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# The Multimodal Expression of Denial: A Case Study on Femicide Suspects

This pilot study investigates multimodal denial by analysing the discourses of male suspects of femicide that are the victims' (ex-)intimate partners and friends. We deploy an exploratory approach to map recurrent verbal and nonverbal features of denial in an *ad hoc* corpus of North-American English (over 10 hours and 101,000 tokens) of audio-video material, featuring guilty suspects of femicide in two legal contexts (i.e., police interviews and courtroom hearings). Our findings suggest that denial is constructed linguistically by means of several strategies that complement and reinforce each other. Besides an extensive use of the morpho-syntactic realization of negation, suspects deny the accusations through recurrent multimodal features, such as, headshakes, shoulder shrugs, gaze direction (towards law enforcement officers), and open hands (either still or moving onward). We also observe that in our corpus denial co-occurs with repetitions, anaphora, vagueness, and reduced sentence length. These results call for additional systematic research on multimodality in legal interactions and in other contexts.

Keywords: negation, denial, multimodality, co-speech gestures, gendered violence

## 1. Introduction

In 1976, Diana Russell mentioned the term 'femicide' for the first time during her testimony at the International Tribunal on Crimes against Women. But it was only in 1992 that Jane Caputi and Diana Russell defined 'femicide' as «the most extreme form of sexist terrorism motivated by hatred, contempt, pleasure or a sense of ownership of women» (Caputi, Russel, 1992: 12). More than two decades later, on the International Day for the Elimination of Violence against Women and through the Vienna Declaration on Femicide, the term 'femicide' was broadly defined as «the killing of women and girls because of their gender» (UN, 2013: 2). In more recent times, the European Institute for Gender Equality (EIGE) defined 'femicide' as «the killing of a woman by an intimate partner and the death of a woman as a result of a practice that is harmful to women» (EIGE, 2017: 28). In this paper, we will adopt the broad definition of 'femicide' formulated by UN (2013).

Femicide differs from male homicide, as most crimes are committed by intimate partners (including ex-partners), other familiar male figures, and they involve ongoing abuse at home, threats or intimidation, psychological violence, sexual and physical violence, or other situations where women have less power or fewer resources than men. In fact, a recent report published by the United Nations Office on Drugs and Crime (UNODC) reveals that in 2020 there were 81,000 women murders around

the world. In 58% of the femicide cases, the offender was the victim's (ex-)intimate partner or some other male family member, friend, colleague, or acquaintance. This means that every eleven minutes, a woman or a girl is killed by someone she knows well. The UNODC (2020) study also claims that although various schemes aimed at reducing or eliminating femicide have been developed worldwide (e.g., VAWG strategy in UK, DdL 99/2013 and L. 119/2013 in Italy, etc.), a significant progress in protecting the lives of female victims is yet to be made. This can be inferred also by the high number of gender-related crimes reported in the past decade that has remained unchanged in large measure. In addition to that, in the American continent there has been a 9% increase of femicide cases with respect to the average global numbers. The afore-mentioned report speculates that collecting accurate data on femicide is difficult because, oftentimes, law enforcement, social service bodies, and medical institutions do not have the necessary information regarding the causes of the homicide, let alone gender-related motives or information regarding the victim-perpetrator relationship.

While the afore-mentioned findings urge for better cooperation between legislators, law enforcement, social services, non-government organization, and scholar research in order to provide more efficient responses to violence against women, in recent years the pervasiveness of femicide has led scholars in various fields of research to explore the facets of this phenomenon in detail. One of the first contributions on this topic is the volume written by Johnson et al. (2010) which presents the results of an international survey on violence against women. The authors discuss the findings of over 23,000 interviews with women from eleven countries that talk about their experiences with gender-based violence. On the same note, Bandelli's (2017) monograph investigates the femicide phenomenon in Italy, by focusing on the discourses of contestation, on the simplistic representations of relationships between men and women, and more specifically, on the aggressor-victim connection.

