



Robert A. Leonard, Ph.D.

The Case of Melissa Lucio: Report

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I. Qualifications

I am Dr. Robert Leonard, a tenured Professor of Linguistics at Hofstra University. I have taught linguistics at the college level for some 40 years, including 32 years at Hofstra where I have created over 30 courses in linguistics. I served for seven years as Chair of Hofstra's Department of Comparative Literature, Languages, and Linguistics, the department that includes linguistics, literature, and 12 foreign language degree programs.

I have been qualified as an Expert in Linguistics, under Frye and under Daubert, in 14 States and six Federal Districts: in State Courts in Arizona, California, Colorado, Florida, Illinois, Indiana, Michigan, Montana, New Jersey, New York, Nevada, Oregon, Pennsylvania, and South Carolina, and in U.S. District Courts in Newark, NJ, Austin, TX, New York, NY, San Jose, CA, Tampa, FL, and Denver, CO, and I have testified as a linguistic expert before World Bank ICSID Tribunals in Washington, DC, and Paris.

I am the Director of Hofstra's graduate program in Linguistics: Forensic Linguistics, a program approved by the Regents of the State of New York to confer degrees. I serve as the founding Director of Hofstra's Institute for Forensic Linguistics, Threat Assessment, and Strategic Analysis, and of the Forensic Linguistics Capital Case Innocence Project, a joint venture with the Hofstra Law School, and founding co-Director of the Joint MA-JD program with the Law School.

I received a Ph.D. in linguistics from Columbia University in 1982 with research specialties in semantic theory—theory of meaning—and sociolinguistics. My research specialty is the juxtaposition of those two fields: the meaning of words and how humans

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communicate in the real world. I am regularly consulted in cases dealing with language use by the FBI, Joint Terrorism Task Force, police, and counter-terrorism units throughout the US, UK, Canada, and Europe.

I received a B.A. from Columbia College in 1970, where I was elected to Phi Beta Kappa and graduated with honors, and received an M.A. and M.Phil. from Columbia Graduate School, where I was awarded a Faculty Fellowship. In graduate school, in addition to my training in linguistics per se, I was mentored by Professor Allen Walker Read, one of the foremost lexicographers of the 20th century. I was awarded a Fulbright Fellowship for my dissertation research.

I serve as a member of the Editorial Board of the Oxford University Press scholarship series Language and the Law.

I have authored and co-authored both technical and popular articles in the field of linguistics. My technical articles have undergone extensive peer-review prior to publication by leading academic publishing houses.

I wrote the “Forensic Linguistics” chapter in Van Hasselt and Bourke's recently published Handbook of Behavioral Criminology: Contemporary Strategies and Issues, and was lead author on a Hofstra Law Review article, “Forensic Linguistics: Applying the science of linguistics to issues of the law.”

I have been employed by the FBI Behavioral Analysis Unit-1 (Counterterrorism and Threat Assessment) to offer my expertise in specific cases, train federal agents, and analyze and advise on their Communicated Threat Assessment Database (CTAD).

I have given plenary presentations at ATAP International's Annual Threat Management Conference in Anaheim, at the Canadian Association of Threat Assessment Professionals, and at the Central Ohio Chapter of the Association of Certified Fraud Examiners' Fraud Investigation & Prevention Conference, as well as the FBI BAU's past Forensic Linguistics boot camps at Quantico.

I have lectured worldwide on the topic of linguistics, on advances in the application of linguistic theory to issues of real-world interactions, including specifically the meaning of words and other linguistic resources and their use in contexts such as intelligence analysis, interrogations, confessions, deception, trademarks, contract disputes, and wills. Invited lectures include

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- “Forensic linguistics: using language evidence in criminal, threat, and intelligence cases, with special reference to homicides.” to the NYPD Detective Bureau Homicide Investigators Course,
- an address to the Lexicography, Language, and Law Dictionary Society of North America,
- the plenary address to the Ohio Attorney General’s Conference on Law Enforcement,
- a lecture on “Speech Acts, Schemata and the Cooperative Principle: Three Useful Concepts in Understanding a False Confession: Linguistics Theoretical Issues in Forensic Linguistics Cases” at Georgetown University,
- “The application of linguistic theory to cases of profiling, authorship & counterterrorism” at the University Seminars of Columbia University: Language and Cognition,
- “Forensic linguistics for Investigative Practitioners: Threat Assessment, Counter-Terrorism, Linguistic Profiling and Authorial Attribution” at John Jay College of Criminal Justice of the City University of New York, and
- “Sociolinguistics as Forensic Science” at the Forensic Linguistics Workshop for Law Enforcement Practitioners, Behavioral Analysis Unit-1 (Counter-terrorism and Threat Assessment), National Center for the Analysis of Violent Crime, Critical Incident Response Group, Federal Bureau of Investigation, Quantico, VA.

I have testified about issues related to linguistics on behalf of government agencies and defendants in criminal cases involving murder and other felonies. I have also consulted on scores of other criminal cases at the request of law enforcement agencies including the U.S. Department of Justice, throughout the United States, Canada, the United Kingdom, and Europe, as well as on scores of civil cases, for clients including Apple, Facebook, and the Prime Minister of Canada.

My testimony has been found pivotal in investigating and prosecuting several high-profile cases, including the JonBenet Ramsey murder, death threats to judges and to U.S. Congress members, the murder of Charlene Hummert in Pennsylvania, and the triple homicide of the Coleman family in Illinois.

II. General Principles of Linguistics

Linguistics is a well-established science, and there are scores if not hundreds of professional peer-reviewed journals. Linguistics is the scientific study of language and is recognized as a science by the American Academy of Sciences. Linguists are regularly granted research funds by the National Science Foundation. In virtually any major university or college, a student can major in linguistics, and many major universities grant a Ph.D. degree in linguistics. There are academic associations and peer-reviewed professional journals within the field of linguistics. Sociolinguistics is an established branch of linguistics with peer-reviewed professional journals.

The English language has two main meanings for the word linguist: one, a speaker adept at a foreign language, and two, a scientist who studies human language as a set of real-world phenomena. Academic, scientific linguists belong to the second group (although many are also adept at foreign languages).

Forensic linguistics is the application of the science of linguistic investigation to issues of law. Forensic linguistics augments legal analysis by applying rigorous, scientifically accepted principles of analysis to legal evidence like contracts, letters, confessions, and recorded speech.

Linguists—as all scientists—seek to explain the non-random distribution of data. Just as bullets do not randomly issue from firearms nor are chemical concentrations randomly spread throughout a human body, words are not found to randomly issue from the keyboards and mouths of speakers of English or any other language. Words adhere to patterns; these patterns are the subjects of systematic observation of scientific linguists.

As in all other sciences, linguistics solves problems by constructing competing hypotheses and then testing which hypothesis better explains the non-random distribution of the data.

To illustrate linguistics as a science, a useful analogy is to medical experts. They describe and define what X-rays and MRI's show; so linguistic experts describe and define the underlying structure of written and spoken language. Both sets of experts can do this because they are trained and skilled in what to look for as they assess the meanings and implications discovered in their observations.

