

One novel contribution of this study was to present how funny three diverse samples of participants rated examples of sarcasm, wordplay, and teasing – a contribution no other study has currently provided. Specifically, no other study (to my knowledge) has studied L2 and Bilingual samples' understanding of humor. Although the study cannot pinpoint why, the Bilingual sample

from India appeared to enjoy the sitcom examples more than the L1 or L2 samples. Little research is available to explain bilingual humor. Vaid's (2006) study of bilingual Mexican-Americans revealed that bilingual speakers often find things funnier than mono-lingual speakers, suggesting that having an additional language increases the amount of resources one has to find things funny. However, the problem with applying Vaid's (2006) findings to the current study is that the Bilingual sample is from India and does not share a border with the US, like the Mexican-American participants from which Vaid's conclusions are drawn. Therefore, the findings for the Bilingual samples lead to more questions than answers; however, it lays out a research agenda to contribute to the sparse (if not non-existent) field of Indian humor research.

Research Question 4

The fourth research question asks about difference in humor comprehension across groups and humor types. The two survey items on language comprehension and speaker intention help to answer this question. The descriptive data on these two items (Tables 11 and 12) show quite high ratings of both language comprehension and understand of speaker intention. However, the only significant difference between the Bilingual and L2 group was found in the TEASE1 video – the reasons why being discussed above.

Several have made the call for more research on how linguistic proficiency impacts humor comprehension (Ayçiçeği-Dinn, Şişman-Bal, & Caldwell-Harris, 2017; Bell & Skalicky, 2018.) However, the results concerning proficiency tell us more about the participants taking the survey than about proficiency and humor comprehension. The MTurk participants lacked a diversity of English proficiency that would be needed to make any conclusions about how proficiency is tied to humor comprehension. As it stands, my results show high levels of comprehension among highly proficient English language users.

Limitations

Like any study, there are several limitations that should be considered. I have divided them into two groups: the limitations of studying humor itself and the methodological limitations of using survey research.

Humor Limitations

One of the hardest things about studying humor, especially particular types of humor, is the unstable nature humor itself. The data from the Pareto analyses underscore this reality quite clearly. Because of the contextual nature of humor, it is extremely difficult to locate pristine examples of conversational humor that hold up to a large and varied sample of people. Humor is quite messy in that way. So, when trying to study different types of humor within conversation, it gets even more tricky. This is one important reason why the three types of humor measured in this study came back with such varied results: humor is inherently unstable. The current study tried to stabilize these three types as best as methodologically possible.

Methodological Limitations

No method of data collection is perfect, and they all have limitations. For a survey design, Dornyei (2003) discusses several that are pertinent to the current study. First, he notes that the answers participants give, particularly in open text boxes, can be simple and superficial. This is certainly true in the responses I received on both surveys I conducted. Because MTurk workers are paid by each survey they take, they try to complete the surveys as fast as possible, so the written responses can be lacking in substance. In a world where researchers only pay \$.45 for a 10-minute survey, MTurkers have a financial incentive to complete as many surveys as they can. And MTurkers generally do not make much money. For instance, in Ross et al.'s (2010)

study, only 3% of MTurkers made more than \$50 per week. Therefore, with the low pay these workers are receiving, it is understandable that many workers do not give quality answers.

Additionally, even though MTurk provides easy access to participants from across the world, MTurkers could be generalized as a relatively young, educated, and employed group of people. In one sense, the type of person who signs up to work for MTurk is someone is more tech-savvy than most. Thus, this reality means that the participants in my sample, although linguistically diverse, might be similar in other areas.

Another pertinent limitation for the current study is potential survey fatigue. This is when the survey is long and the participant loses steam and it affects her/his responses. My survey was hopefully not long enough for participants to become tired. It takes around 10-12 minutes to complete.

For both surveys, the Humor Categorization Test and the Humor Comprehension Survey, the videos were not presented randomly. This could explain the how each of the second examples of types of humor received lower ratings, particularly in how funny the clip was seen. This could have also resulted in an over-stimulation to a certain type of humor.