Several works in the field of linguistics (especially corpus linguistics and discourse analysis) have focused on the topic of violence against women. For example, Sánchez-Moya (2017) explores the discourse of women survivors of intimate partner violence, by means of a corpus-driven examination of a dataset of 120,000 tokens collected from online forums. The paper displays the role of pronominal distribution in shaping the collective identity, as well as some differences in the emotional tone across the groups of victims taken into consideration. Similarly, Sánchez-Moya's (2021) paper analyses the discursive constructions used by female survivors of intimate partner violence when representing themselves and the perpetrators online. The work relies on the semantic categorisation of verbs, recurrent lexical patterns, and corpus statistics measurements (e.g., keyness) to identify these representations. The findings of Sánchez-Moya's (2021) work show that words such as 'abuser' and 'perp' are frequently used by victims to conceptualise male perpetrators. Moreover, the partner's aggressive behaviour is linguistically mirrored by the use of activity verbs such as 'grab', 'punch', and 'break'. Interestingly, some lexical choices adopted

by the victims suggest that they tend to conceptualise themselves largely through their roles as mothers.

Next, Busso et al.'s (2020) study employs tools and techniques from corpus linguistics and natural language processing to explore how femicide is framed in the Italian media. The results indicate that most crimes are perpetrated by intimate partners and that the media discourse around this topic increases in certain circumstances and moments of the year. There is also a tendency of not holding offenders accountable of their crimes. Moreover, the qualitative analysis of figurative language reveals that metaphors are used to delineate both the victims' and the perpetrators' socio-psychological traits. Finally, the episodes of violence are narrated using multimodality, more specifically by means of iconic speech and gestures.

The afore-mentioned studies and our work share the use of techniques from linguistics to explore the domain of discourse regarding gendered-related violence. Nevertheless, unlike previous research, we focus on discourses of the alleged perpetrators (suspects that were later found guilty and convicted), in an attempt to understand the linguistic expression of denial. In particular, through the lens of multimodal analysis and conversation analysis, we investigate how the crime is denied by exploring the discourses of a specific category of suspects of femicide, namely people familiar with the victims from long or close association.

This pilot study is exploratory and qualitative, to a large extent, and our main aim is to detect and describe recurrent verbal and nonverbal features used by the suspects to deny the accusations of femicide. To this end, we collect, transcribe, and annotate a multimodal corpus of over 10 hours (101,000 tokens) of public domain audio-video material of North-American English featuring guilty suspects of femicide. Considering the descriptive nature of this study and the data at hand, no generalisation claims can be advanced with respect to the differences between the strategies used to deny the allegations of femicide and those used to deny other crimes.

Our work attempts to contribute to the general understanding of the multimodal strategies employed to encode denial. In particular, we investigate how denial is communicated by alleged perpetrators (later found guilty) of femicide during police interviews and courtroom hearings. To this end, besides exploring the purely verbal expression of denial, we look at the bodily conduct of the suspects in order to map recurrent multimodal features (e.g., co-speech gaze, co-speech gesture, etc.).

Various studies have explored the role of multimodality in the expression of negation and have indicated that specific gestures and facial expressions are used to express distinct types of speech acts, including those associated with negation (see Prieto, Espinal, 2020, for an up-to-date review). However, previous works have not focused specifically on the multimodal expression of denial, let alone how it is encoded in the discourses of the suspects of crime (femicide or other). We believe that the data produced by the alleged perpetrators of femicide is particularly interesting because of the relationship they have with the victims. Although generalisations over the role of multimodal denial in outlining the profiles of perpetrators of femicide may

not be advanced from the data analysed here, we believe that this type of exploratory study may pave the way to more systematic research on the topic.

The paper is structured as follows: in section 2 we discuss about the theoretical tenets of this study; section 3 describes the corpus, the methods employed and the limitations of this study; results are presented and discussed in section 4; concluding remarks follow in section 5.

## 2. The study

### 2.1 Denial

Negation is a basic and essential phenomenon in language and its expression starts in early childhood (Morris, 2003). As is the case with most universal features of human languages, negation has sparked the interest of scholars from various fields of research, such as philosophy, logic, cognitive science, and linguistics. In fact, the beginning of the scholarship on negation dates back to Parmenides, roughly the early fifth century BCE, and over the following centuries it has been further developed by a multitude of scholars, such as Plato, Gottlob Frege, Otto Jespersen, Bertrand Russell, Ludwig Wittgenstein, and Paul Grice (see Speranza, Horn, 2010, for a historical review of negation).