III. Assignment in this Case and Summary Conclusion

I was asked by counsel to analyze the transcripts of the police questioning of Melissa Lucio and Robert Alvarez. I was further asked to perform a comparative analysis of the two transcripts to determine whether the linguistic performance by the officers differed between the two subjects in a manner that affected the speech event taking place, and if so, how. Thus, my team and I compared two competing hypotheses for each of the transcripts: that the linguistic performances of the officers' questioning constituted the speech event of:

Hypothesis 1 - an information gathering interview, OR

Hypothesis 2 - an accusatory interrogation.

Speech events are identifiable human activities in which the language used plays the central role in defining it. The way a person uses language depends on the speech event in which that language occurs. Speech events can be further refined into those that fall under the subcategory of "institutional talk", which can be broadly understood as "interactions between lay people and the representatives of professions or public bureaucracies," which "tend to be quite strongly reined in by the limits of goal orientation, special constraints on [linguistic] contributions, and specific inferences."¹ In this, the interaction between the questioning officers and Lucio/Alvarez comprises "institutional talk", and is constrained by the goals of the officers, and the constraints on the participants' contributions (e.g., at its core: the police ask the questions, Lucio and Alvarez give the answers).

Speech events of "institutional talk" can be characterized by, "five major dimensions of interactional conduct... These are: (a) **lexical choice**; (b) **turn design**; (c) **sequence organization**; (d) **overall structural organization**; (e) **social epistemology and social relations**," [emphasis added].² These are exemplified below. Any given speech event may vary in all or only some of these five dimensions from any other speech event, and it is these variations that constitute the differences in this case between an information-gathering interview and an accusatory interrogation, both of which are predictable speech events in interactions between questioning officers and lay people. These five dimensions do not occur in isolation, with multiple aspects likely occurring

¹ Heritage, J. (2005). Conversation analysis and institutional talk. *Handbook of language and social interaction*, 103, 47.

² Heritage, J., & Drew, P. (1992). Talk at work. Interaction in institutional settings.

during any given instant of a speech event, and with the outcome of one dimension frequently characterizing the outcome of others.

Thus this report examines these five dimensions in the transcripts of the police questioning of Lucio and Alvarez. The difference in these five variables between the transcripts of Lucio and Alvarez constituted the difference between an information gathering interview for Alvarez and an accusatory interrogation for Lucio, as demonstrated in the table below, which affords an overview of the difference between **accusatory** and **information-gathering** outcomes.

	Melissa Lucio	Robert Alvarez
(a) Lexical Choice	Officers evoked lexical categories dealing with blame, frustration, abuse, etc. , as well as information gathering	Officer evoked lexical categories dealing specifically with the facts of the case and information gathering
(b) Turn Design	Officers interrupted Lucio more , and picked up/pushed back against more of her topics	Officers interrupted Alvarez only once , and picked up/pushed back against fewer of his topics
(c) Sequence Organization	Officers used question types that skewed toward confusing (compound questions, complex questions) and primarily accusatory (loaded/leading questions, closed choice questions) sequences	Officers used question types that contributed toward information gathering sequences (open ended questions) with fewer accusatory question sequences
(d) Overall Structural Organization	Officers followed the style of the guilt-presumptive Reid technique, involving direct accusations and dismissal of denials of guilt, etc. ³	Officers largely followed an information-gathering interview style.
(e) Social Epistemology and Social Relations	Officers invoked Lucio's gendered role of a responsible mother and their shaming claim of her not following that role to push for a confession	Officers referenced Alvarez's gendered role as a biological father or sympathetically

Thus, as demonstrated in the analysis below, based upon these variables, I find **Hypothesis 2** to be the superior hypothesis to explain the distribution of the linguistic patterns as performed by the officers in Lucio's transcript, and **Hypothesis 1** to be the

³ Kassin & Gudjonsson, 2004

superior hypothesis to explain the distribution of linguistic patterns as performed by the officers in Alvarez's transcript. That is, **Lucio's police questioning was performed by the officers as the speech event of an accusatory interrogation**, whereas **Alvarez's police questioning was performed by the officers as the speech event of an information gathering interview**.

The analyses of these variables are the product of both a quantitative and qualitative analysis of the transcripts of Melissa Lucio and Robert Alvarez as provided by the Innocence Project. The quantitative approach consisted of a *linguistic keyword analysis*, which enables the objective computation of the *keyness* of words in a target text in comparison to a reference text, by comparing the ratio of occurrences of words in the two bodies of texts. This provides a measure of statistical difference that brings forth the ideological patterns/themes within a text, as compared to another text.

The keyword analysis yielded keywords [see Appendixes] that informed the qualitative analyses, as I examined each keyword in context to discover its uses. By letting the algorithm inform the qualitative analysis, my conclusions have been formed based on a comparative statistical analysis of the words used. As well, following the quantitative analysis, I also compared the types of questions and themes that were present between the two transcripts, focusing on the officers' utterances toward the addressees.

IV. Analysis

(a) Lexical Choice

According to Heritage and Drew (1992), "lexical [word and vocabulary usage, as opposed to other levels of language such as discourse] choice is a significant way through which speakers evoke and orient to the institutional context of their talk." As mentioned in the section above, a keyword analysis was conducted on the language of the officers in order to determine what lexical choices differed between the transcripts of Lucio and Alvarez. These lexical differences informed not only the overall categorical themes of the two transcripts, but also the differences in questions asked in (c) Sequence Organization below.

1. Lexical choices indicative of disparate question types and forms

The keyword lists of the officers' utterances in Melissa Lucio and Robert Alvarez's transcripts show that during **Alvarez's** interrogation, 55 out of 83 keywords spoken by officers [See Appendix B] were:

- a. words dealing specifically with the case and
- b. words that were used in the process of gathering information.

On the other hand, officers' utterances in Melissa **Lucio's** transcript had more evenly distributed proportions of keywords [See Appendix A] in the following categories:

- a. morality/praise/blame (14 keywords)
- b. physical aspects/abuse of the case (13)
- c. parenthood/family roles/children (6), and
- d. Case-specific, info-gathering process (11)

The distribution of the keywords above is consistent with **an information gathering interview for Alvarez**, and **an accusatory interrogation for Lucio**. As we will see further in part (b) below, the distribution of these lexical choice types likewise affects the disparate manner of questioning directed toward Lucio and Alvarez.

2. Lexical choices indicative of suggestions/feeding Lucio motives/triggers of "frustration/anger/upset"

During Lucio's transcript, the questioning officers introduced categories of emotion terms such as "frustration/frustrate," "mad/anger/angry," and "upset" as possible motives or triggers for harming Mariah and/or the other children. These categories are subject to thematic repetition, and contribute to the **accusatory nature** of an interrogation. Contrastingly, the officers do not introduce the same lexical categories in Alvarez's transcript, but rather stick to the **information-gathering** lexical categories as discussed in section 1 above. The counts below indicate utterances in which the words are used (and not the raw number of the words themselves which may have been used more than once in a single utterance).

i. "frustrated/frustration"

18 out of 24 occurrences of "frustrated/frustration" are used by the officers to accuse Lucio of having had a motive (her frustration). In the remaining 6 instances in which the terms are used, Lucio uses "frustration" herself after it is introduced by the officers;

however, she hedges her uses of “frustration” with mitigating words such as “**probably** frustration **I guess**” and “**just** out of frustration” in 5 out of those 6 instances.