Another limitation of the study was exposed through the Bilingual samples' differences: culture may play a role in humor comprehension. The survey used in this dissertation focused on the linguistic aspects of humor comprehension and did not ask any culture-related questions. Having done so may have helped explain the differences found in the Bilingual sample.

Recommendations for Future Research

This dissertation journey has taught me that a single research study is limited in the amount it can say about a particular phenomenon. I hoped to be able to say more about comprehension of humor types, but I learned that this area is far too expansive for a single study.

While my study did contribute the field's knowledge of humor comprehension, it also revealed at least four appropriate next steps for me and other researchers.

First, the results of this study suggest that humor comprehension may be more involved than previously thought. The existing theories of comprehension are need of expansion. For instance, I think there is room for more theoretical work showing how Attardo's (1994) General Theory of Verbal Humor can speak to comprehension. Being the most trusted linguistic theory of humor, it is worth knowing if it the theory could be expanded to include comprehension. The GTVH is rarely challenged and its weaknesses are rarely discussed, so I think it is time for a new batch of scholars to expand its reach – perhaps with the goal to create a new theory of verbal humor comprehension.

Second, humor categorization research is inherently messy and I think the messiness may deter researchers from analyzing it. The current study is perhaps the first study to ask diverse samples of participants to categorize types of humor, and the variability shown in the results sparks new possibilities of research. One avenue for future research would be to further explore Goddard's (2018) work on the cross-translatability of humor category definitions and see how different terms are defined cross-culturally. This would require a more systematic approach to participant recruitment, and would most likely be best studied between different languages. With more insight into how different language define key humor terms, the results from cross-cultural studies would carry more weight.

Third, an overwhelming unknown in this study is the impact of culture on the participants' choices. A strength of this study was to isolate the linguistic aspects of humor comprehension; however, the significance of these findings will be made greater with the addition of cultural knowledge. More research into the cultural uses and attitudes toward

different humor types seem to be a logical next step for this line of research. For instance, the Bilingual sample rated humor as funnier than the other two groups and categorized the videos more diversely. Perhaps we need to look into what the cultural use of humor is within those various language groups across India. Indeed, it is only through a targeted study of these Indian groups that we'd be able to see how humor is used in groups, thus only then giving us a fuller view of why this group rated the videos as funnier.

Fourth, more work could be done on establishing the relationship between humor comprehension and linguistic proficiency. Because the samples from MTurk provided highly proficient users of English, not much could be said about humor comprehension according to proficiency level; however, more targeted research across varied proficiency levels could add more precision to anecdotal notions that only highly proficient users of English can understand humor.

Overall, this dissertation is able to say something about how multilingual users of English understand different types of humor. It is my hope that the line of inquiry established in this dissertation serves a starting point for healthy research agenda. Humor comprehension and use is a worthy topic of exploration, and it is my hope that this dissertation, as well as future studies, might help to lead to the field to new areas of insight. And if anything, I hope my continued research into humor helps me to not take myself too seriously.

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Appendix A

Humor Categorization Test

Default Question Block**INFORMED CONSENT**

Do you have a good sense of humor? Do you like getting paid to watch YouTube videos? If so, then you are invited to participate in a study about humor. The aim of this study is to see how people categorize different types of humor. You will be asked to watch 6 short video clips and then answer a few questions about them. Participation should take about ten minutes. All data collected in this study are for research purposes only.

RISKS and BENEFITS: The risks to your participation in this online study are those associated with basic computer tasks, including boredom, fatigue, or mild stress. Benefits to you include the enjoyable experience of watching funny video clips and the satisfaction of participating in a research study. Your participation in this study also benefits the larger field of humor studies.

COMPENSATION: Participants will be paid according to the posted rate.

PLEASE NOTE: This study contains a number of checks to make sure that participants are finishing the tasks honestly and completely. As long as you read the instructions and complete the tasks, your HIT will be approved. If you fail these checks, your HIT will be rejected.

CONFIDENTIALITY: Your Mechanical Turk Worker ID will be used to distribute payment to you but will not be stored with your survey response. We will not be accessing any personally identifying information about you that you may have put on your Amazon public profile page.

