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Beyond mock politeness: sarcastic interrogatives as tools for face-threatening acts

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Abstract: This paper examines the use of sarcastic interrogatives as a face-aggravating strategy and the contextual factors influencing their use. Through a mixed-methods approach, combining qualitative and quantitative analyses of data from three distinct American English corpora, we present two key findings. First, sarcastic interrogatives function as a face-aggravating strategy by projecting a negative image of addressees through connotations, ad hoc categorization, and maxim-flouting. Such usage challenges previous research that predominantly associates sarcasm with insincere or mock politeness. Instead, results position sarcasm as a more direct and conventionalized face-threatening act in certain discourse contexts. Second, our study demonstrates that sarcastic interrogatives are more commonly employed as a face-aggravating strategy in online political debate forums, compared to spoken and unscripted TV discourse. This variation is attributed to contextual differences, including social distance, anonymity, and the likelihood of joint accomplishment in each discourse type. The findings highlight the role of discursive environments in shaping sarcastic usage, offering new insights into the relationship between sarcasm and impoliteness. Overall, our study contributes to a deeper understanding of how discursive environments shape the use of sarcasm, emphasizing its nuanced role in impoliteness and face-aggravation across varying communicative contexts.

Keywords: sarcasm; interrogatives; facework; impoliteness; positioning

1 Introduction

A key factor in the success of human communication is our ability to relate to others – addressing, responding, and anticipating their actions (Linell 2007). In

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everyday interactions, participants engage in communicative projects that promote joint actions and the development of co-representations (van der Wel et al. 2021). Politeness, understood as efforts to mitigate potential threats to individuals' self-esteem, plays a crucial role in maintaining cooperative discourse (Brown and Levinson 1987).

Politeness has been extensively studied as a linguistic, psychological, and cultural phenomenon (e.g., Brown 2022; Spencer-Oatey and Kádár 2021). With the development of politeness theory, increasing attention has also been directed toward impoliteness strategies. As Culpeper (2005) notes, impoliteness is pervasive and can manifests in various forms. During interactions, participants may attack the addressee's image and self-esteem by ignoring them, condescending, belittling, using sarcasm, and other and other similar strategies strategies.

Within impoliteness theory, sarcasm is viewed as a strategy in which an attack on the addressee's face is achieved through insincere politeness (e.g., "***DO** help yourselves, won't you?*" said to people greedily helping themselves). Consequently, sarcasm is often labeled as "mock politeness". However, studies on the relationship between sarcasm and (im)politeness have predominantly focused on interactions characterized by social closeness between participants (e.g., Ghezzi and Molinelli 2019; Gibbs 2000; Jorgensen 1996; Taylor 2015).

In this paper, we aim to diverge from these valuable previous approaches while offering new insights into the relationship between sarcasm and impoliteness. Rather than contradicting them, we seek to demonstrate how sarcasm can also be used to attack the addressee's face directly, in a way that aligns more with outright rudeness than just mock-politeness. While previous research recognizes sarcasm as a face-threatening strategy, it has predominantly positioned it as a form of mitigated impoliteness, i.e., mock politeness (Culpeper 1996; Taylor 2015). Our analysis reveals that sarcastic interrogatives often function closer to conventionalized and overt impoliteness, similar to direct insults, rather than as subtle implicational impoliteness that relies on incongruity. This perspective on sarcasm as an unmitigated face-aggravating strategy has been relatively underappreciated heretofore.

To investigate this phenomenon, we compare discursive genres that differ in medium, setting (physical vs. online discourse), and communicative purposes (Hymes 1974). To illustrate this point, consider example (1), drawn from an online debate forum.

(1) Just a minute ago you were making up all sorts of claims about the reasons why you posted that study, and now you say that you "don't even remember it". ***So were you lying a minute ago, or just deluding yourself? emoticonXRolleyes*** (The NLDS corpus)[1]

Example (1) illustrates the use of an alternative question, i.e., a closed question that limits the answer to the explicitly mentioned options (Biezma and Rawlins 2015). In this case, the alternatives target the addressee's positive face, specifically the desire to be valued by others (Brown and Levinson 1987). By presenting two options that frame the addressee as either a liar or a self-deluded individual, the writer performs a face-threatening act (FTA), delivering critique. This is an example of a sarcastic interrogative, where the expected situation, seeking an honest response, is inverted to convey sarcasm (Camp 2011).[2]

This paper aims to explore in depth how the interplay between the surface forms of interrogatives and other-images can be used to sarcastically attack the addressee's face. Specifically, two key questions are posed:

(a) How are sarcastic interrogatives used as a face-aggravating strategy?
(b) What contextual factors influence their use?

To answer these questions, we conduct both qualitative and quantitative analyses of tokens collected from various genres. As discussed in further detail later, we demonstrate that sarcastic interrogatives function as a face-aggravating strategy through other-positioning achieved via negative connotations, ad hoc categorization, and maxim-flouting. Additionally, we show that the use of sarcastic questions as an FTA varies across genres, and is influenced by several contextual features of the communicative event, such as social distance and the likelihood of joint accomplishment.

These findings enhance our understanding of the relationship between sarcasm and impoliteness in two key ways. First, the qualitative analysis shows that sarcastic utterances do not necessarily rely on insincere politeness strategies, contrary to previous research (e.g., Taylor 2015). Second, the quantitative analysis highlights the influence of discursive environments on the frequency of sarcasm, addressing a gap in the literature (see Hancock 2004).

While prior studies have examined sarcasm in institutional contexts, research specifically comparing sarcasm usage (distinct from irony) quantitatively across different discursive environments (e.g., spoken vs. Computer Mediated Communication [henceforth CMC]) remains scarce. To our knowledge, only Hancock (2004)

1 Unless otherwise noted, all examples are drawn from the corpus data analyzed in this study (see Section 4).

2 See a review of the definition of sarcasm in Section 2.

and Aguert et al. (2016) directly compared CMC and face-to-face (henceforth FTF) interactions, yet both focused primarily on irony and sarcasm as one of its subsets, rather than as a separate phenomenon. Additionally, these studies are limited in terms of recency and participant demographics.[3] These limitations further highlight the contribution of our approach: a comparative, cross-genre analysis using openly available datasets. This design enhances both the reproducibility of our findings and our understanding of how sarcasm functions across different communicative contexts.

The paper is structured as follows: Sections 2 and 3 present key information on sarcasm and impoliteness, respectively. Section 4 reviews the corpora and methodology used in the study. Section 5 examines how sarcastic questions function as a face-aggravating strategy, and analyzes the contextual factors that influence their use. Finally, Section 6 concludes the paper.

2 Sarcasm and (sarcastic) interrogatives

Sarcasm is a complex linguistic phenomenon that conveys contempt implicitly and humorously, while signaling the speaker's dissociation from others' opinions (Lozano-Palacio and Ruiz de Mendoza 2022; Savini and Caragea 2022). Within the framework of (im)politeness theory, it typically functions as a face-threatening act that operates through the contrast between apparent politeness and intended criticism, generally equated with "mock politeness" (Culpeper 1996; Taylor 2015).