Conversely, 3 out of the 4 times that “frustrated” occurs in Alvarez’s transcript, Alvarez is stating that he is frustrated, and he is the first to use the word. And that is in regards to his again taking cocaine, as shown in the excerpt below.

Alvarez	Well, about, about two weeks I did a couple--little bit--lines. You know? - - you know, I was just, you know, so frustrated ..
Banda	Why, why, why did you feel that you needed to - - ?
Alvarez	I don't know. I was just frustrated , man.
Banda	Frustrated with what?
Alvarez	- - I'm just tired, man, because - - .
Banda	- - .
Alvarez	I understand, sir. I understand.
Banda	- - I go through the same thing. Believe me.

This demonstrates a different application of the same lexical choices in the two transcripts, with “frustration/frustrated”, being used by the officers to accuse Lucio of having a motive for murder, and by Alvarez to describe himself.

ii. “angry/anger/mad”

The words “anger,” “angry,” and “mad” are all introduced by the officers in Lucio’s interrogation. Lucio denies 10 out of 13 suggestions that due to “anger,” “being mad,” or “angry” she had harmed her children. The two times that she does say/indicate that she would get “mad” is toward the end of her interrogation, after the questioning officers have suggested the words “angry” “anger” and “mad” several times, in addition to the other suggested motives of “frustration” and “upset.” The remaining instance of anger/being mad/angry suggested as a motive is within an officer's long conversational turn, in which it is unclear to which statement or question Lucio is responding.

iii. “upset”

The use of “upset” is mentioned 6 times by officers in Lucio’s interrogation as suggestions for motive/trigger, and to minimize the weight of the accusation by generalizing (e.g. “We all get upset. We all make mistakes”).

While officers suggest being “mad, angry, upset” as possible motivations or triggers for Lucio harming Mariah, these are never mentioned in Alvarez’s transcript. The only other feeling/emotion that is attributed to Alvarez is “stress,” and in the 2 times that it occurs, it

occurs within the context of “I (the officer) can just imagine” [the stress].

(b) Turn Design

According to Heritage and Drew (1992), “the analysis of turn design [taking turns in a conversation] addresses two distinct phenomena: (a) the selection of an activity that a turn is designed to perform; and (b) the details of the verbal construction through which the turn’s activity is accomplished.” In interactions, a turn is any utterance by a given speaker, which can be complete or incomplete (as by interruptions); turns are often a part of a larger sequence organization as we will see in section (c) below (in this case, question/answer pairs). The turn design of a given speech event dictates not only the use and designated performers of question/answer pairs as discussed further below in (c) Sequence Organization, but also how turns between speakers are completed, or, as we will see in this section, not completed.

1. Interruptions

Interruptions as linguistic phenomena concern the above mentioned, “details of the verbal construction through which the turn’s activity is accomplished.” That is, an interruption ending a turn accomplishes a different institutional goal than turns that allow a question/answer pair to naturally conclude with an answer.

Alvarez’s transcript contains only a single instance where he was interrupted by an officer, and as such is much more consistent with the speech event of an **information gathering interview for Alvarez** wherein all turns fully accomplish question/answer sequences.

In Lucio’s transcript, out of 129 interruptions noted by the transcriber in Lucio’s transcript, 85 were interruptions by the officers. 14 of those interruptions were the officers interrupting each other, or the linguistic phenomena of “minimal response” backchanneling, whereby an interlocutor interjects with phrases such as “yeah” and “right” to show that the officer was following along with the answer being provided. In particular, backchanneling does not detract from the natural culmination of a question/answer pair, and does not necessarily constitute linguistic interruptions in our sense, although the transcription notates them as such.

But, officers interrupted Lucio in 71 of those 85 times while she was trying to

answer questions or defend herself. This direct truncation of the institutional sequencing of question/answer pairs is indicative not of information gathering techniques expected in an interview, but of **an accusatory interrogation for Lucio**.

The remaining 44 interruptions were made by Lucio, who was trying to:

1. deny accusations that she had harmed her children,
2. answer one of the officers' multiple, rapid-fire questions, or
3. clarify her answer or one of the officers' questions.

Lucio, who has no other relational power in the interaction beyond being able to answer the questions she is being asked, appears to interrupt in an attempt to have those answers recognized and ratified by the officers. But the officers do not. Again, this is indicative of **an accusatory interrogation**, where the institutional validity of the sequences of a police questioning speech event are continually broken, thus inciting attempted pushback from Lucio.

(c) Sequence Organization

According to Heritage and Drew (1992), "it is apparent that the phenomena through which the institutionality of the talk is substantiated are most often *sequential* phenomena," which "exhibit features and social relations that are characteristic of particular settings." (Think about the different sequences of talk to be expected in, say, a church sermon speech event versus a used-car negotiation speech event.)

In the context of police questioning, the speech event can be reasonably expected to follow question/answer sequences, in which the institution (the officers) are the ones asking the questions. This section considers how the different approaches of asking questions in the two transcripts contribute to the contrasting speech events of an information gathering interview for Alvarez and an accusatory interview for Lucio.

1. Accusatory vs. Information-Gathering question types

Throughout the two transcripts, officers initiate multiple types of question sequences to both accusatory and information-gathering ends. The accusatory question types include (1) questions that make direct and indirect accusations of harm, (2) are closed-choice questions that provide answer options that are only inculpatory, or (3) are otherwise leading or loaded questions. All three of these question types occur throughout

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Lucio’s transcript, and to a degree much higher than Alvarez’s, contributing to the speech event of **an accusatory interview for Lucio**. In contrast, Alvarez’s contains far fewer varieties and instances of such questions (and, as demonstrated in section (d) below, the target of many of the accusatory questions asked of Alvarez are actually directed at accusing not Alvarez, but Lucio), contributing to the speech event of **an information gathering interview for Alvarez**.

i. Accusatory questions sequences

The table below demonstrates an approximate breakdown of accusatory questions asked of both Alvarez and Lucio throughout their transcripts. (This number is approximate because much of the accusal in Lucio’s transcript is carried over as a presupposition through several more turn sequences. As such, the accusations are implicit to the individual question forms rather than explicit, or may be ambiguous.)

ALVAREZ	LUCIO
<ul style="list-style-type: none"> - No Direct Accusations of Harm/Neglect - 6 Direct Questions about Harm/Neglect - 11 Indirect Questions about Harm/Neglect - 30 Indirect Accusations of Harm/Neglect 	<ul style="list-style-type: none"> - 28 Direct/explicit Accusations of Harm/Neglect - 62 Direct Questions about Harm/Neglect - 126 Indirect Questions with implicit presumptions/presuppositions about Harm/Neglect - 126 Accusations with implicit presumptions/presuppositions of Harm/Neglect

The following table demonstrates examples of accusatory question sequences in Lucio’s transcript, which contain a large number of accusations of harm/neglect, both direct and indirect, focused on Lucio. Examples are shown below.