Any reports and presentations about the findings from this study will not include your name or any other information that could identify you. I may share the data I collect in this study with other researchers doing future studies – if I share your data, I will not include any information that could identify you.

SUBJECT'S RIGHTS: Your participation is voluntary. You may stop participating at any time by closing the browser window; however, due to the survey's anonymity, there is no way to remove a response after it's been submitted.

Yours,
Aaron Beasley

This project has oversight from the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Email: gradresearch@iup.edu / phone number: 724-357-7730).

Principal Investigator: Aaron Beasley (bscv@iup.edu, 731-661-5545, 1050 Union University Drive, Jackson, TN 38305)

Faculty Sponsor: Dr. David Hanauer (hanauer@iup.edu, 724-357-2268, 506R Humanities and Social Sciences Building, IUP)

Study Title: Humor Type Categorization Test

By consenting, you verify that you are over the age of 18.

- ☐ Consent
☐ Withdraw

[Created by Codegena.](#)

On the following scale, please rate the degree to which the video you just watched is funny to YOU:

- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny
- ☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?

Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
- ☐ **Teasing** - To make fun of someone by saying unkind things to him/her
- ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line
- ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way
- ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression
- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor

On the following scale, please rate the degree to which the video you just watched is funny to YOU:

- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny
- ☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?

Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
- ☐ **Teasing** - To make fun of someone by saying unkind things to him/her

- ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line
- ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way
- ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression
- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor

On the following scale, please rate the degree to which the video you just watched is funny to YOU:

- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny
- ☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?

Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
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- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor

[Created by Codegena.](#)

On the following scale, please rate the degree to which the video you just watched is funny to YOU:

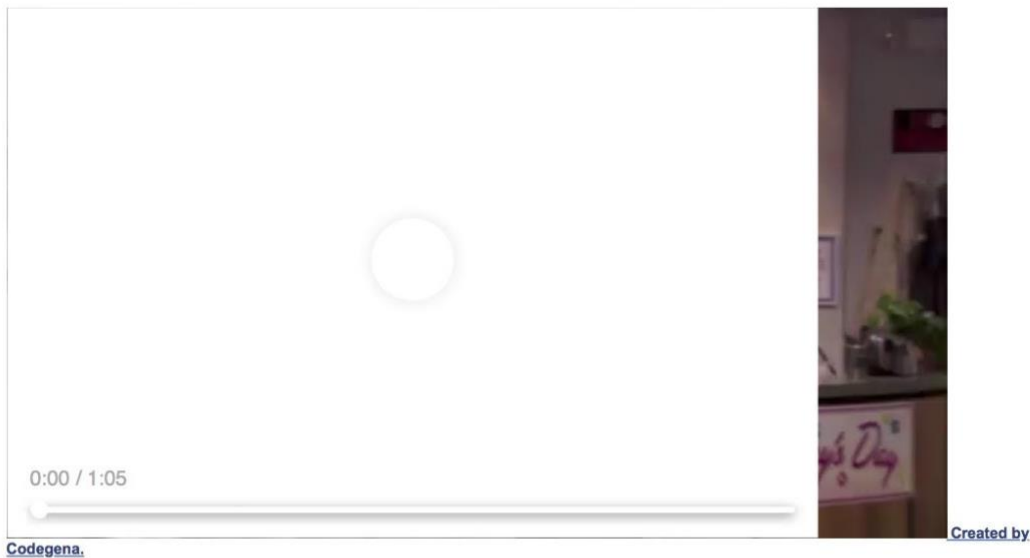
- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny
- ☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?



Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
- ☐ **Teasing** - To make fun of someone by saying unkind things to him/her
- ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line
- ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way
- ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression
- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor



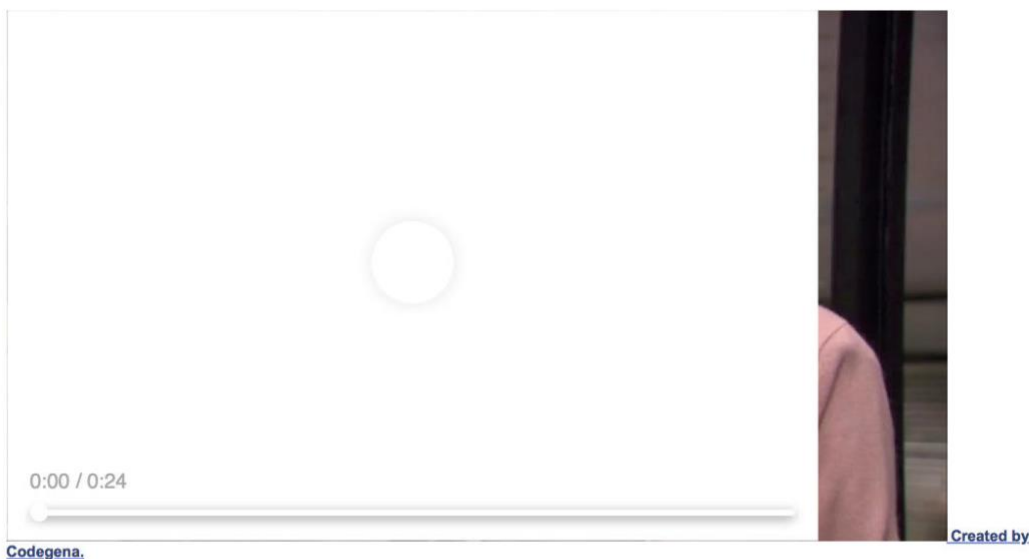
On the following scale, please rate the degree to which the video you just watched is funny to YOU:

- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny
- ☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?

Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
- ☐ **Teasing** - To make fun of someone by saying unkind things to him/her
- ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line
- ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way
- ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression
- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor



On the following scale, please rate the degree to which the video you just watched is funny to YOU:

- ☐ Not funny at all
- ☐ Slightly funny
- ☐ Neither funny or not funny
- ☐ Funny

☐ Very Funny

Did you think this video was funny? If so, what did you find funny about it?

Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else
- ☐ **Wordplay** - Joking about the meanings or sounds of words
- ☐ **Teasing** - To make fun of someone by saying unkind things to him/her
- ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line
- ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way
- ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression
- ☐ **Self Deprecating** - When a speaker makes a joke at her own expense
- ☐ **Slapstick** - Exaggerated, often physical humor

For the following questions, you will be asked to rank videos you just watched by how similar they are to each other.

To answer the questions:

1. Read the synopsis of the video,
2. Think of the type of humor used in the video
3. Rank the other videos from most similar (1) to least similar (5) to that video.

Again, only rank the videos by the similarity of the type of humor used in the video.

Video Clip Synopsis: Baby locked in the apartment (from the TV show "Friends")

In this scene, a man and woman are locked out of their apartment, but their sleeping baby is inside. The woman is starting to get very worried and imagining dangerous scenarios about what could happen to the baby. The man responds by making up even more extreme possibilities in order to be funny.

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Salsa/Seltzer (from the TV show "Seinfeld")** - Two men sit at a table discussing the salsa and how it sounds similar to seltzer.
- **Solving Apartheid (from the TV show "30 Rock")** - A man and woman are talking about hunger, and the woman says that she once went on a hunger strike to solve apartheid, and the man makes a funny remark.
- **Lactose Intolerant (from the TV show "The Big Bang Theory")** - A group of friends is sitting around a table making crude jokes about how Leonard can't digest dairy.
- **Mocking Gabe (from the TV show "The Office")** - A group of office workers begin mocking one of their own

- **Choosing Daycare (from the TV show "The Office)** - A husband and wife discuss daycare options for their child.

Video Clip Synopsis: Salsa/Seltzer (from the TV show "Seinfeld")

In this scene, two men begin a conversation about salsa. They joke how a Spanish person would have trouble distinguishing between "salsa" and "seltzer."