Discussions of sarcasm frequently merge it with irony, as both serve as important communicative devices to express attitudes or evaluations toward the content of a message (Abrams 1999). As a result, the two terms are often used interchangeably, and are frequently assumed to be sufficiently similar to omit explicit differentiation (Clift 1999; Ling and Klinger 2016). Furthermore, sarcasm is commonly viewed as a

3 Hancock (2004) compared verbal irony in FTF interactions and CMC, revealing a significantly higher use of irony in CMC. Aguert et al. (2016) found that adolescents produced more ironic utterances in CMC compared to FTF settings. While these findings suggest a trend toward increased irony in CMC, they present a key issue: both focus on irony, which is distinct from sarcasm. Additionally, Hancock's (2004) research, though pioneering, was conducted over two decades ago, at an early stage of CMC development. Therefore, it may not reflect current trends to a sufficient degree. Aguert et al.'s (2016) study, while more recent, narrows its scope to adolescent language development, not to general usage among the broader population, limiting its broader applicability. Therefore, data on the specific use of sarcasm across different corpora and discursive contexts is scarce. Additionally, to our knowledge, no single study has exclusively compared the usage of sarcasm (distinct from irony) between FTF, non-scripted corpora and CMC corpora.

specific case, or sub-set, of irony rather than as a distinct linguistic phenomenon (Filatova 2012), and has even been referred to as irony's "evil twin" (Kreuz 2020: 9).

This tendency to conflate sarcasm with irony has not only blurred important distinctions between them, but also contributed to its diminished status in academic research. Historically, sarcasm has been treated as a mere subset of irony, which has contributed to its marginalization in both philosophical and linguistic research. While irony, famously linked to Socratic dialogue, has been valued for its philosophical and epistemic functions, sarcasm has retained a predominantly negative connotation (Lee and Katz 1998). Although recent decades have seen the emergence of sarcasm as a distinct object of inquiry, certain gaps persist in our understanding, especially regarding its use in naturally occurring dialogue (Oraby et al. 2016).

A particularly underexplored area within sarcasm research concerns sarcastic interrogatives. While sarcasm has been studied in assertions and, to a lesser extent, in rhetorical questions, interrogative forms have received minimal and inconsistent attention. They are often conflated with ironic and rhetorical questions, and described using varying terminology, which obscures their distinctive function. This oversight is especially striking given the frequency of sarcastic interrogatives in oral traditions, journalism, and popular culture (Doyle 2008). However, to explore sarcastic interrogatives meaningfully, we must first establish a clear working definition of sarcasm.

In a pioneering approach, Camp (2011) provided one of the first comprehensive definitions of sarcasm as an independent phenomenon. According to her, sarcasm is a scalar meaning inversion that hinges on the transposition of pretended commitment. Specifically, sarcasm involves evoking a normative scale while feigning commitment to it, only to invert this commitment in interpretation. While the speaker appears to make an assertion, they are actually setting an evaluative standard and implying that it has been negatively violated. Let us illustrate this with the following example, taken from our own corpus research:

(2) Are you ignorant, or are you lying? (The NLDS corpus)

This sarcastic alternative interrogative exemplifies scalar meaning inversion by establishing a normative scale in which an informed and truthful response is expected. A genuine alternative question would present a balanced choice, allowing for the possibility that the addressee is correct or acting in good faith. However, in this case, the speaker feigns neutrality while framing both options negatively, implying that the only possible explanations for the addressee's statement are ignorance (lack of knowledge) or deception (intentional misrepresentation).

The sarcasm arises from the forced commitment to this normative scale, where informed discourse is the expected standard, while simultaneously inverting this commitment by presupposing its violation. This demonstrates how sarcasm

manipulates meaning not by simple opposition, like verbal irony, but by distorting the expected neutrality of discourse through a forced evaluative contrast.

Although Camp's (2011) meaning-inversion model does not explicitly address impoliteness, it clearly predicts this phenomenon, which is central to definitions of sarcasm as a form of mock politeness. Camp's framework presents four components of a normative scale – presupposition, pretense, inversion, and evaluative attitude. These elements provide a theoretical apparatus that naturally accounts for mock politeness dynamics.

This is particularly evident in her analysis of illocutionary sarcasm, where she demonstrates how utterances like "Thanks for holding the door" operate on politeness scales: the speaker "pretends to undertake an utterance which would be appropriate if the addressee had held the door, where door-holding ranks high on a scale of politeness" and thereby "communicates the speaker's evaluation of the addressee's actual behavior as rude" (Camp 2011: 618).

The strategic value of sarcasm for impoliteness is further reinforced by Camp's observation that sarcasm enables speakers to "communicate rhetorically volatile negative attitudes while preserving deniability" (Camp 2011: 609), a characteristic that makes it particularly useful in antagonistic contexts. Indeed, her characterization of sarcasm as a "communicative bluff" that creates vulnerability to retaliation explains why sarcasm is frequently deployed in contexts of "intense social anxiety" (Camp 2011: 605) and interpersonal conflict, where face management and social positioning are paramount concerns.

Building on Camp's (2011) definition, Michaelis and Feng (2015) offer an elaboration using a similar approach. According to them, sarcastic utterances rely on the widely understood assumption that the speaker's intended meaning diverges substantially from their stated words, rather than merely representing the direct opposite. They describe sarcasm as an indirect rebuke, prompting the listener to reconstruct both a scale and a presupposition. This can be illustrated by the following adapted example from Michaelis and Feng (2015: 150):

(3) Someone cries disproportionally about a paper cut. Someone else looks at the trivial injury and says the following utterance: ***"You'll probably live."***

The scale reconstructed by the interpreter is based on an ordering of injuries by severity. The reconstructed presupposition concerns the circumstances in which one should worry about an injured person's death (likely not when they have a paper cut). In this example, the sarcastic utterance establishes the necessary evaluative scale, and signals that the situation is the opposite of one where a sincere utterance would be appropriate. Sarcasm, therefore, highlights the disparity between the current situation and the circumstances that would justify a sincere speech act (Michaelis and Feng 2015). The speaker appears to make an assertion, but implicitly

sets an evaluative standard, suggesting that it has been negatively violated (Camp 2011).

Some constructions are particularly sensitive to sarcasm due to elements that readily lend themselves to meaning inversion, the core mechanism of sarcasm. One such construction is interrogatives, which form the focus of our current research. In the following subsection, we elaborate on the different types of interrogatives examined in this study.

2.1 (Sarcastic) interrogatives

Before explaining what sarcastic interrogatives are, we must first clarify the terms "questions" and "interrogatives", and explain how they will be used in this paper. It is common practice to use "questions" to refer to both a semantic and a syntactic category. However, it is important to distinguish between these two uses, with interrogatives being a category of grammatical form, and questions a category of meaning (Huddleston 1994).