Examples of Accusations made to Lucio
<p>It does bother you? But not enough? Not enough to take her to the doctor, not enough? Not, not enough to find out who did this because actually it was you. Right?</p>
<p>It’s got to be one, one or the other. There’s no other--there’s nothing else here. Either you’re a coldblooded killer who has no remorse, no remorse whatsoever for that two and a half year old child that’s dead, or it was an accident. Accidents happen. Was she a bad kid? Was she a restless kid?</p>
<p>How do you explain all those bruises? You have to be able to explain all those bruises one way or another. How do you explain all those bruises? You can’t say it’s horseplay. I mean come on. Kids play but not like that. Right now is the time, Melissa. Right now is the time to put it out. Lay it on the</p>

table. Just lay it out, Melissa. Right now is the time. Like I said, it was an accident or it was coldblooded and planned. So it was an accident?
Why would he say it's more you and not him? He didn't even blame the kids. Also the bite marks, these--the bite marks, it's--these look like adult teeth and there's no way that this happened on Thursday. I mean that's an old bruise. That's clearly more than four days ago. You know? I mean doesn't it look like she got run over by a car maybe? Really badly beaten? Why would you just let her lay there and die without eating? What was going through your mind? Hurry up and die?
I already know why. You caused these injuries, right? You have how many children?
Yes. Yes, you are. Yes, you are. You're telling me that a mom--I mean come on. I mean that's your baby. That's your baby. You bath her. You change her pampers. She's little, baby. You need to tell us. What happened? She a handful? Was she crying?
You know what happened. You just don't want to tell us. Right?
But yet you don't want to take responsibility. Right? Your daughter is dead. She had a slow death but yet you don't want to take responsibility. Is that right?
Then who did? Who did, ma'am? You're the mom. I asked dad. Dad said come see you, ask you. You're the one that has Mariah all day. You're gonna--you're not going to speak for her, right?
There's got to be something. There's got to be some explanation for these bruises, for these bite marks, for this torture. There's got to be something. You can't explain it? You can't explain it or you just can't take responsibility for it because you know you did this?"

Alvarez's transcript contains similar accusatory questions, but to a much lesser degree than Lucio receives, as shown in the distribution table above. Examples are below.

Examples of Accusations made to Alvarez
Um, and--so, um, first of all, I just want to get this out of the way. Okay? Uh, I have to ask you--okay? Um, because I, I have to know, okay, what happened to Mariah. Okay? Did you hurt her?
No. Did anybody in your family hurt her?
You didn't hurt her?
Who is the one that got to her? Who is the one that caused those bruises?
Are you hiding from--something from--that you don't want to tell me?
- - . It's not adding up. Sorry. It's not adding up. Someone got to Mariah, okay, and inflicted these injuries.
Well, right now the--I need to find out to see if they're talking to your, to your wife, what she has to say. Okay? Everything that - - right now you've been completely honest. You've been... [Alvarez: Uh huh] Truthful.
A person to, to--I mean you're being, you're being completely honest with me.
Okay? And the only thing I can, I can, I can, I can go by as far as right now is your word and the thing is that I don't know if you're being totally honest with me. See? But, um, but you're willing to take a polygraph.

If you pass it, then that shows that you're being honest with me.
...Okay? It just clears that--it just clears that obstacle there that you--so that everything that has been said right now has been truthful. Okay? The machine detected you were truthful and that's all it is. I don't care about the drugs. I don't care about any of that. My thing is that did you cause the--Mariah's death.
You can use this ashtray. I know you want to tell me.
So I'm pretty sure there's a lot of discipline going on there.
Well, like I said, I'm going to recommend that they get placed out in a foster home. It's going to be up to CPS to make that, that, that overall decision. Now, unless you got something else to tell me.
Okay. Do you want to go ahead and start giving me a statement of everything that you just basically told me? You're saying it's truthful. Right? Everything?
And you did not do those[?]
You did not hurt her[?]
You didn't hurt her[?]
So is there something you need to tell me.

ii. Closed choice question sequences

Closed choice or multiple choice questions are those in which the preferred answer possibilities or answer types are explicit in the question itself. (That is, “would you prefer a Ford or a Chevy?” requests an explicit choice between only Ford and Chevy.) There are 3 closed choice questions posed to Alvarez, but neither of the first 2 are in relation to a question of his guilt in harming Mariah or the children, and the remaining 1 is hedged. The distribution of these questions is demonstrated below.

<p>ALVAREZ</p> <p>3 Closed Choice Questions</p> <ul style="list-style-type: none"> - 2 are info-gathering - 1 is hedged with “we’ll see” and presents an option that absolves Alvarez of guilt <p>85 Open-ended questions</p> <ul style="list-style-type: none"> - 82 are info-gathering - 3 relating to harm/neglect 	<p>LUCIO</p> <p>26 Closed choice Questions</p> <ul style="list-style-type: none"> - 11 are info-gathering - 15 relating to harm/neglect <p>63 Open-ended questions</p> <ul style="list-style-type: none"> - First 23 are info-gathering - Later 40 relating to harm/neglect
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In contrast to Alvarez, 26 total closed-choice questions were posed to Lucio, 15 of which were within accusations or questions about her presupposed guilt in

harming Mariah or the children. That is, Lucio was presented with only inculpatory

or otherwise unfavorable answer options, as shown by the examples below.

Closed Choice Questions
That's what it looks like now. It was either an accident or it was intentional.
Okay? And I mean, like I said, it was either intentional or it's an accident.
Now is your chance to put it out. Now is your chance to tell us exactly what happened. Like we said, it's either intentional or it's an accident, but this happened. There's no, no going back on it. You can't bring your daughter back. We can't bring your daughter back.
It's got to be one, one or the other. There's no other--there's nothing else here. Either you're a coldblooded killer who has no remorse, no remorse whatsoever for that two and a half year old child that's dead, or it was an accident. Accidents happen. Was she a bad kid? Was she a restless kid?
How do you explain all those bruises? You have to be able to explain all those bruises one way or another. How do you explain all those bruises? You can't say it's horseplay. I mean come on. Kids play but not like that. Right now is the time, Melissa. Right now is the time to put it out. Lay it on the table. Just lay it out, Melissa. Right now is the time. Like I said, it was an accident or it was coldblooded and planned. So it was an accident?
Did you plan it or was it an accident?
Well, then what was it? It had to have been one or the other. There's no third choice here. You either killed her on purpose or she died accidentally.
... You didn't want the doctor to see those bruises and say, "Oh, she's abusing her." But you know what? At least she'd still be alive or at least have a fighting chance. Like I told you earlier, you're either a coldblooded killer or it was an accident. This just--didn't just happen. That just doesn't happen.