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Baby Locked in Apartment (from the TV show "Friends")** - A man and woman are locked outside of their apartment, but their sleeping baby is inside.
- **Solving Apartheid (from the TV show "30 Rock")** - A man and woman are talking about hunger, and the woman says that she once went on a hunger strike to solve apartheid, and the man makes a funny remark.
- **Lactose Intolerant (from the TV show "The Big Bang Theory")** - A group of friends is sitting around a table making crude jokes about how Leonard can't digest dairy.
- **Mocking Gabe (from the TV show "The Office)** - A group of office workers begin mocking one of their own
- **Choosing Daycare (from the TV show "The Office)** - A husband and wife discuss daycare options for their child.

Video Clip Synopsis: Solving Apartheid (from the TV show "30 Rock")

In this scene, a man and woman are talking. The man is complaining about how he has to fast from food for a colonoscopy. The woman adds that one time she fasted to solve apartheid (segregation in South Africa).

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Baby Locked in Apartment (from the TV show "Friends")** - A man and woman are locked outside of their apartment, but their sleeping baby is inside.
- **Salsa/Seltzer (from the TV show "Seinfeld")** - Two men sit at a table discussing the salsa and how it sounds similar to seltzer.
- **Lactose Intolerant (from the TV show "The Big Bang Theory")** - A group of friends is sitting around a table making crude jokes about how Leonard can't digest dairy.
- **Mocking Gabe (from the TV show "The Office)** - A group of office workers begin mocking one of their own
- **Choosing Daycare (from the TV show "The Office)** - A husband and wife discuss daycare options for their child.

Video Clip Synopsis: Lactose Intolerant (from the TV show "The Big Bang Theory")

In this scene, a group of friends is sitting around a table in a restaurant. A woman orders for her boyfriend but doesn't know he is lactose intolerant. The rest of the table knows this about him and starts making crude jokes about how milk products give him gas.

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Baby Locked in Apartment (from the TV show "Friends")** - A man and woman are locked outside of their apartment, but their sleeping baby is inside.
- **Salsa/Seltzer (from the TV show "Seinfeld")** - Two men sit at a table discussing the salsa and how it sounds similar to seltzer.

- **Solving Apartheid (from the TV show "30 Rock")** - A man and woman are talking about hunger, and the woman says that she once went on a hunger strike to solve apartheid, and the man makes a funny remark.
- **Mocking Gabe (from the TV show "The Office")** - A group of office workers begin mocking one of their own
- **Choosing Daycare (from the TV show "The Office")** - A husband and wife discuss daycare options for their child.

Video Clip Synopsis: Mocking Gabe (from the TV show "The Office")

In this scene, a group of office workers begin to mock a co-worker. Several people make exaggerated impressions of him to his face.

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Baby Locked in Apartment (from the TV show "Friends")** - A man and woman are locked outside of their apartment, but their sleeping baby is inside.
- **Salsa/Seltzer (from the TV show "Seinfeld")** - Two men sit at a table discussing the salsa and how it sounds similar to seltzer.
- **Solving Apartheid (from the TV show "30 Rock")** - A man and woman are talking about hunger, and the woman says that she once went on a hunger strike to solve apartheid, and the man makes a funny remark.
- **Lactose Intolerant (from the TV show "The Big Bang Theory")** - A group of friends is sitting around a table making crude jokes about how Leonard can't digest dairy.
- **Choosing Daycare (from the TV show "The Office")** - A husband and wife discuss daycare options for their child.

Video Clip Synopsis: Choosing Daycare (from the TV show "The Office")

In this scene, a husband and wife discuss a possible daycare for their daughter but are worried about it being difficult to get in to.

Rank the following videos from MOST SIMILAR (1) to LEAST SIMILAR (5) to the type of humor used in this video clip.