The seemingly simple phenomenon of negation camouflages an elaborate system of forms of expression. Languages are endowed with all sorts of lexical, morphological, and syntactic devices that in combination with other features (e.g., modality) enable speakers to express negation. Adding a single negation feature (e.g., the negative adverb 'not') to a sentence will change greatly the message conveyed (e.g., 'The wall is white.' vs. 'The wall is not white.'). In face-to-face communication, the verbal expression of negation is often complemented by nonverbal devices, such as prosody (e.g., speech rate, pitch, etc.) and the multimodal conduct (e.g., gestures, gaze, posture, etc., see also 2.2) – this latter dimension also occurring alone (e.g., in some cultural and linguistic groups head shaking is associated with negation).

According to Roitman (2017: 1), there are three main meanings of linguistic negation: non-existence (e.g., 'There is no progress.'), rejection (e.g., 'I do not want this.'), and denial (e.g., 'It did not happen.'). The studies of Hummer et al. (1993) and Dimroth (2010: 45) indicate that from a developmental perspective, denial occurs later than other functions of negation, because it requires the simultaneous representation of two mental models, one for the true state of the world and one for its false counterpart.

Ripley (2020) investigates the relationship between negation and denial and he asserts that denying a certain claim means performing an act that introduces some information and this new information is the fact that the claim is ruled out. Generally speaking, denial has been regarded as a speech act that enacts objections

to utterances produced by previous interlocutors (van der Sandt, 1991)<sup>1</sup>. This implies that, generally speaking, denial cannot occur alone in natural contexts. However, denial can correct previous utterances that express negation, generating positive sentences.

Geurts (1998) identifies several mechanisms of denial and argues against the unitarian approaches proposed by Horn (1989) and van der Sandt (1991). According to Geurts (1998: 275), denials may be classified as follows: propositional denials (concerned with the content of a previous utterance), presupposition denials (the presupposition of a previous utterance), implicature denials (the implicature of a previous utterance), and form denials (the form, style, or register of a previous utterance).

In this paper we adopt an unitarian approach to denial; in particular, we use 'denial' as an umbrella term to refer to any kind of verbal or nonverbal linguistic expression employed by a speaker (let us call it 'speaker X') to object or correct the content, the presuppositions, the implicatures, and the form of a previous sentence uttered by another speaker (let us call it 'speaker Y').

## 2.2 Multimodal conduct

Before we operationalize denial as a multimodal speech act, it is worth taking a step back with the purpose of introducing and understanding the concept of multimodality. The term 'multimodality' is common to several fields of research in linguistics (e.g., conversation analysis, cognitive linguistics, construction grammar, etc.) and consequently it has been defined in many ways. As Mondada (2016: 338) claims, in conversation analysis, 'multimodality' is used to "refer to the various resources mobilized by participants for organizing their action – such as gesture, gaze, facial expressions, body postures, body movements, and also prosody, lexis and grammar".

Following the definition above, we also adopt the concept of 'multimodal conduct' from Matoesian & Gilbert (2018) who in turn borrow it from Deppermann & Streeck (2018). In fact, the term appears in Deppermann & Streeck's (2018) edited volume, which is dedicated to the study of embodied interaction. The book brings together several authors that discuss the complexities of multimodal discourse. These contributions reveal how speakers build and employ modal resources (e.g., speech, gesture, gaze, etc.) to perform social actions. More importantly, Deppermann & Streeck's (2018) volume advocates for the use of multimodal analysis of video material in the study of social interaction. In their book, Matoesian & Gilbert (2018: 7) use 'multimodal conduct' interchangeably with 'multimodal resources' to refer to "the integration of speech, gesture, gaze, material artifacts, posture, and movement in the courtroom performance". To

<sup>&</sup>lt;sup>1</sup> Besides denial, other speech acts are associated with negation, namely rejection and metalinguistic negation (see Déprez, Espinal, 2020, for detailed contributions on this topic).

contribute to the understanding of these modes in legal interaction, the authors propose methods and tools for a systematic analysis of multimodality.

One of reasons why multimodal conduct has long been neglected in the research on legal language is that the analyses are complex and time-consuming, in a context where it is already difficult to investigate the content of the discourse alone. Multimodal analyses of spoken legal language imply the transcription and annotation of a whole range of features such as overlaps, pauses, hesitations, body positions and movements, etc. In turn, each of these features should be categorized in various classes (each having several levels). To make an example, let us consider gaze, namely a type of mode that has been annotated very differently in linguistic research, since (to the best of our knowledge) there are not any unanimous conventions available. For instance, some scholars only annotate the gaze direction (e.g., Kendon, 1967) while others use more granular annotation schemes, coding also the object that the eyes fixate (e.g., Somashekarappa et al., 2020).