Huddleston (1994) explains that interrogatives, as a syntactic category, contrast with declaratives, imperatives, and exclamatives. These categories are mutually exclusive, meaning that a single, unambiguous sentence cannot simultaneously function as both an interrogative and a declarative or imperative (Huddleston 1994; Sadock and Zwicky 1985).

While interrogatives belong to the syntactic system, questions pertain to meaning and define a set of potential answers. Typically, questions are posed with the intention of eliciting information from the addressee (Huddleston 1994). This concept aligns closely with Hamblin's influential perspective, which suggests that understanding a question involves recognizing what constitutes a relevant or "good" answer (Ginzburg 2010).

Similarly, Sadock and Zwicky (1985) note that the conventionalized function of a question as a speech act is to seek information, typically prompting some form of response or feedback (Michaelis and Feng 2015). However, not all questions are intended to elicit an informative answer. In some cases, questions act as a vehicle for conveying the speaker's attitudes or emotions, thus falling into the category of expressive speech acts (Celle et al. 2021). Moreover, different forms of interrogatives may correspond to distinct speaker-addressee relations (Celle et al. 2019), thus shaping their function within the interaction.

This brief review demonstrates that distinguishing between questions and interrogatives is not always straightforward. However, to ensure clarity and consistency throughout this paper, the term "interrogatives" will be used to denote

syntactic structures, while "questions" will refer specifically to communicative functions.

Both questions and interrogatives are particularly well-suited for conveying sarcasm. Under the pretense of seeking information, the speaker preforms meaning inversion, indirectly expressing criticism or ridicule. As a result, sarcastic interrogatives are not genuine questions, but rather illocutionary speech acts that reveal the speaker's attitude by signaling its insincerity, therefore functioning as counterfeit forms of pretense (Camp 2011; Michaelis and Feng 2015).

Unlike sincere, information-seeking questions, sarcastic interrogatives typically do not expect or require a literal answer from the addressee. When a speaker asks *"Are you ignorant, or are you lying?"*, they are not genuinely asking the addressee to select between these options, but rather implying criticism through forced negative positioning. Addressees typically recognize these as face-threatening acts rather than honest information requests, often responding with defense or counter-attacks rather than direct answers.

The following subsections examine three types of questions relevant to this paper: alternative questions, disjunctive polar questions, and WH-questions followed by a self-answer, which we refer to as split interrogatives (following Michaelis and Feng 2015).

2.1.1 Alternative questions (AQs)

AQs are closed questions designed to narrow down the range of possible answers to two (or more) explicitly stated alternatives (Biezma and Rawlins 2015; Huddleston and Pullum 2002). These alternatives are introduced by the disjunctive coordinator *or*, which is an essential feature of AQs. The content of an AQ presents a disjunction of propositions, each corresponding to one possible answer (Huddleston and Pullum 2002). Responding to an AQ typically involves selecting one, several, all, or none of the proposed alternatives, as shown in (4a) and (4b).

(4a) Are you far-sighted or near-sighted? (the COCA corpus)

(4b) Are you being deliberately dense, or is it a natural gift? (the NLDS corpus)

Example (4a) illustrates a straightforward and literal AQ, seeking information about the addressee's vision condition, with two neutral options presented. In contrast, example (4b) demonstrates a sarcastic alternative interrogative that performs a face-threatening act by presenting two insulting alternatives. The disjunction forces the addressee to choose between being "deliberately dense" (implying intentional stupidity) or possessing stupidity as "a natural gift" (implying inherent stupidity). Neither option allows the addressee to maintain face, making this a clear example of

how alternative interrogatives can be weaponized sarcastically to position the addressee negatively.

2.1.2 Disjunctive polar questions (DPQs)

DPQs are closed questions that typically present two polar opposite answers – an affirmative *yes* and a negative *no* (Huddleston and Pullum 2002). Other responses to a DPQ may include interjections, like "uh-huh", "mm", head nods, or repetitions of some or all of the question (Enfield et al. 2019).

In DPQs, the disjunctive conjunction *or* links two (or more) disjuncts, each representing a set of alternatives. One alternative is explicitly stated in the question, while the other is inferred through polarity reversal (Huddleston and Pullum 2002). Thus, answering a DPQ generally involves choosing between the explicitly presented alternatives and those implied by the context, although the disjunction often suggests a singleton alternative (Biezma and Rawlins 2015). This is illustrated in (5a) and (5b).

(5a) Have you any links or book references to this? (the NLDS corpus)

(5b) Is this ancient Greece or something? (the NLDS corpus)

Example (5a) represents a genuine DPQ seeking information about resources, with *or* introducing the implied alternative (not having such references). Conversely, example (5b) functions sarcastically by invoking an absurd temporal comparison ("ancient Greece") to ridicule the addressee's position or statement. While structurally similar to (5a), this interrogative does not genuinely seek information, but instead implies that the addressee's viewpoint is so outdated or inappropriate that it belongs to a completely different historical era. The tag "or something" further emphasizes the speaker's dismissive stance.

2.1.3 WH-question followed by a self-answer – split interrogatives (SIs)

Following Michaelis and Feng (2015), we refer to this dual conversational construction as SIs, as it mimics a brief conversational exchange within a single speaker's turn. In this structure, the speaker first poses a question, and then immediately provides an answer, creating a distinctive two-part sequence.

(i) WH-interrogative (e.g., *what is this, what's next*) – the body.
(ii) a self-answer, which can be realized by a participial, nominal, adjectival, or prepositional phrase, or by a clause – the proffer.

Typically, WH-questions invite open-ended responses. However, in the case of SIs, the syntactic presence of a self-answer restricts the range of possible responses to

satisfy the WH-element. The juxtaposed content narrows the set of potential answers (Huddleston and Pullum 2002), effectively transforming the question into a yes-no question rather than an open one (Michaelis and Feng 2015). This pattern is illustrated in (6a) and (6b).

(6a) Where is Raleigh, in North Carolina? (The Switchboard corpus)

(6b) What's next? Marrying an animal? (The NLDS corpus)

Example (6a) illustrates a straightforward information-seeking question, in which the speaker genuinely requests clarification about Raleigh's location, suggesting uncertainty or a need for confirmation. In contrast, example (6b) demonstrates a sarcastic interrogative that poses a face-threatening question by suggesting an absurd progression of events ("marrying an animal"). This sarcastic interrogative does not truly seek information, but rather implicitly mocks and criticizes a prior situation, positioning the addressee negatively and restricting their ability to respond without damage to their face.

Having reviewed sarcasm, questions, and the studied interrogatives, we now shift our focus to impoliteness and face work. In the following section, we examine the relevant literature on these topics, with particular attention to sarcasm.