- **Baby Locked in Apartment (from the TV show "Friends")** - A man and woman are locked outside of their apartment, but their sleeping baby is inside.
- **Salsa/Seltzer (from the TV show "Seinfeld")** - Two men sit at a table discussing the salsa and how it sounds similar to seltzer.
- **Solving Apartheid (from the TV show "30 Rock")** - A man and woman are talking about hunger, and the woman says that she once went on a hunger strike to solve apartheid, and the man makes a funny remark.
- **Lactose Intolerant (from the TV show "The Big Bang Theory")** - A group of friends is sitting around a table making crude jokes about how Leonard can't digest dairy.
- **Mocking Gabe (from the TV show "The Office")** - A group of office workers begin mocking one of their own

Humor Comprehension Survey

Start of Block: Block 1

Q1 INFORMED CONSENT

Do you have a good sense of humor? Do you like getting paid to watch YouTube videos? If so, then you are invited to participate in a study about humor. The aim of this study is to see how bilingual people understand different types of humor. You will be asked to watch 6 short video clips and then answer a few questions about them. Participation should take about 12-15 minutes. All data collected in this study are for research purposes only. **RISKS and BENEFITS:** The risks to your participation in this online study are those associated with basic computer tasks, including boredom, fatigue, or mild stress. Benefits to you include the enjoyable experience of watching funny video clips and the satisfaction of participating in a research study. Your participation in this study also benefits the larger field of humor studies.

COMPENSATION: Participants will be paid according to the posted rate.

PLEASE NOTE: This study contains a number of checks to make sure that participants are finishing the tasks honestly and completely. As long as you read the instructions and complete the tasks, your HIT will be approved. If you fail these checks, your HIT will be rejected.

CONFIDENTIALITY: Your Mechanical Turk Worker ID will be used to distribute payment to you but will not be stored with your survey response. We will not be accessing any personally identifying information about you that you may have put on your Amazon public profile

page. Any reports and presentations about the findings from this study will not include your name or any other information that could identify you. I may share the data I collect in this study with other researchers doing future studies – if I share your data, I will not include any information that could identify you. SUBJECT’S RIGHTS: Your participation is voluntary. You may stop participating at any time by closing the browser window; however, due to the survey's anonymity, there is no way to remove a response after it's been submitted.

Yours,

Aaron Beasley This project has oversight from the Indiana University of Pennsylvania Institutional Review Board for the Protection

of Human Subjects (Email: grad-research@iup.edu / phone number: 724--357--7730).

Principal Investigator: Aaron Beasley (bscv@iup.edu, 731-661-5545, 1050 Union University Drive, Jackson, TN 38305)

Faculty Sponsor: Dr. David Hanauer (hanauer@iup.edu, 724--357-2268, 506R Humanities and Social Sciences Building, IUP)

Study Title: Humor Comprehension Survey

Q52 By consenting, you verify that you are over the age of 18.

☐ Consent (1)

☐ Withdraw (2)

Skip To: End of Survey If By consenting, you verify that you are over the age of 18. = Withdraw

Page Break

End of Block: Block 1

Start of Block: Block 2

Q71 Is ENGLISH your first language?

☐ Yes (4)

☐ No (5)

Skip To: End of Survey If Is ENGLISH your first language? = Yes

End of Block: Block 2

Start of Block: Default Question Block

Q3

[Created by Codegena.](#)

Q4 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
 - ☐ Slightly funny (2)
 - ☐ Neither funny or not funny (3)
 - ☐ Funny (4)
 - ☐ Very Funny (5)
-

Q5 Did you think this video was funny? If so, what did you find funny about it?

Q6 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
 - ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way (5)
 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q68 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q10

Q11 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
 - ☐ Slightly funny (2)
 - ☐ Neither funny or not funny (3)
 - ☐ Funny (4)
 - ☐ Very Funny (5)
-

Q12 Did you think this video was funny? If so, what did you find funny about it?

Q13 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
 - ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way (5)
 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q66 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q17

Q18 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
 - ☐ Slightly funny (2)
 - ☐ Neither funny or not funny (3)
 - ☐ Funny (4)
 - ☐ Very Funny (5)
-

Q19 Did you think this video was funny? If so, what did you find funny about it?

Q20 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
 - ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way (5)
 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q69 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q24

[Created by Codegena.](#)

Q25 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
- ☐ Slightly funny (2)
- ☐ Neither funny or not funny (3)
- ☐ Funny (4)
- ☐ Very Funny (5)

Q26 Did you think this video was funny? If so, what did you find funny about it?