Despite being a challenging analysis, the fine-grained investigation of multimodal conduct allows us to better comprehend the dynamics of legal interaction (e.g., between suspects and law enforcement representatives). On the same note, Matoesian (2010: 541) claims that verbal and nonverbal features work together "as co-expressive semiotic partners – as multimodal resources – in utterance construction and the production of meaning". However, this understanding should not remain confined to the academic research, because a systematic identification, annotation, and analysis of features pertaining to multimodal conduct in the courtroom or in other legal settings may be relevant in shedding light on the interactants' profiles.

As far as our study is concerned, we aim to demonstrate that suspects negotiate their identity and credibility also by means of multimodal resources. We believe that in all likelihood, multimodality has an effect on the pragmatics of speech acts and on their belief status. On this account, the speech act of denial is operationalized in the present work as a composite variable consisting of both a verbal and a nonverbal dimension that complete and enhance each other. This study explores the strategies employed by suspects to express denial during police interviews and courtroom hearings. In more general terms, this is an attempt to uncover and describe recurrent co-speech multimodal resources able to express denial.

Several studies have already investigated the role of multimodality in the expression of negation, but to the best of our knowledge, none has focused on how the suspects of crime encode denial. Prieto & Espinal's (2020) review shows that the negation-related speech acts are expressed by means of various prosodic and gestural features across natural languages. As far as denial is concerned, Prieto & Espinal (2020) mention high tones (in tonal languages) and pitch accentual prominence (in intonational languages). An important contribution to the study of multimodal negation is Harrison's (2018) monograph. He argues that "[n]egation is a linguistic universal with clear grammatical and gestural manifestations" (Harrison 2018: 1) and that there are regularities between grammar and gestures in human communication. Along the same lines, a recent study by Boutet et al. (2021) suggests

that children produce a set of shared gestures in combination with their target languages, generating a bimodal expression of negation. Finally, Bressem & Müller's (2017) paper on the multimodal patterns of negative assessment demonstrates that recurrent gestures display a fixed form-meaning pairing.

In light of the afore-mentioned studies, investigating how suspects of crime (in our case, femicide) use recurrent verbal and nonverbal features to express denial in a range of legal contexts and interactions may improve our understanding of the universal phenomenon of negation. Moreover, this preliminary work may lay the foundations to more systematic linguistic research on the representation and perspectivation of the femicide phenomenon and on the suspect's responsibility.

## 3. Methodology

## 3.1 Corpus

This work investigates the multimodal expression of denial by analysing the discourses of a specific category of suspects of femicide, namely individuals that are familiar with the victims from long or close association. For this purpose, we build an *ad-hoc* multimodal corpus of North-American English. We consider four suspects of solved cases of murders perpetrated to women in Canada and in the United States of America. Three suspects were married to the victims and one was the victim's friend. They were accused of killing the victims and one of them was charged of murdering both his ex-wives. Even though all suspects were eventually found guilty, they denied the accusations of murder in the audio-video material we considered in this study. For this reason, we refer to them by using the term 'suspects'.

The four videos are collected from Canadian and American open-access channels dedicated to crime news: The Fifth Estate², Red Circle Interrogations and Confessions³, Law & Crime Trial Network⁴, Macon Telegraph Archive⁵. In one of these videos, the suspect is portrayed in a courtroom during evidentiary and judiciary hearings. The other three videos show suspects during police interrogations with law enforcement officers. Besides the four suspects, the other active participants in the interactions are police officers, a county sheriff, a district attorney, a judge and two lawyers. Table 1 summarizes the information regarding the corpus statistics.