3 Impoliteness and facework

Research on language in use demonstrates that everyday discourse primarily reveals speakers' attitudes, stances, and evaluations (Thompson and Hopper 2001). In this context, interlocutors are not merely exchanging factual information, but are also expressing assessments and (dis)aligning themselves with others (Du Bois 2007). This suggests that interactions frequently involve stance-taking (Du Bois and Kärkkäinen 2012), where stance is viewed as a three-way process. In this process, speakers evaluate an object, position themselves in relation to it, and (dis)align with co-present others (Du Bois 2007).

When multiple viewpoints are introduced in discourse, participants often communicate their evaluations of a situation, positioning themselves within a particular social or moral framework (Graumann and Kallmeyer 2002). In doing so, interlocutors frequently adopt specific roles, presenting their "personhood" in relation to others through characters or stereotypes, such as mother–child or nice–crude dynamics (Wells 2015).

Positioning, defined as "the discursive production of selves" (Davies and Harré 1990), is closely tied to the concepts of image and face. In the literature, face refers to the public self-image that community members seek to project (Brown and Levinson

1987). Since this image can be maintained, enhanced, or damaged during interactions, it is understood as existing within the dynamic flow of discourse rather than being an inherent attribute of individuals (Holtgraves 2002).

For instance, Brown and Levinson (1987) emphasize that certain communicative actions, such as criticism or commands, may threaten the addressee's positive or negative face. Positive face refers to the desire to be appreciated by others, while negative face concerns the need to act without imposition. In such cases, speakers may mitigate the threat by using strategies like hedging devices or indirect requests. Consequently, interlocutors may soften face threats, enhance their own positive face through (indirect) self-praise, or attack the face of their addressees to achieve specific communicative goals (Culpeper 2016; Speer 2012). These processes are called facework.

While politeness is seen as a strategy to reduce threats to the addressee's face, impoliteness may be understood as a face attack. For impoliteness to occur, the speaker must deliberately convey a face attack, or the hearer must perceive the communication as a face attack (Culpeper 2005). Culpeper (2005) outlines several types of impoliteness strategies, such as direct and explicit face attacks, attacks aimed at damaging the addressee's positive face (e.g., showing a lack of sympathy), and attacks targeting the addressee's negative face (e.g., expressing scorn).

Recently, Culpeper (2016) has suggested that impolite utterances are those that go challenged. This challenge can be expressed in discourse through verbal responses indicating the hearer's perception of rudeness, as well as non-verbal reactions, such as facial expressions of hurt, or counter-impolite utterances. Culpeper (2005) also argues that directness is often associated with impoliteness, but this connection can be problematic, as it tends to rely on the researcher's intuition. To address this, Culpeper (2011) proposed a model of impolite utterances grounded in empirical research.

In this model, impolite utterances can take two forms: conventionalized formulae, such as insults, and implicational expressions. Implicational expressions are utterances that exhibit a mismatch between the context implied by one part of the turn (e.g., a compliment) and the context implied by another part (e.g., a bored tone of voice). Sarcasm, in this sense, is seen as an incongruity between context, content, and prosody (Nakamura et al. 2022).

This distinction between conventionalized formulae and implicational impoliteness is critical for our understanding of sarcasm's role in face-threatening acts. Following Dynel (2015), impoliteness can be categorized along a spectrum from mitigated to unmitigated forms. While existing literature has predominantly positioned sarcasm within the domain of mitigated impoliteness, specifically as mock politeness that relies on the incongruity (Nakamura et al. 2022), our analysis reveals a different pattern.

As will be shown in upcoming sections, the sarcastic interrogatives in our data, particularly in online political debate, frequently function as unmitigated impoliteness, bypassing the pretense of politeness entirely. Rather than operating through implicit contrast between surface politeness and intended criticism, they directly position the addressee negatively through explicit linguistic choices. This positioning of sarcasm closer to conventionalized impoliteness formulae rather than implicational strategies represents a departure from how sarcasm has traditionally been conceptualized in impoliteness theory.

Research on the relationship between sarcasm and (im)politeness has often emphasized sarcasm's connection to politeness strategies, particularly highlighting the incongruity between context and content. For instance, Jorgensen (1996) suggests that sarcasm can be used to critique or complain about minor issues among close acquaintances as a face-saving mechanism. She argues that sarcasm allows the speaker to soften face threats, enabling them to appear less aggressive or unfair. This mitigation helps maintain the speaker's positive self-image and decreases the likelihood of negative reactions from others. In these contexts, sarcasm is not intended to amuse, but to temper the criticism, thereby avoiding the perception of the speaker as thoughtless or insulting.

However, other studies have suggested that sarcasm functions as an impoliteness strategy, achieved through the use of insincere, or mock, politeness (Bousfield 2008; Culpeper 2005). In these cases, sarcastic utterances may seem to support or enhance the recipient's face, but in reality, they significantly undermine and damage it.

In the following sections, we demonstrate how sarcastic interrogatives perform FTAs through other-positioning by analyzing features of syntax, semantic transparency, and pragmatic inference. This shifts the focus of previous studies, which have emphasized the relationship between sarcasm and politeness, to explore the interplay between positioning, impoliteness, and offense.

4 Corpora and method

The analysis of sarcastic interrogatives in this study is based on data from three American-English corpora: the COCA corpus, the NLDS corpus, and the Switchboard corpus. These corpora vary in terms of contextual features, including the medium, setting, and the participants' communicative purposes (Hymes 1974).

The COCA (Corpus of Contemporary American English) corpus contains over one billion words across eight genres: spoken, fiction, popular magazines, newspapers, academic texts, TV and movie subtitles, blogs, and other web pages. For this study, we

analyzed the sub-corpora of spoken, non-scripted language from the two most recent years available – 2011 and 2012, comprising a total of 7,430,781 tokens.

The NLDS (Natural Language and Dialogue Systems) corpus includes several main categories, such as online debate forums, human-generated summaries, blogs, and casual conversations. For this study, we focused on the Internet Argument Corpus (IAC) version 2, which is a collection of corpora designed for research on political debate in internet forums (Abbott et al. 2016). The IAC consists of three datasets: *four forums* (414,000 posts), *Convince Me* (65,000 posts), and a sample from *Create Debate* (3,000 posts).

The Switchboard corpus is a large, multi-speaker dataset of conversational speech, collected between 1990 and 1991 (Godfrey et al. 1992). It contains approximately 2,400 two-sided telephone conversations between 543 speakers of American English (302 male, 241 female) from across the United States. All speakers were complete strangers, connected by a robotic operator and prompted to select discussion topics from a predetermined list of about 70 options, such as cars, recycling, savings accounts, and newspapers (Calhoun et al. 2010). To ensure variation, no two speakers conversed more than once, and no one discussed the same topic more than once. The conversations range from one and a half to 10 minutes, with an average duration of six and a half minutes. In total, the corpus contains roughly three million words, amounting to approximately 260 h of recorded speech (Calhoun et al. 2010).