Consistent with the information-gathering speech event of Alvarez's interview is the presence of 82 information-gathering, open-ended questions. Only 3 open-ended questions had to do with harm/neglect toward the children. In contrast, 26 open-ended questions were posed to Lucio, the first 11 of which were information-gathering questions clustered toward the beginning of the interrogation, and the later 15 open-ended questions relating to her supposed guilt.

iii. Leading/loaded question sequences

Leading or loaded questions are those in which the answer, or at least the preferred answer is presupposed by the question. (That is, "don't you like Fords?" presupposes that you do, and "do you even like Chevys?" presupposes that you do not, for example.) Lucio is asked substantially more leading/loaded questions that presuppose guilt, and/or are crafted in such a way as to contribute to the accusatory nature of the institutional question

sequence, as shown in the examples in the table below.

Leading/Loaded questions to Lucio
<p>.... I mean do you even feel at least one bit of remorse for her not making it due to you neglecting so many telltale signs? Explain to me how these got here because it's--I'm going to tell you right now. Somebody has to account for the--for who--for who hit her.</p>
<p>Let's start with the truth. If you do anything, like I told you, like I've been telling you, if you do anything for your child, tell us the truth. The only thing you can do for her now is tell the truth. Did you even care about Mariah?</p>
<p>Do you even feel sorry for this little girl?</p>
<p>... Claiming that he [Alvarez] doesn't know anything about all these bruises and that bite mark, but he says, "You need to go ask my wife. He's a--she's the one that bathes her. She should know." So I'm here asking you what happened. Can you even speak out as a mom? I mean that's the very least you can do as a parent for your little one not here anymore. Two years here. Her body gave out. What triggered it? Did she deserve those hits? Something must have triggered you. I'm giving you now the time right now to tell me what happened. Or would you rather have Renee, or Richard, Gabriel, or your other daughters explain what really happened? Should you leave it up to them to explain what happened? Should I be going, going over there and asking them what happened to Mariah? Or are you going to step up as a parent? I mean you love your daughter, right? Now is the time. You need to tell us. Who was the one that hurt Mariah? You going to tell me?</p>
<p>[Interposing] If you had those markings, would you want help? That's what--you would want medical help. Right? Why wouldn't you give it to your daughter?</p>
<p>She would wake up in the middle of the night? Would it--would it make you upset when she woke up in the middle of the night and play with your makeup, and went through your purse, and made a mess?</p>
<p>What was going through your mind? She's going to get better without food, sleeping? Beaten up, beaten like--did you think that she was going to live and get better by going to sleep?</p>
<p>Well, but still that's \$20 that you all could be using for food, for clothes for the children, for anything the children need. You can't tell me that doesn't frustrate you. He's out smoking rock and you've got to take care of all the children. Now, what was this? Was this frustration that went a little too far or were you planning to kill her? Was it a huge weight off your chest when Mariah died?</p>
<p>Do you wish she was never born? That way you wouldn't have all these problems?</p>

2. Complex and compound vs. clear and concise question types

Consistent with the distribution of keywords in Lucio versus Alvarez's transcripts is the manner by which officers questioned Lucio and Alvarez. While both Lucio and Alvarez deal with accusations and questions to varying degrees, the proportion of direct to indirect accusations and the proportion of rapid-fire, compound questions to open-ended

info-gathering questions are disproportionate. There were 102 compound questions in Lucio’s interrogation, 53 of which were presupposed harm/neglect, and 47 of which were info-gathering. All of Alvarez's 6 compound questions were info-gathering.

Clear and concise question types, especially for the institutional talk of a police questioning, are likely to be open-ended questions. Open-ended questions are those in which a topic is proposed, but an exact answer, in either form or content, is not presupposed by the question. These are usually wh- questions, beginning with who, what, when, where, why, and how, as opposed to yes/no questions, where the response is limited to confirmation or rejection of the question’s premise. Several such open-ended questions are asked of Alvarez, as shown in the examples below, contributing to the overall speech event of **an information-gathering interview for Alvarez.**

Questions to Alvarez- info-gathering, Open-ended
Okay. I understand that you, you all have, uh-- how many children?
Okay. Can you tell me what happened today --this morning from the morning?
Okay. So then what happened?
Where is your wife at that time?
Okay? And is anybody going with you or is it, uh-- what’s going on?
Who was going to give the child a bath?
Okay. What about the day before yesterday? How was that day?
You all didn't do anything else? Was there any other activities?
Okay. And what’d you all do?
Okay. About what time did you go, go and get pizza? Let’s start with that.
What was she wearing?
- - . How do you spank them? / [Alvarez answers] / With what? / [Alvarez answers] / With your hand?
Okay. What about your wife? How does she discipline the children?
Is that the bruises that you saw on her?
How did that happen?
How long ago was this?
When you got them back?
Then who? Who?

In contrast, complex and compound question types are those in which, for example, multiple questions are asked within a single sequence, or the question is otherwise worded in such a way as to be unclear. Interlocutors often have a difficult time clearly answering all or any parts of compound questions, and tend to answer either the final question in the

sequence, or the question that made the most sense in its form. (That is, for example, “do you want ice cream? what size? do you want any toppings?” would make it unclear what the answer “no” was responding to, or may lead a wary respondent to request clarification in breaking the question down).

Roughly 100 compound questions, such as those examples provided below, were asked of Lucio by the officers, many of them, as discussed in section 1 above, pre-loaded with accusatory language. Examples are shown below.

Questions to Lucio- Rapid-Fire, Compound
Okay. Do you hit her? Who does the disciplining in your home?
[Interposing] Okay. How about your older children? When they mess up, who does the disciplining at home? Do you spank or does your--does your husband?
..Anything, anything different that you noticed that Mariah did differently? Did she sleep sound? Did, did she--was she crying more than usual?
Was she getting a cold or anything? Or was it the first time?
How, how, how long did she sleep? What time does your day start today? Did you wake up more or less--
But she started acting after the fall? Or you think could have been something before then?
[Interposing] And these signs from the seizure was when? The lockjaw and the dribbling of the nose and having a hard time breathing?
Did he know that she hadn't been eating? Did you tell him that, "Hey, Mariah hasn't been eating?"
And then you were off and on, on cocaine? Or was it other things?
Okay. Were you able to tell? Did you ask him or what? Or did you see him do it?
You're going to have to explain yourself one way or another. And maybe we're not the ones you have to answer to. I think you know who you have to answer to. Are you a religious person? You don't go to church or anything?
Well, you can tell us--start with telling us the truth. Start by telling us the truth. Did it go a little too far? Is that what happened? It went a little too far? Did she make you mad?
Then what happened? What happened? Did you plan to do this?
What's your definition of that? Is that a three step fall? Look at this, right there on the side, her ear. She's bleeding or something from her ear. What--I mean if my niece even had just that I would already be going to the doctor like crazy. What do you think about that? Right here, these markings right there on her arm, her shoulder. Look at--look at--look at the back of her neck. It's bruised. Who, who got her dressed in the morning? Did she cry when you put her clothes on?
What from? It's kind of hard for a kid to bruise back there. Come on. Do you--where does the discipline come? The rest of your kids, if we strip the rest of your kids down, are they going to have bruises too?

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Why only her? Did you plan to have her?