<sup>&</sup>lt;sup>2</sup> The channel is available at this webpage (accessed 21.10.2021): https://www.cbc.ca/news/fifthestate

 $<sup>^3</sup>$  The channel is available at this webpage (accessed 21.10.2021): https://www.youtube.com/c/RedCircleInterrogationsandConfessions

<sup>&</sup>lt;sup>4</sup> The channel is available at this webpage (accessed 21.10.2021): https://lawandcrime.com

<sup>&</sup>lt;sup>5</sup> The channel is available at this webpage (accessed 21.10.2021): https://www.youtube.com/user/ Telegraph247

Suspect (anonymized acronym)	Relation with the victim(s)	Legal context	Other participants	Duration of the interaction (HH:MM:SS)	Number of tokens
A.B.	wife	courtroom	district- attorney, judge, lawyers	01:54:17	17,682
C.D.	ex-wife	police interrogation	county sheriff	01:09:44	20,164
E.F.	ex-wives	police interrogation	police officer	04:58:24	46,076
G.H.	friend	police interrogation	police officers	02:03:39	17,234
Total				10:06:04	101,156

Table 1 - Corpus statistics

The overall size of the corpus amounts to over ten hours of multimodal material corresponding to 101,156 tokens, but the duration of each video and their number of tokens vary due to factors that do not depend on our methodological design.

Generally, the audio quality of the material is good enough to allow us to use software for automatic transcription. The four videos are in colour but they display different characteristics in terms of camera shots and angles. The video of A.B.'s courtroom hearing is mostly a medium shot with an over the shoulder angle – enabling us to have a solid view of the suspect – but close-up shots are also used, and in those cases the suspect covers most of the screen. The medium shot is used also for the video of C.D., but this time with the high-angle technique; since the camera points down on the participants from above, the overview of the interrogation room is possible. For the police interrogations of suspects E.F. and G.H. the long shot and the high-angle techniques are used. All these characteristics allow us to explore and annotate in detail the suspects' multimodal conduct.

After data collection, we use Dragon Professional software<sup>7</sup> for English to automatically transcribe some of the audio-video material<sup>8</sup>. The generated transcripts are manually edited and corrected to match the content of the interviews and the participants' turns. Although the videos are part of the public domain and all cases are closed, we anonymize the data that we consider potentially sensitive (i.e., the names of suspects, of victims, and of other interactants; detailed geographical infor-

<sup>&</sup>lt;sup>6</sup> For a review on camera shots and angles, see Savardi et al. (2021).

 $<sup>^7</sup>$  An overview of the software and its characteristics is available at this webpage (accessed 20.11.2021): https://www.nuance.com/dragon.html

<sup>&</sup>lt;sup>8</sup> The transcription methodology had to be adjusted along the way because of the COVID-19 pandemic and the unavailability of licensed software at home. Only part of the material was automatically transcribed with Dragon Professional. The remaining part was manually transcribed by the author with the support of S. Rizza and S. Casari– two trainees of Laboratorio Sperimentale (Department of Modern Languages, Literatures and Cultures, University of Bologna) – to whom we are immensely grateful.

mation, such as town and street names; dates; other information that may reveal the identities of the participants).

#### 3.2 Methods

The edited transcripts of all speakers are imported into ELAN<sup>9</sup> and adapted to match Jefferson's (2004) transcription conventions. ELAN allows us to create tiers for each speaker, to define customised annotation schemes and levels for multimodal conduct, and to generate time stamps.

Even though the entire interactions between participants are transcribed, anonymized, and annotated, for our analyses we only consider the discourses of the suspects.

Therefore, in addition to the speech transcription, we elaborate *ad hoc* annotation schemes for five multimodal resources that we label as follows: gesture, gaze, posture, head, and legs. As displayed in Figure 1 (a screenshot of our transcription and coding in ELAN) each tier corresponds to a specific level of annotation.

Figure 1 - Example of ELAN transcription and annotation of multimodal conduct (own adaptation)

 $<sup>^9</sup>$  An overview of the software and its characteristics is available at this webpage (accessed 20.11.2021): https://archive.mpi.nl/tla/elan

In this study, we use the term 'gestures' to refer exclusively to what is traditional known as 'indexical (or deictic)' gestures, 'iconic (or lexical)' gestures, and 'beat (or motor)' gestures produced spontaneously with the hands in face-to-face conversation (Holler et al. 2012; Kendon 2013). Under the macro level of 'gestures', we insert three levels of annotation: the hand shape (i.e., angled, cup, deictic, fist, gun, hole, intertwined, jailed, knife, loose, open and still, open moving onward, pursed, relaxed, steepled, peace sign, wall, other), the hand location (i.e., above the head, in the air far from the torso, in the air near the torso, near the ankles, touching the arms, near the back, near the chair, near the head, near the hip, near the knees, on the lap, near the neck, in the pocket, near the shoulders, on the table, touching the torso, touching the waist, other), and the handedness (i.e., one hand, both hands). Our coding scheme for gestures is a simplified free adaptation of the Gesture Studies Coding Manual created by the MIT Speech Communications Group<sup>10</sup>; it allows us to annotate the wide range of gestural manifestations in the corpus.