Based on these corpora, we collected interrogative-tokens and manually annotated them as either literal or non-literal, focusing on meaning inversion. An interrogative was classified as sarcastic if it aligned with our primary definition, which treats sarcasm as a form of scalar meaning inversion (Camp 2011). In such cases, the speaker appears to commit to a proposition while implicitly signaling a negative evaluation of that commitment, thereby implying that an expected standard has been violated.

In such situations, the speaker exploited a shared assumption that the literal interpretation was implausible, thereby implying indirect criticism (Michaelis and Feng 2015). Sarcasm was further identified by features such as implicit contempt, ridicule, and the speaker's disassociation from others' views (Lozano-Palacio and Ruiz de Mendoza 2022; Savini and Caragea 2022).

Here are three examples illustrating the application of this annotation criterion:

(7a) Is your place pretty chic or old and historic?

This is a sincere question, in which the speaker is seeking information in an honest way. There is no meaning inversion, no criticism, and no ridicule. Therefore, this question was annotated as a literal, non-sarcastic question.

(7b) ***Were the slaves slaves because they were not Christian or they were black?*** I'll answer that myself. Because they were black.

This is not a sincere question. The speaker is not seeking for information or waiting for an answer (which is evident by the fact that they answer themselves immediately). Instead, they are trying to prove their point by asking a question to which the answer is obvious, thus making a compelling and persuasive interrogative statement (Frank 1990). Therefore, it is not a literal question. However, there is no meaning inversion, and no implicit and humorous conveyance of contempt and ridicule. As a result, it cannot be considered a sarcastic interrogative either. Consequently, it was annotated as a rhetorical,[4] non-sarcastic question.

(7c) Do you have any real facts or just fallacies?

This is also not a sincere question. It is not posed with the intention of eliciting a genuine response. Instead, it serves to deliver a pointed critique through meaning inversion and the pretense of seeking for information. In reality, the asker employs an evaluative standard, implying it has been breached negatively.

As noted by Michaelis and Feng (2015), sarcasm functions as an indirect rebuke, prompting the interpreter to establish a scale and presuppose certain truths. In this example, the rebuke targets the addressee's reliance on misconceptions rather than facts. The scale that the interpreter reconstructs relates to proper argumentation practices – specifically, how arguments should be based on facts to be persuasive. The presupposition challenges the conditions under which one should find an argument convincing, namely when it is grounded in facts rather than fallacies. This interrogative sets the parameters for evaluating the discourse while highlighting the disparity between the current situation and one that would call for a literal utterance (Michaelis and Feng 2015), while conveying ridicule, humor, and criticism. This analysis led to this token being annotated as a sarcastic interrogative.

To ensure the accuracy of our sarcasm annotation process, we conducted an external judgment test. In this test, we presented a sample of utterances to external judges, asking them to determine whether they perceived them as sarcastic or literal. Our test comprised a total of 72 questions. This number was selected for several reasons.

First, this subset constituted approximately 6.5 % of the total utterances collected for the study, providing a representative and manageable sample size. Second, this quantity allowed external judges, particularly laypersons who were not academics, to assess the data without experiencing excessive fatigue or confusion.

Among these utterances, 36 were annotated by us as sarcastic interrogatives, while the remaining 36 were annotated as literal questions. We provided the judges

4 In accordance with the conventional definition, rhetorical questions are indirect speech acts in which the speaker poses a question not to elicit an answer or request information, but to function as a persuasive rhetorical device (Frank 1990).

with a concise document outlining our definition of sarcasm in layperson's terms, along with several examples. The full explanation and the table of utterances used in the test are available in the appendix.

Our judges were divided into two distinct groups: an expert group and a non-expert group, comprising of native speakers. The expert group consisted of two female linguists who had previously conducted research on the topic of sarcasm and published several articles in the field. Conversely, the non-expert group comprised three native speakers of American English, including two males and one female, ages ranging from 32 to 42 years old. All non-expert participants were monolingual speakers of American English, right-hand dominant individuals, and had no diagnosed cognitive disorders or learning disabilities.

All participants received an identical short explanation demonstrating the distinction between a literal, information-seeking question, and non-literal, sarcastic interrogatives. They were instructed to review the 72 utterances and simply indicate whether they perceived each question as literal or sarcastic, without providing any further explanation for their choice.

To illustrate, consider the following two examples – one to which all five judges (both experts and native speakers) agreed with our classification as sarcastic, and one to which all agreed to our classification as literal.

(8a) How long were they actually up the mountain, couple of months wasn't it? (Literal SI, the NLDS corpus)

(8b) What planet are you living in? Romulus? (Sarcastic SI, the NLDS corpus)

After collecting all responses, we conducted a Fleiss' kappa test to measure the agreement between our categorization of sarcasm and that of the external judges. Fleiss' kappa assesses the extent of agreement among multiple raters beyond what would be expected by chance alone. Specifically, observed agreement was calculated as the proportion of consistent judgments averaged across all items and raters, while expected agreement represents the level of consensus predicted by chance.

For each judgment, the proportion of times each category (agreed or disagreed) was used by the raters was calculated. These proportions were then averaged across all items to obtain the average proportion of each category. The expected agreement was computed as the square of this average proportion.

In our study, the expected agreement was 0.25, reflecting the level of agreement expected by random chance. Fleiss' kappa was calculated to be over 0.72, indicating a substantial level of agreement among the participants beyond what would be expected by chance alone.

In addition to inter-rater agreement, we examined discrepancies between our judgments and the external raters. 29.17 % of utterances were classified differently

by at least one external judge compared to our original classification. To ensure the accuracy of the final analysis, we excluded these utterances from further consideration. Despite these differences, the overall high agreement supports the robustness of our annotation process.

To conclude, we believe that the sarcasm annotations in our study, validated by external judges (comprising both experts in the field of sarcasm and lay native speakers) demonstrated significant concordance as confirmed by Fleiss' kappa. This substantial agreement among the raters reinforces the validity of our analytical approach and the accuracy of our results in identifying sarcastic content.

Following this, we performed a text-based analysis of non-literal questions to illustrate how certain interrogatives can be sarcastically used to attack the addressee's face. We examined selected tokens that contained stretches of co-text from several perspectives: facework, other-positioning, presuppositions, and their co-occurrence with linguistic and extralinguistic cues. To better understand the contextual features influencing the use of sarcastic interrogatives as a face-aggravating strategy, we conducted a sarcasm distribution analysis using a z-test.

5 The interplay between sarcastic interrogatives and face aggravation

In this section, we present both quantitative and qualitative analyses of our data. First, we examine the distribution of sarcastic interrogatives across different corpora, highlighting how contextual features of the communicative event influence their frequency (Section 5.1). Then, we demonstrate how speakers and writers use these sarcastic interrogatives to perform FTAs, providing detailed analysis of specific patterns and their relative prevalence in our data (Section 5.2).