Q27 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
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 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q67 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q31

[Created by Codegena.](#)

Q32 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
 - ☐ Slightly funny (2)
 - ☐ Neither funny or not funny (3)
 - ☐ Funny (4)
 - ☐ Very Funny (5)
-

Q33 Did you think this video was funny? If so, what did you find funny about it?

Q34 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
 - ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way (5)
 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q65 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q38

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Q39 On the following scale, please rate the degree to which the video you just watched is funny to **YOU**:

- ☐ Not funny at all (1)
 - ☐ Slightly funny (2)
 - ☐ Neither funny or not funny (3)
 - ☐ Funny (4)
 - ☐ Very Funny (5)
-

Q40 Did you think this video was funny? If so, what did you find funny about it?

Q41 Please select the type of humor present in the video.

- ☐ **Sarcasm** - To humorously criticize by saying one thing but meaning something else (1)
 - ☐ **Wordplay** - Joking about the meanings or sounds of words (2)
 - ☐ **Teasing** - To make fun of someone by saying unkind things to him/her (3)
 - ☐ **Scripted Joke** - A structured story or anecdote intended to make people laugh, often involving a build up and a punch line (4)
 - ☐ **Pun** - Drawing upon multiple meanings of a word in a humorous way (5)
 - ☐ **Deadpan** - A joke that draws upon a speaker's lack of physical expression (6)
 - ☐ **Self Deprecating** - When a speaker makes a joke at her own expense (7)
 - ☐ **Slapstick** - Exaggerated, often physical humor (8)
-

Q70 Rate the degree to which you agree with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I understood the language used in this video (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characters in this video intended to be funny (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood the humor used in this video (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q55 What gender do you identify with?

- ☐ Male (1)
 - ☐ Female (2)
 - ☐ Prefer not to say (3)
 - ☐ Gender nonconforming (4)
-

Q56 How old are you?

- ☐ 18-22 (1)
 - ☐ 23-30 (2)
 - ☐ 30-40 (3)
 - ☐ 40-50 (4)
 - ☐ 50-60 (5)
 - ☐ 60-70 (6)
 - ☐ Over 70 (7)
-

Q60 What is the highest level of school you have completed or the highest degree you have received?

- ☐ Less than high school degree (1)
- ☐ High school graduate (high school diploma or equivalent including GED) (2)
- ☐ Some college but no degree (3)
- ☐ Associate degree in college (2-year) (4)
- ☐ Bachelor's degree in college (4-year) (5)
- ☐ Master's degree (6)
- ☐ Doctoral degree (7)
- ☐ Professional degree (JD, MD) (8)



Q58 Please select your country of origin:

▼ Afghanistan (1) ... Zimbabwe (1357)

Q61 Please list your first language(s):

Q63 Please list any other languages you speak:

Q65 Please rate your ability to **understand** spoken English

- ☐ Very Low (1)
- ☐ Low (2)
- ☐ Fair (3)
- ☐ Slightly less than adequate (4)
- ☐ Adequate (5)
- ☐ Slightly more than adequate (6)
- ☐ Good (7)
- ☐ Very good (8)
- ☐ Excellent (9)
- ☐ Perfect (10)

Q66 Please rate your ability to **speak** spoken English

- ☐ Very Low (1)
 - ☐ Low (2)
 - ☐ Fair (3)
 - ☐ Slightly less than adequate (4)
 - ☐ Adequate (5)
 - ☐ Slightly more than adequate (6)
 - ☐ Good (7)
 - ☐ Very good (8)
 - ☐ Excellent (9)
 - ☐ Perfect (10)
-

Q67 The videos in this survey were clips from the TV shows *Friends*, *Seinfeld*, *30 Rock*, *Big Bang Theory*, and *The Office*. Please rate how familiar you are with each of these shows.

	I've never watched this show before (1)	I've seen clips from the show (2)	I've seen an episode or two (3)	I've seen multiple episodes/seasons (4)
Friends (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seinfeld (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30 Rock (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Big Bang Theory (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Office (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Default Question Block