Next, the term 'gaze' is employed here to describe how the speakers use their eyes for regulatory and communicative functions during spoken interactions (Kendon, 1967). Under this category we only code the direction of the gaze (i.e., down, up, left, right, towards the other speaker, other).

Another multimodal resource annotated in this study is posture that we intend as the speaker's body movements and position when they participate in the conversation (i.e., moving and leaning onward, moving left, moving right, retracting back, erect and sitting, shoulder shrugging, erect and standing, other).

We also code the movements and the position of the head (i.e., back, up front, left, right, still and erect, nodding, shaking, other) and of the legs (i.e., crossed ankles, foot over the thigh, leg over leg, moving legs while sitting, open legs, standing, tight legs, walking, wrapping legs around the chair, other).

Besides the multimodal conduct, we annotate hesitations, pauses, and overlaps. We employ corpus linguistics measurements (e.g., absolute and relative frequencies, concordances, etc.) to account for the ways denial is encoded verbally, namely by means of lexical and morpho-syntactical strategies (e.g., negative markers). This allows us to verify the expression of denial as a multimodal speech act.

The descriptive research proposed here has an important limitation, namely that it does not compare our data with data produced by suspects of crimes other than those involving violence against women. Therefore, we cannot establish whether the characteristics of denial, as they emerge from our data, depend on the type of crime or on other extralinguistic variables (e.g., the emotional state of the suspect, etc.). To the best of our knowledge, there are not any comparable open-access multimodal corpora on legal interactions and, at the time this research was conducted, building another resource on different types of crimes seemed highly impractical.

<sup>&</sup>lt;sup>10</sup> The Gesture Studies Coding Manual created by the MIT Speech Communications Group is available at this webpage (accessed 01.12.2021): https://web.mit.edu/pelire/www/manual/

## 4. Results and discussion

The first finding of this study reveals a trend on the verbal expression of denial. We observe that suspects make extensive use of lexical, morphological, and syntactic strategies of negation. In Table 2, we present the frequencies of the six most frequent negative markers in our corpus, as compared to their frequencies in the Open American National Corpus – only the spoken subcorpus is considered here (Ide & Suderman 2004)<sup>11</sup>. The frequencies reported for our corpus take into consideration only the suspects' turns and answers to the questions related to the crime. For comparability purposes, we display relative frequencies (per 1,000,000 words).

	Relative Frequency (1,000,000 words)			
Lemma	Our corpus (suspects only)	Open American English Corpus (spoken)		
not	16,050	4,408		
no	3,902	2,434		
never	2,367	930		
nothing	888	224		
nobody	222	110		
none	166	36		

Table 2 - The most frequent negative markers

As shown above, some of the lemmas (e.g., 'not', 'nothing', 'non') occur up to four times more in the discourses of the suspects in our corpus as compared to the data in the Open American English Corpus. This may not be surprising considering the data at hand, but it strengthens our assumptions with respect to the fact that the suspects of femicide may deny the allegations, in an attempt to abandon their sense of responsibility.

We further investigate the verbal expression of denial in our corpus, by performing a qualitative analysis of a sample of forty turns (ten for each video) that contains at least one instance of morpho-syntactic negation. In most of these interactions, we find examples of reactive negation (77.50%) – typical cases of denial – such as those show in (1) and (2) below. The cases of initiative negation like the one in example (3) are less frequent (22.50%).

(1) **Police officer:** she was gonna move out and live on her own (.) **Suspect:** NO (0.5) we were gonna move together and live together (.)