Before presenting the study's findings, it is important to discuss the category of non-literal questions. As mentioned earlier, they can exhibit meaning inversion, allowing speakers to fulfill various communicative functions, such as expressing surprise, conveying disagreement, or persuasion. This study focuses specifically on a subset of non-literal questions – sarcastic interrogatives.

Sarcastic interrogatives are particularly likely to occur in contexts of disagreement, as they are used to express the speaker's dissociation from others' opinions (Lozano-Palacio and Ruiz de Mendoza 2022). However, not all questions that appear in disagreement contexts are necessarily sarcastic interrogatives. To illustrate this distinction, consider the following examples:

(9a) [A mother to her son] Who has cared for you and fed you your whole life? (constructed example)

(9b) Do you have any real facts or just fallacies? (The NLDS corpus)

Both interrogatives in example (9) are non-literal within a conflictual context. However, the interrogative in (9a) allows the speaker to express an assertion based on information shared by the participants (Biezma and Rawlins 2017), specifically, "*I, the mother, have cared for you your whole life*". In contrast, the interrogative in (9b) introduces new information into the discourse, which is not necessarily shared by the interlocutors. This distinction suggests that non-literal interrogatives can draw on common ground to reaffirm accessible information for various communicative purposes (Rohde 2006). In the following subsection, we examine how sarcastic interrogatives leverage discourse-new information to convey dissociation and criticism.

5.1 Quantitative analysis

Numerous studies on language-use highlight how contextual factors, such as the medium and setting of interactions, shape speakers' linguistic choices (Gregory and Carroll 2018). Building on these insights, this subsection explores whether the use of sarcastic interrogatives as a face-aggravating strategy varies across different discursive environments.

As mentioned in Section 4, this examination was conducted across three corpora: the non-scripted, spoken TV corpus (COCA); the spoken telephone corpus (Switchboard); and the written web-discourse corpus (NLDS). Each corpus differs in the medium (spoken/written), the setting (telephone/FTF/CMC), and the communicative purposes of the participants (deliver information/entertain/debate).

In our analysis, a total of 787 questions from the COCA corpus were examined, among which 37 were identified as sarcastic (4.7 %). The NLDS corpus, on the other hand, exhibited a significantly higher incidence of sarcasm: 121 out of 301 questions analyzed (40.19 %) were sarcastic. Notably, the Switchboard corpus contained no instances of sarcasm (0 %). These results are illustrated in Figure 1.

Statistical analysis reveals that the proportion of sarcastic interrogatives is significantly higher in the CMC corpus compared to the FTF TV corpus ($z = -14.87$, $p < 0.001$). This result highlights substantial differences in the prevalence of sarcasm between spoken, FTF, interactions and written, web-based discourse.

This finding may be attributed to the differing expectations that each type of interaction elicits from participants. Locher (2013) emphasizes that interlocutors enter communicative events with expectations shaped by their understanding of the event's social frame. Similarly, Locher and Watts (2008) argue that social frames originate from cognitive conceptualizations of behavior, formed through

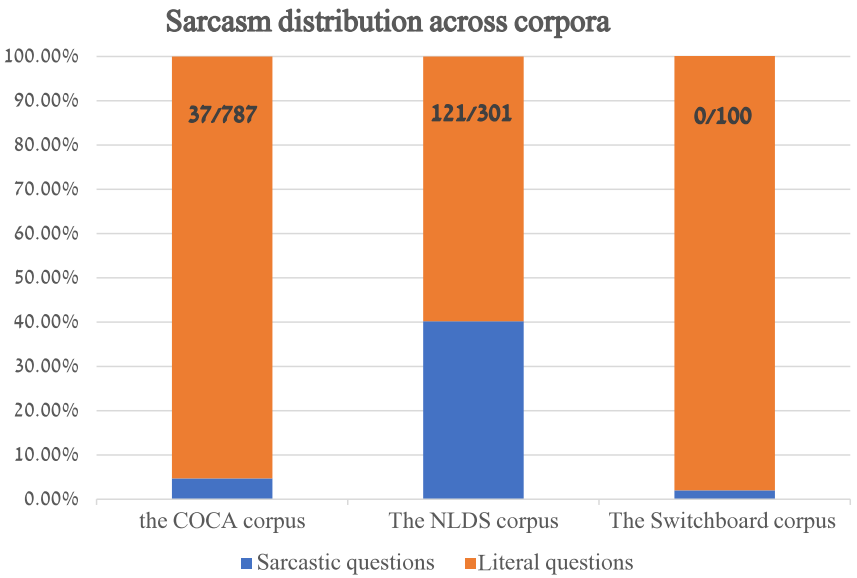

Figure 1: Sarcasm distribution across corpora.

individuals' experiences in social practice. These frames establish norms and expectations that evolve over time and are subject to change. According to Locher and Watts (2008), these social frames are essential for analyzing interactions, as any judgment of (im)politeness is always assessed against the specific frame of expectation for the given communicative context.

From this perspective, each corpus represents a distinct communicative frame, differing in two key aspects: social distance and the likelihood of joint accomplishment. Regarding social distance, the three corpora vary in the familiarity between participants. The Switchboard corpus, for instance, represents an artificial discursive environment where strangers, connected through an automated system, are required to select discussion topics from a predetermined list. As a result, the participants have no prior familiarity with one another.

Previous empirical research has shown that politeness tends to increase as familiarity decreases (Holtgraves and Yang 1992; Stephan et al. 2010). Additionally, sarcasm was shown to be more frequently used in close relationships compared to distant ones (Zhu and Wang 2020). This pattern may account for the complete absence of sarcastic interrogatives in the Switchboard corpus, where interactions involve socially distant participants.

Unlike the Switchboard corpus, the NLDS corpus represents a social frame characterized by ongoing engagement between participants in an online forum.

Here, interlocutors are familiar with one another, regularly interacting within the same forum. In contrast, the COCA sub-corpus studied represents a discourse type that includes both high and low familiarity.

On one hand, some participants, such as panel members of talk shows and morning programs, interact regularly and develop familiarity over time. On the other hand, interactions between hosts and one-time interviewees involve participants who have never met before and are unlikely to meet again. While this discourse type includes elements of social distance, such as between interviewees and hosts, it also evokes expectations of familiarity in certain communicative settings. This familiarity can facilitate the use of sarcasm, as shared common ground makes the underlying counterfactual attitude more transparent to addressees (Kreuz 1996).

However, social distance alone cannot fully account for our findings, particularly the significantly higher proportion of sarcastic interrogatives in the NLDS corpus compared to the COCA corpus. To address this discrepancy, it is important to consider a key difference in communicative expectations between the two corpora: the likelihood of joint accomplishment.

Linell (1998) highlights that a communicative project, which aims to achieve social goals, inherently involves the participation of others. In such interactions, participants may share communicative purposes, working together toward the joint accomplishment of actions. Alternatively, they may have competing goals, each pursuing their own objectives, as is often the case in arguments.