I already know why. **You caused these injuries, right? You have how many children?**

The very least you can do is give her that. Tell us what happened. Not just sit there, staring blank. Tell us what happened. **That's the very least you can do. Did you love her? Did you love her? That's the very least you can do. She's gone. She's not going to experience any life, growing up. 12, 13 years old, you know how the girls are, friends, who knows, sports, getting into high school, prom. Then what's out there, college, whatever. She's not going to be able to see that. The very least you can do as a mom is tell us what happened. What happened to Mariah? Were you stressed out, frustrated? Was dad stressed out? Was he frustrated? Then what happened? Answer, at least answer that. What happened?**

Well, but still that's \$20 that you all could be using for food, for clothes for the children, for anything the children need. You can't tell me that doesn't frustrate you. He's out smoking rock and you've got to take care of all the children. **Now, what was this? Was this frustration that went a little too far or were you planning to kill her? Was it a huge weight off your chest when Mariah died?**

How did this happen? How did that happen? How did that happen? How did it happen? The bite didn't kill her. **How did the bite happen?** You need to come out clean and tell us. At least as, as a mom, do it for Mariah. For two, two years she's been with you. So you should be able to explain what happened just by looking at this picture of Mariah, bite marks. Look at that. You change her diaper. She still wears pampers and you're telling me as a mom you can clearly look at that and just think nothing of it? At least do it for your little daughter, your little baby here. Tell us what happened, what triggered it. What's going on? It's just you and your husband, your kids. And it should come out from you. You're the mom. I shouldn't hear it--hear it from the kids, your own kids. **Can you tell us? Who caused these injuries? Was it your husband? No answer? Was it you?**

No easy way out of this one. There's no easy way out. You can't blame that on children. You can't blame that on children playing. You're not even standing up for yourself. **Are you going to offer any explanation for this? Melissa? Melissa, are you going to offer any explanation for this? Why not?**

"Well, then prove it. Prove that you cared for her. Prove that you cared for her by telling us how this happened. **How did she get these bite marks? How did she get these bruises? Was she that bad of a child? Was she that bad of a child that she needed to be disciplined like this? If you want to call this discipline? Was she that bad of a child?"**

"Explain that. Frustration? Melissa, I'm being straight with you. I need you to be completely honest with me. Okay? It's just you and I. Okay? I'm meeting you halfway. Okay? We're going to match those teeth. Okay? I want to just hear it from you, Melissa. It's okay. **You hit her? Out of anger? Who did it?"**

"With your hand? All over her body? Why? Explain that to me. I know why but I got to hear it from you."

"You were mad? That's not playing around. Let's be straight. Okay? **You were mad, weren't you? And you bit her?** Look at me, Melissa."

"Because, you know, a baby brings in a lot of responsibility. And then what happened? What, what led her--**what led her to her death? Just did you hit her**

in the head?"

Contrastingly, only 4 compound questions were posed to Alvarez, all shown below.

Okay. Can you tell me what happened today--this morning from the morning?
First of all, where did you all spend the night?

You all didn't do anything else? Was there any other activities?

Okay? And is anybody going with you or is it, uh--what's going on?

What about Sarah? She's only three. Is she potty trained?

The differences in the distribution of compound/complex questions between the two transcripts contribute not only to multiple confusing question/answer sequences in Lucio's transcript, but the overall speech events of **an information-gathering interview for Alvarez** versus **an accusatory interrogation for Lucio**.

(d) Overall Structural Organization

According to Heritage and Drew (1992), "A further level at which the institutionality of an interaction may manifest itself is in its overall structural organization. Many kinds of institutional encounters are characteristically organized into a standard 'shape' or order of phases. Conversations, by contrast, are not."

Questioning of Lucio was highly structured and appears to have followed the well-known and widely taught Reid Technique, which claims that "The interrogation of a suspect should only occur when the investigator is reasonably certain of the suspect's involvement in the issue under investigation"⁴. Following the overall structural organization of the Reid Technique aligns the speech event with **an accusatory interrogation for Lucio**.

Conversely, in contrast to an interrogation, the questioning of Alvarez more closely followed an *interview*. As distinguished by Prof. Roger Shuy in the *Language of Confession, Interrogation and Deception*⁵:

Authorities on police interrogation differ somewhat in how interrogation is defined. Yeschke (1987) describes *interviewing* as "a dynamic human interaction having the purpose of collecting truthful data to be used for mature decision-making and just action-taking" (p. 25). He contrasts the interview with *interrogation*, however, defining the latter as "a face-to-face meeting with the distinct task of gaining an admission of confession in a real or apparent violation of law, policy, regulation or other restriction" (p. 25)...

⁴ http://archive.reid.com/educational_info/critictechnique.html

⁵ Shuy, R. W. (1998). *The language of confession, interrogation, and deception* (Vol. 2). Sage.

It is perplexing, however, how law enforcement could interrogate, following the above definition, without first interviewing. It would seem reasonable that the first contact with a suspect would be to bring out the necessary facts. It is quite possible that what may start out as an interview may turn into an interrogation once the suspect has produced inconsistent or conflicting statements, but it is not logical to conduct an interrogation before the necessary facts are revealed through an interview. (1998)

Following the overall structural organization of an interview aligns the speech event with **an information gathering interview for Alvarez.**

(e) Social Epistemology and Social Relations

According to Heritage and Drew (1992):

With this last category we mean to raise themes and issues that are often generally distributed across broad ranges of conducts in institutional settings and manifest themselves in and through the features of institutional interaction addressed above. These themes are not necessarily attached to any specific sequence of action; rather, they may emerge in any or all sequences.

In the transcripts of Lucio and Alvarez, there is an inherent asymmetry to both interactions between Lucio and Alvarez, who have no relational social power as compared to the officers, and the questioning officers, who have institutional power over the speech event. This asymmetry is why, as we saw in section (c), the officers take the role of question-askers. As we will see in this section, however, the officers also evoke specific, non-institutional roles from Lucio and Alvarez along the lines of their gendered roles, with Lucio as a mother in the capacity of a responsible caregiver, and Alvarez as a father in the capacity of verifying biological paternity.

1. Disparities between appeals to motherhood versus fatherhood

The questioning officers evoke motherhood and the roles expected of a “good mother” throughout the interrogation of Lucio and tie the role to Lucio’s responsibility. Examples are shown below.

Appeals to Lucio’s Motherhood
If you’re such a good mother, you need to stand up for her right now and tell us exactly what happened. You want us to believe you’re a good mother. You

want to believe yourself that you're a good mother because you're not believing that right now. Whether it's because you did it or because you know who did it, that needs to come out.

...And we don't have to answer for that. You and your husband do. Moreso you because you were the primary caregiver to Mariah. You were the one who took care of her. You were the one that was with her day in and day out, every day, all day, while your husband was at work, while your kids were at school, while your husband was out smoking crack.

... How did it happen? The bite didn't kill her. How did the bite happen? You need to come out clean and tell us. At least as, as a mom, do it for Mariah. For two, two years she's been with you. So you should be able to explain what happened just by looking at this picture of Mariah, bite marks. Look at that. You change her diaper. She still wears pampers and you're telling me as a mom you can clearly look at that and just think nothing of it? At least do it for your little daughter, your little baby here. Tell us what happened, what triggered it. What's going on? It's just you and your husband, your kids. And it should come out from you. You're the mom..