<sup>&</sup>lt;sup>11</sup> While the Open American National Corpus is not a multimodal corpus of legal interactions, we believe that it is a valuable electronic resource of American English, as it consists of over 40 million tokens. The corpus contains data from texts of all genres and transcripts of recorded spoken data produced from 1990 onward. The corpus is fully open. A complete description of the corpus is available at this webpage (accessed 14.05.2022): https://anc.org

- (2) **District attorney:** a.b. you whispered cheating whore right there (?) **Suspect:** no (0.7) no (.)
- (3) **Police officer:** in case you need something else to eat (0.6) a cigarette **Suspect:** you know like ehm i don't hate my ex-wife (0.5) for what she's done to me (,)

Our qualitative exploration uncovers another interesting finding. In most cases, the reactive negations are supplemented by the repetition strategy. Two of such examples are (2) above and (4) below – the latter is particularly interesting because all negative sentences are repeated twice or three times.

(4) **Police officer:** but you know that's gonna be in the paper (.) **Suspect:** no i'm not not i'm not (0.5) i can't change that of course (1.0) and there's nothing i can do to change this (0.5) ((he is sobbing)) no i can't (0.9) i can't tell you anything other than what i've told you (.)

Another feature that emerges from the analysis of the sample of turns is the suspects' preference for the anaphora, even when the referents are not easily retrievable in the context of the narratives. Victims are rarely called by their names; instead, suspects use the entire set of anaphoric third person pronouns (e.g., 'she', her), possessives (e.g., 'her', 'hers'), and reflexives (e.g., herself). An interesting example is the one shown in (5) below, as the suspect does not refer to his ex-wife by her name during the entire hour of interrogation. He deploys anaphoric expressions such as "that woman" to distance himself from the murder accusations.

(5) **Suspect:** i didn't do anything to that woman (0.9) i didn't hurt her (.)

In addition, the corpus exploration reveals other (less frequent) strategies employed by the suspects to deny the allegations of murder. The turns of suspects A.B. and G.H. have a reduced average sentence length (i.e., around 3 words per sentence). These two suspects are also those whose speech acts (including denial) are the vaguest. An example is provided in (6) where it is not clear to which question the suspect answers.

(6) Lawyer: did you confront them about the affair (?) did you (?) had you concluded there wasn't an affair (?)

Suspect: no i did not (,)

The description and the discussion of our results continue with the part dedicated to the multimodal resources. Table 3 displays the number of items coded for each suspect.

Suspect (anonymized acronym)	Number of items		
A.B.	1,674		
C.D.	1,756		
E.F.	4,122		
G.H.	351		
Total	7,903		

Table 3 - Multimodality resources

The number of items representing instances of multimodality amounts to 7,903, but their distribution in the corpus varies greatly. In particular, if we consider the duration of each video and the related number of tokens, it is clear that, proportionally, suspect G.H. employs the lowest number of multimodal features, while, on the contrary, suspect C.D. the highest number of these features.

In order to account for the multimodal expression of denial, we identify all the turns that contain markers of negation and we manually control whether suspects use simultaneously co-speech multimodal resources in these cases. All these instances are classified and counted. Table 4 displays the most frequent multimodal features (and the related number of items for each suspect) that co-occur with denial in our corpus.

Suspect (anonymized acronym)	Gesture: Open hands still / moving onward	Gesture: Steepled hands	Head: Shaking	Posture: Shoulder shrugs	Posture: Leaning or moving onward	Gaze: Towards the other participant
A.B.	6	3	37	7	15	28
C.D.	74	21	71	12	14	82
E.F.	48	2	13	5	31	176
G.H.	2	0	1	1	4	29

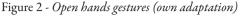
Table 4 - Multimodal denial

This analysis unveils several interesting trends. First of all, the verbal dimension of denial is complemented by a set of recurrent co-speech multimodal features: headshakes, open hands (either still or moving onward), steepled hands, shoulder shrugging, leaning or moving onward, and the gaze directed towards the other participant in the legal interaction.

Overall, the results are consistent with previous research on the multimodal expression of negation. According to Bross (2020: 18), the negative headshake is a "statistical universal" acquired during early infancy and, just like other gestures, it may have roots in "object manipulation or action, especially within parent-child interaction".

As far as the gestures are concerned, the most frequent is the 'open hands' gesture (see Figure 2). The hands are either still or moving and their location is generally in the air near the torso, near the lap, on the lap, and on the table. Previous research has reported that the 'open hands' gesture (part of the Open Hand Prone gestures family) is usually linked to spoken expression of negations (Kendon 2004). The other co-speech gesture associated with denial in our corpus is the 'steepled hands'. In this case, the hands are located near the head (more specifically, near the face).