In the NLDS corpus, interlocutors engage in debates over political and religious issues, adopting different stances and seeking to justify their positions against those of others. As a result, their likelihood of joint accomplishment is diminished. Additionally, these debates take place anonymously, which influences the online disinhibition effect, characterized by a reduced sense of restraint when communicating online (Suler 2004). This anonymity fosters an environment where participants are more inclined to use sarcastic interrogatives as a face-aggravating strategy, particularly within a discourse that features competitive, unidentified interactions.

In contrast, in the COCA TV-corpus, cooperation among participants is essential for the success of talk shows and morning programs. In this context, interlocutors share a communicative goal of entertaining the audience through emotional and relatable stories that promote a sense of solidarity. As a result, the use of sarcasm to undermine or attack the addressees may be less prevalent, as it could hinder the joint accomplishment of these shared objectives.

In this subsection, we have argued that contextual factors, such as social distance and the likelihood of joint accomplishment, may influence the use of sarcastic interrogatives as a face-aggravating strategy. Therefore, our findings shed light on how communication modalities and discursive environments shape the frequency of sarcasm.

5.2 Qualitative analysis

Our corpus analysis reveals that speakers and writers can use non-literal interrogatives as a face-aggravating strategy by manipulating their surface form. The interrogatives examined in this study (AQs, DPQs, and SIs) function as partially specified constructions, containing open slots where speakers can insert phonologically specified elements, such as lexemes or phrases.

Among the 158 sarcastic interrogatives identified across our corpora, we observed three distinct patterns of face-aggravating strategies: affect-marked lexemes with negative connotations (42.4 %), scalar values through ad hoc categorization (38.6 %), and maxim-flouting (19.0 %). Each pattern appeared with varying frequency across the different corpus types, with the NLDS corpus showing the highest prevalence across all patterns, particularly for those employing affect-marked lexemes. Below, we examine each pattern in detail.

One such element, frequently observed in the data, is an affect-marked lexeme, which includes words or phrases with strong positive or negative connotations, such as honorifics or swearwords. This pattern occurred in 67 instances (42.4 % of all sarcastic interrogatives), with the highest concentration in the NLDS corpus (59 instances). The data shows that speakers and writers can employ these interrogatives to sarcastically convey dissociation and criticism by incorporating negative references to the addressee. This is illustrated in examples (10 a–c).

(10a) **Are you retarded or just ignorant?** either way, get your facts right. Limbaugh and Savage do not have tv shows so if they want to listen to Beck they still can on the radio. (AQ, The NLDS corpus)

(10b) President Obama was 14 years old when the War with Vietnam ended in 1961. **Are you stupid or something?** (DPQ, The NLDS corpus)

(10c) **What, that you're a bigot?** I think you will be hard pressed to find anyone here who finds OP's pointing out of that fact as insulting. (SI, The NLDS corpus)

In the examples above, the writers express disagreement with the addressees either by explicitly refuting claims attributed to them (examples 10a and 10b) or by referencing a popular counter-stance (example 10c). In the latter case, the writer strengthens their argument by appealing to conformity, relying on the *ad populum* fallacy – the idea that something is true simply because it is widely accepted (Van Eemeren et al. 2002).

In all the tokens in example (10), the writers' disagreement is accompanied by a non-literal interrogative containing slanders and slurs directed at the addressee,

such as *ignorant*, *stupid*, and *bigot*. As noted by Culpeper (2016), insults can sometimes be used as banter between close friends to express solidarity. However, this does not seem to be the case in these examples.

All examples in (10) are taken from an online debate forum, where participants do not share a physical environment and are often socially distant. As a result, their interactions are more likely to be influenced by the online disinhibition effect, i.e., an increased sense of reduced restraint when communicating online (Suler 2004). In this context, the tokens in (10) illustrate the use of conventionalized impoliteness formulae (Culpeper 2016). Through these formulae, the writers engage in other-depreciation, negatively evaluating the addressee's positive face.

Thus, the writers in example (10) perform an FTA by expressing criticism through a negative evaluation of the addressee's character (Nguyen 2013). The explicitness of this evaluation is heightened in the discourse due to the use of semantically transparent elements (e.g., insults and slurs) and direct references to the target (e.g., *you*). Overall, the tokens in (10) illustrate the use of sarcastic interrogatives that employ meaning inversion to convey dissociation and critique.

The second pattern, found in 61 instances (38.6 % of all sarcastic interrogatives), demonstrates the use of sarcastic interrogatives as a face-aggravating strategy by introducing scalar values into the open slots. This pattern was more evenly distributed between the COCA corpus (14 instances) and the NLDS corpus (47 instances). In this pattern, speakers and writers use ad hoc categorization that implicitly positions the addressee negatively. This strategy is illustrated in examples (11 a–c):

(11a) Its origin is irrelevant. It IS a parody of the Christian church which negates Christianity by suggesting it is equal with it. ***Are you really a teacher or do you just hold the chalk and wipe the blackboard?*** (AQ, The NLDS corpus)

(11b) the purpose of a 'tool' called gun is to kill. Killers use those 'tools'. without 'tools' the 'tradesman' at Virginia Tech couldn't have done any 'work' today. Yeah! I would feel real safe to know that every person I pass by on the street, or knock at my door is armed to the teeth. I would feel so safe you wouldn't believe it. The rest of the world must be really stupid not have come with the same idea! ***By the way do you think that children should pack guns at 5 years of age or maybe younger?*** (DPQ, The NLDS corpus)

(11c) REPRESENTATIVE-ROB# What's really amazing is the fact at just how normal the people you see, you know, like even Nancy Pelosi, just - you know, just a regular person when you see… CHRISTIANE-AMANPOU# (Off-camera) ***What did you think, she was the devil with horns?*** REPRESENTATIVE-ROB# Well, you know, no, but, I mean, you see a totally different person, kind of like when we see you on TV. (SI, The COCA corpus)

In example (11a), the writer presents their stance on Christianity, followed by an AQ. This interrogative introduces two options concerning the addressee's role: *really a teacher* or *just hold the chalk and wipe the blackboard*. These alternatives represent opposing values within the ad hoc category of "teachers' duties". The polarity in this example is constructed through two distinct strategies.

First, by using the adverb *really* in the first part of the interrogative, the writer casts doubt on the addressee's role as a teacher educating students. In the second part, introduced by the disjunctive coordinator *or*, the writer presents an opposing alternative: that the addressee merely holds chalk and wipes blackboards. This alternative triggers a pragmatic presupposition about the role of teachers – that real teachers are actively engaged in conveying knowledge to their students.

Notably, this opposing value is more salient in the AQ construction due to its length and complexity (Haude 2019). In this way, the writer implicitly positions the addressee as an unknowledgeable and unprofessional teacher. Through this other-positioning, enhanced by scalarity, the writer delivers a sarcastic critique of the addressee, thereby weakening their argumentative stance (see also Kuzai 2022).