... Claiming that he doesn't know anything about all these bruises and that bite mark, but he says, "You need to go ask my wife. He's a--she's the one that bathes her. She should know." So I'm here asking you what happened. Can you even speak out as a mom? I mean that's the very least you can do as a parent for your little one not here anymore. Two years here. Her body gave out. What triggered it? Did she deserve those hits? Something must have triggered you. I'm giving you now the time right now to tell me what happened. Or would you rather have Renee, or Richard, Gabriel, or your other daughters explain what really happened? Should you leave it up to them to explain what happened? Should I be going, going over there and asking them what happened to Mariah? Or are you going to step up as a parent? I mean you love your daughter, right? ...

..... It happens all over the United States. Okay? It happens every single day because parents are pushed to the limit. Okay? So right now you tell me you have 12 kids. You have 12 worries. You have 12 problems. You're a mother. Those instincts are going to kick in and it's going to push you to a limit...

Contrastingly, while officers evoke Lucio's role as a mother multiple times throughout her interrogation, mentions of Alvarez's paternity and roles as father are comparatively fewer, with 2 of the 3 instances concerned with Alvarez's biological (as opposed to responsible) role as a father, and the remaining instance offering sympathy.

Appeals to Alvarez's Fatherhood
Five step kids. So, my Mariah is yours--you're the biological father.
Those are yours. You're the biological father.
And I can empathize for you, man, because the amount of the children that you have or that you have to provide for, that you have to be a parent for which you have to be a father. You know? I can identify with it. I only have two kids. But they take so much time.

The difference in the evocations of these gender roles can be seen to contribute to

the speech events of **an accusatory interrogation for Lucio** and **an information gathering interview for Alvarez**.

2. Motherhood as a persistent institutional choice

After the topic of religion fails to stick in their questioning of Lucio, the officers evoke and appeal to Lucio's respect and love for her own mother in the same way the previous section demonstrates they appealed to Lucio's own responsible role as a mother.

Motherhood as a persistent institutional choice
Okay. If your mom was right here sitting next to me, what would she want you to do, Melissa? She would want you to be--to tell us everything. ... Your kids, your kids, your mom, who do you respect the most? Who do--who do--who do you look up to the most? Melissa? Hmm?
Your mom. Your mom. Your mom is going to understand. Okay? Your mom is going to understand. Okay? Your mom is going to under--but only one--under only one circumstance, is that you tell us what happened and why it happened. Okay? Because she would do the same thing while she expects you to do that, Melissa. She expects you to come out and explain --. Okay? You owe it to your kids. You owe it to your mom. You owe it to your baby. She's going to understand. It's all going to be--she's going to understand. Okay? You cannot hold this inside. You cannot hold this inside. You need to let it out. That's why we're here - - to let it out.....
Because one day you'll see her again. Okay? And right now is the time. Okay? To make it right. So don't try to sugarcoat anything. Don't try to make it softer. Tell it how it is. Okay? Do it for your mother . Do it for your kids. Do it for Mariah. Okay? Because you're going to see her again. ...

Contrastingly, no such strategies are present in Alvarez's transcript. These differences in the evocations of gender roles can likewise be seen to contribute to the speech events of **an accusatory interrogation for Lucio** and **an information gathering interview for Alvarez**.

V. Conclusion

As demonstrated by the analysis above, I find that the differing speech event variables as performed by the questioning officers in the two transcripts contributed to **an accusatory interrogation for Lucio** and an **information gathering interview for Alvarez**.

APPENDIX A - Keywords in Lucio's Transcript

Target Corpus: Officer to Lucio Utterances

Reference Corpus: Officer to Alvarez Utterances

46 Total keywords, NO SPANISH

Color Code Key	
13	Primary codings of words relating to physical aspects/abuse of the case
14	Primary codings of words relating to morality, praise, and blame
6	Primary codings of words relating to parenthood, family roles, reference to children
11	Primary codings of Words relating to specific details about the case; info-gathering
	Camaraderie politeness
3	Primary codings of Words relating to evidence and process
	Uncoded words indicate very few consistent uses (each use is different)

Rank	Freq	Keyness	Effect	<i>Color coding in this section indicates that the keyword closely and frequently collocates with words within the color's category</i>	
1	64	35.01	0.0235	husband	Info-gathering on Alvarez= 17/64; Asks whether Alvarez harmed Mariah= 12/64; Quoting/Attributing actions to Alvarez= 11/64; Asking whether Alvarez knew about harm/aspects of case= 7/64; Blame on Lucio and Alvarez as parents= 7/64; "you and your husband" as joint blame/responsibility for Mariah= 6/64; Stating that Alvarez accused Melissa= 1/64; "Are you covering for?"= 1/64
2	68	24.75	0.025	melissa	66 times addressing Melissa/getting her attention; 2 times stating her name for the record
3	212	22.05	0.0755	going	mostly "going to" = "will"; "going on"- collocates with "abuse, beating, everything that's"= 5/212; What's going through your head/mind?"= 5/212;
4	33	18.01	0.0122	hit	(physically striking with something)= 32/33; "you hit her./?"= 18/33; accusing/asking for/describing location, manner, items for hitting
5	37	13.81	0.0137	look	13/37= "Look at me", 8/37 "look at [evidence]", "Look like (as if) x"= 4/37
6	25	13.63	0.0093	exactly	"You know exactly what happened..."= 6/25; "show/tell me/us exactly how/what"= 7/25
7	43	12.84	0.0159	bite	"bite mark/s"= 33/43; collocates with <i>pretty good, big, real hard, huge</i>
8	45	8.3	0.0166	explain	demanding/asking for explanations, etc.
9	15	8.17	0.0056	good	"You're/We're doing good"= 5/15; "We're/That's good(ready to move on)"= 3/15; [hypothetical] "good mother"= 3/15; "not going to look good", "pretty good bite"
10	15	8.17	0.0056	happens	"It happens"= 14/15, "This happens"; often collocates with