A co-speech multimodal feature that frequently complements denial in our corpus regards the direction of the gaze. In particular, all speakers tend to fixate their interlocutors during denial. One such example is provided in Figure 3 and it corresponds to the question-and-answer exchange in (7). The suspect is sitting still on the chair for almost two hours, his head is still and erect, his hands are relaxed on the table, and his gaze is always directed towards the detective that is asking questions. In all probability, the suspects in our corpus adopt the strategy of looking squarely into the eyes of their interlocutors in an attempt to appear honest and credible.



Figure 3 - Gaze towards the other speaker (own adaptation)

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(7) Police officer: when was the last time you shot those guns (?)
Suspect: i haven't (,)
Police officer: you've never shot a gun (?)
Suspect: no (,)
Police officer: have you ever shot any gun in your whole life (?)
Suspect: no (,)
Police officer: NEVER (?)
Suspect: no (,)
Police officer: so you own three guns and you've never shot (?)
Suspect: yes (,)
Police officer: wow (.)
```

Two cues pertaining to the posture set of multimodal features co-occur with denial: shoulder shrugs and the torso leaning or moving onward. Debras (2017: 24) sustains that shoulder shrugs "have to do with the subjective expression of negation". A qualitative exploration of the shoulder shrugs in our corpus suggest that they are often combined with raised eyebrows – not coded in this study. This is also consistent with previous research, as in the literature, the propensity of the shrug feature to combine with other modes is known as the "compound enactment" (Morris 2004: 165; Debras 2017: 2).

Finally, but not surprisingly, our data do not reveal any interesting trend regarding the movements and the position of the legs.

All in all, our study shows that the speech act of denial may be operationalized as a composite variable consisting of a verbal and a multimodal dimension that coexist and go along in face-to-face interactions. While we cannot establish whether our findings are relevant, in general, for the speech act of denial, the results discussed above suggest that all suspects analysed in our corpus deny the accusations of by means of multimodal resources. These findings call for more systematic studies in linguistics on multimodality (and on languages other than English) in legal interactions.

# 5. Conclusions and further research

Starting from a case study of interviews with guilty suspects of femicide – the victims' (ex-)intimate partners, family members, or friends – this paper explored the multimodal dimension of denial. The data produced by these individuals were considered interesting precisely because of the close relationship they had with the victims. The objective of this descriptive and, to a great degree, qualitative research was to identify recurrent verbal and nonverbal features used by suspects to deny the allegations of crime. The analyses are supported by an *ad hoc* multimodal corpus of over 10 hours (101,000 tokens) consisting of open-access and public domain audiovideo material produced by speakers of North-American English.

We showed how suspects expressed denial in two legal contexts (i.e., police interviews and courtroom hearings). The findings suggest that denial is constructed by means of verbal and nonverbal strategies that complete and strengthen each other.

Besides the extensive use of morpho-syntactic realization of negation (negative markers in our corpus were more frequent than those in a reference corpus of American English), suspects deny the accusations through several recurrent cospeech multimodal resources, such as headshakes, shoulder shrugs, gaze towards the interviewer, and open hands (either still or moving forward). We also observed that in our corpus denial co-occurs with repetitions, anaphora, vagueness, and reduced sentence length.

All in all, our results indicate that the speech act of denial is much more than what verbal features could express. Suspects negotiate their credibility through multimodal and verbal resources simultaneously and, to some extent, equally. Our study suffered from limitations common to qualitative methods in linguistics, which, however, provide opportunities for improvement in future research. In particular, the analyses were limited to the data we collected and annotated: due to the lack of comparable corpora, we were not able to adopt a contrastive approach (e.g., taking into consideration denial in discourses produced by suspects of other crimes or by speakers in other communicative contexts). At this stage, we cannot ascertain that the characteristics of denial, as they emerge from our findings, depend on the type of crime or on other extralinguistic variables (e.g., the emotional state of the suspect, legal context, etc.).

For all these reasons, we believe that additional systematic research on multimodality in legal interactions, in other communicative contexts, and in more languages is necessary. Moreover, research on multimodality should not remain confined to the scholarly debate; analysing the multimodal conduct in legal settings may be advantageous in providing insights on the interactants' profiles.

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