In a similar usage, the writer in (11b) engages in a discussion with the addressee about the right to bear arms. They express their objection to unrestricted armament through consecutive sarcastic statements that are incongruent with the situation in which such an utterance would be reasonably expected (e.g., *Yeah! I would feel really safe to know that every person I pass by on the street, or knock at my door, is armed to the teeth!*).

Following this, they introduce a DPQ, ostensibly questioning whether the addressee believes that children should bear arms at the tender age of five or younger. This construction introduces a scalar value within the ad hoc category of "the appropriate age to carry a weapon". The category is framed through polar values (five or younger), restricting the addressee to this limited set of alternatives (*Do you think that*…). As a result, the writer indirectly positions the addressee as a radical and unreasonable individual, thereby sarcastically undermining their positive face.

In a different type of usage, speakers may introduce scalar values as a response to participants' previous turns, as illustrated in (11c). In this example, a participant in an interview-show describes Nancy Pelosi as a "regular" person. In reply, the host employs a SI, using a WH-question about the interviewee's perspective, followed by a

self-answer. This self-answer introduces a scalar value (*she was the devil with horns*) within an ad hoc category related to people's attributes. This discourse-new information represents an extreme contrast to the participant's use of the term *regular*.

Since this discourse-new information appears in an SI construction, which limits the possible set of responses to the one introduced by the speaker, the host implicitly positions the interviewee as foolish, mocking his choice of words. In doing so, the host sarcastically expresses dissociation from the interviewee while performing an FTA. The interpretation of the host's question as impolite is evident in the interviewee's response. Rather than simply replying with *no*, he feels compelled to clarify his previous statement, defending his characterization (*I mean, you see a totally different person, kind of like when we see you on TV*).

The examples in (11) demonstrate how speakers and writers use interrogatives to sarcastically undermine the addressee's positive face by incorporating scalar values that convey a negative assessment of others. The third pattern, comprising 30 instances (19.0 % of sarcastic interrogatives), reveals how speakers and writers express criticism through maxim-flouting.

This pattern was observed predominantly in the NLDS corpus (25 instances), with fewer occurrences in the COCA corpus (5 instances). In these occurrence, speakers and writers deliberately violate the Maxim of Quality ("Do not say what you believe to be false") to prompt a pragmatic inference that conveys a negative evaluation of the addressee (Grice 1975). This usage pattern is exemplified in (12 a–c):

(12a) you can't predict the outcome unless you know all the input variables to an arbitrarily high accuracy. That's not pretending, that's reality. **Did you miswrite that, or are you actually claiming that atoms think and decide, to some degree or another?** Well, it doesn't, so it isn't. (AQ, The NLDS corpus)

(12b) Accounting is an underrated profession:) Yeah what is with that? **Does our money have AIDS or something?** (DPQ, The NLDS corpus)

(12c) Religion. If you know so much about God, then why are you dancing around my question? **What planet your you living in? Romulus?** Are you living there? Are you a Romulan? We have right-wing evangelical psychos in power at the moment (SI, The NLDS corpus)

In these examples, writers engage in arguments with addressees over scientific issues (12a), occupational considerations (12b), or religious matters (12c). In each case, the writers express their objection to claims made by the addressees, followed by an interrogative. These interrogatives suggest possibilities regarding the addressee's behavior or way of thinking. For instance, in example (12a), the writer suggests that the addressee believes atoms can think and make decisions; in (12b), that the

addressees think accountants' money has AIDS; and in (12c), that the addressee resides on planet Romulus.

As shown, these possibilities relate to shared presuppositions and mutual beliefs (Van Dijk 2006). The writers introduce options that all participants know to be false based on sociocultural knowledge, such as the impossibility of atoms having independent thought, money being diseased, and humans living anywhere other than Earth. In doing so, the writers intentionally flout the Maxim of Quality ("Do not say what you believe to be false") to trigger a pragmatic inference (Grice 1975). This inference centers on ridiculing the addressee's reasoning and perspective, thereby negatively evaluating their image. Through this strategy, the interrogatives in (12) sarcastically depict the addressees as odd or irrational, ultimately attacking their positive face.

To conclude, this subsection has demonstrated that sarcastic interrogatives can serve as a face-aggravating strategy by presenting a negative image of addressees. This is achieved through the use of connotations (42.4 %), ad hoc categorization (38.6 %), and maxim-flouting (19.0 %). In such cases, speakers and writers leverage semantic transparency, direct reference to targets, pragmatic inferencing, and the syntactic structure of interrogatives to ridicule addressees and convey criticism.

The distribution of these patterns across corpora further supports our quantitative findings, highlighting how different discursive environments shape the frequency and nature of sarcastic interrogatives. Our findings thus suggest that employing sarcasm as an impoliteness strategy does not necessarily require insincere politeness utterances, such as requests or compliments.

Having analyzed both the distribution of sarcastic interrogatives across different corpora and the specific patterns through which they function as face-aggravating strategies, we now turn to the conclusions drawn from this study.

6 Conclusions

This paper aimed to explore how speakers and writers use sarcastic interrogatives as a face-aggravating strategy and the contextual factors that may influence this usage. Through quantitative and qualitative analyses of data from three open-source corpora, which vary in medium, setting, and participants' communicative purposes, several key conclusions have been drawn.

First, the data indicates that sarcastic interrogatives can serve as a tool for directly attacking the addressee's face, which differs from previous conceptualizations of sarcasm as primarily a form of mock politeness. While traditional views position sarcasm as a mitigated impoliteness strategy that operates through the contrast between apparent politeness and intended criticism, our findings reveal

that sarcastic interrogatives often function as unmitigated, conventionalized face-threatening acts closer to direct insults, entirely bypassing the pretense of politeness.

This is achieved through an interplay of semantic transparency, direct reference to targets, pragmatic inferencing, and the syntactic structure of the interrogatives themselves. Specifically, speakers and writers may incorporate affect-marked lexemes with negative connotations, scalar values, or presuppositions that flout the Maxim of Quality into the open slots of interrogatives. This strategy presents a negative image of the addressee, thereby conveying ridicule and criticism. Our findings highlight how sarcastic interrogatives can perform FTAs through other-positioning, rather than relying on insincere politeness strategies. In doing so, this study contributes to the growing body of literature on sarcasm and (im)politeness by uncovering an understudied aspect of sarcasm's use.

Second, the data reveals that sarcastic interrogatives as a face-aggravating strategy are more prevalent in written, web-based, argumentative discourse than in spoken, unscripted TV interactions. We attribute this finding to the differing contextual factors that characterize each type of discourse: social distance and the likelihood of joint accomplishment. While previous research has emphasized sarcasm as a reflection of content-context incongruity, our study sheds light on another dimension of the relationship between sarcasm and context – specifically, how sarcasm usage depends on the discursive environment. Future research could expand on this by examining other types of discourse that display varying degrees of additional contextual features, such as agency and authority.

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