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Rank	Freq	Keyness	Effect	<i>Color coding in this section indicates that the keyword closely and frequently collocates with words within the color's category</i>	
					"Melissa" and other phrases that try to minimize fault, "we all", "the world is not going to stop moving" "all over the US", etc
11	15	8.17	0.0056	yes	7/15 to accuse Melissa
12	14	7.63	0.0052	hear	"hear" Melissa's side of the story/from Melissa= 10/14; "do you hear me?"= 3/14; "Did you hear her fall or did you see the fall?"
13	14	7.63	0.0052	mother	"good mother"= 3/14, and collocates with hypotheticals <i>if you're..., want to believe you're...</i> ; collocates with <i>bad, frustrated</i> ; "Do it for your mother," "You're a mother", "What kind of a mother...", "What would you think of your mother if this was you?"
14	12	6.54	0.0045	coldblooded	collocates with "killer" 9/12 times
15	12	6.54	0.0045	mad	"Were>> you mad?"= 6/12; "We all get mad"= 2/12; "did she make you mad?"= 2/12;
16	40	6.47	0.0148	daughter	"your daughter"= 30/40; "older daughter"= 7/40; "[negation]... Abuse your daughter" (If you didn't/I'm not saying...)= 6/40; "bring your daughter back"= 3/40; other words that collocated with "daughter"= <i>dead, defend, discipline, harmed, love, reject, give [her] medical attention she deserves</i>
17	40	6.47	0.0148	let	"let it out/let's be straight/let's do this this/it; let's get it over/out of the way/let's start with the truth/let's try to make it right" = 10/40; "let her(Mariah)"= 5/40; "
18	28	6.3	0.0104	say	"you... (can't/going to/nothing you can/naw's your time to/are you even going to/etc.) say..."= 19/28; "he(Alvarez)... say"= 4/28; "I (officer) didn't/'m not trying to say"= 2/28; others are jury, doctor, and "say what again?"
19	11	5.99	0.0041	bruising	always referring to descriptions/locations of bruises on Mariah's body
20	11	5.99	0.0041	markings	always referring to markings on Mariah's body
21	11	5.99	0.0041	spanked	"you... spanked her"
22	11	5.99	0.0041	steps	stair steps / (process)
23	84	5.57	0.0307	happened	preceded by "what/how"= 62/84; other preceding: <i>it, just, never, nothing, something, that/this</i>
24	26	5.5	0.0096	mom	"You're the mom."= 7/26; "your mom" (evoking Melissa's mom)= 9/26; "as a mom"= 3/26; "my mom" (quoting one of Melissa's children)= 2/40; other collocates= "a stressed mom, stressed parents"
25	10	5.45	0.0037	accident	offering an alternate expl for Mariah's death
26	10	5.45	0.0037	inside	car, home, her thigh, ear, etc.
27	10	5.45	0.0037	rights	procedural context; "constitutional rights" "your rights" etc
28	10	5.45	0.0037	water	asking how much water Mariah drank= 8/10; offering water to Melissa= 2/10
29	9	4.9	0.0033	bit	(to bite)= 3/9; "little/one bit"= 6/9
30	9	4.9	0.0033	case	"this/your/a/the case"= 7/9; "just in case"= 2/9
31	9	4.9	0.0033	clean	"come clean"= 3/9; referring to drugs = 2/9 times, "clean out her nose"= 1/9

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Rank	Freq	Keyness	Effect	<i>Color coding in this section indicates that the keyword closely and frequently collocates with words within the color's category</i>	
32	9	4.9	0.0033	dead	always referring to Mariah
33	9	4.9	0.0033	killer	always "a coldblooded killer" with hypothetical/modal words
34	9	4.9	0.0033	says	"he/husband says"= 4/9; "it says"(quoting a doc)
35	9	4.9	0.0033	times	Asking how many times Mariah was spanked= 7/9; "hard times" "many times"
36	8	4.36	0.003	area	always referring to "areas" of Mariah's body that have marks.
37	8	4.36	0.003	bad	"bad kid/that bad of a child?= 4/8; "bad mother"- 1; "bad tamales"- 1; "how bad her x-rays are", "bad things happen"
38	8	4.36	0.003	beat	"beat her(Mariah)"= 6/8
39	8	4.36	0.003	gave	"You gave birth to [Mariah]"= 3/8; "[Mariah] just gave out"= 2/8; "You never gave him anything else"; "I gave him [a cigarette]"= 2/8.
40	8	4.36	0.003	led	what/that/who/it led to [Mariah's death]
41	8	4.36	0.003	looks	"looks like [capital murder/coldblooded killer/what it looks like now]"; insinuating that Mariah's death looks intentional.
42	8	4.36	0.003	making	"making sense"= 2/8; "making it" as in surviving; "making marks" (on Mariah's body); "making us understand"; "making the call"; "money he was making"
43	8	4.36	0.003	older	"older daughter/children"= 7/8, mostly info-gathering, especially about medical history of the daughter with epilepsy, to compare with Lucio's handling of Mariah
44	8	4.36	0.003	vagina	Always collocates with physical terms "spank, pinch, bruise, poke, sore spots," etc
45	33	4.11	0.0122	saw	"you saw [signs/process before Mariah's death]"= 17/33; "he [Alvarez] never saw"= 333;
46	16	3.98	0.0059	mark	"Bite mark"= 13/16, "teeth mark"= 2/16

APPENDIX B - Keywords in Alvarez's Transcript

Target Corpus: Officer to Alvarez Utterances

Reference Corpus: Officer to Lucio Utterances

88 Total keywords minus 5 Spanish = 83

Color Code Key	
4	Primary codings of words relating to physical aspects/abuse of the case
3	Primary codings of words relating to morality, praise, and blame
	Primary codings of words relating to parenthood, family roles, reference to children?
55	Primary codings of words relating to specific details about the case; info-gathering
2	Camaraderie politeness/Deference marker
19	Primary codings of words relating to evidence and process
***Children names mentioned 34 times; keyness of children's names can be attributed to info-gathering function of Alvarez's interview	

Rank	Freq	Keyness	Effect	<i>Color coding in this section indicates that the keyword closely and frequently collocates with words within the color's category</i>	
1	188	80.92	0.1779	okay	tag questions "(is that) okay?/understand?"= majority; discourse marker; to acknowledge answer; "okay"="fine/well" (2/188)
2	26	53.7	0.0306	wife	"your wife"; Asking/gathering info on the events of case= 10/26; Asking how Melissa behaves habitually (spanking, depression, drugs, getting kids ready for school in morning)= 5/10; Asking if Melissa harmed kids= 1/26; Asking if covering for/protecting wife?= 2/26; "Did wife tell you x?"= 2/26; Redirecting to Melissa "So you want me to ask your wife" = 2/26
3	38	21.67	0.0434	mariah	14/38 Mariah is mentioned when interrogator is being directly or indirectly accusatory of Alvarez (and sometimes Lucio) of Mariah's death. Other times, to gather case info
4	7	20.16	0.0083	pizza	Info-Gathering about case
5	9	19.97	0.0107	polygraph	Asking whether Alvarez will take a polygraph; explaining what a polygraph is
6	6	17.28	0.0072	sarah	info about kids; Info-Gathering about case
7	15	16.35	0.0177	went	asking Info-Gathering about case
8	7	14.67	0.0083	truthful	collocates with "be/being" truthful, and there's a presupposition that Alvarez could be/is being/has been truthful, when asking about

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					Alvarez's truthfulness
9	5	14.4	0.006	selena	info about kids; Info-Gathering about case
10	13	12.56	0.0154	night	Info-Gathering about case
11	9	12.04	0.0107	seen	"you've seen [Mariah's bruises]" = 3/9; "you've never seen [Melissa] pick up a belt..." = 2/9; "I haven't seen the amount of bruises"
12	9	12.04	0.0107	statement	"sworn/written statement"; always asking or hedging with "I need"
13	8	11.78	0.0095	yesterday	Info-Gathering about case
14	4	11.52	0.0048	boys	info about kids; Info-Gathering about case
17	4	11.52	0.0048	minutes	"just give me a few min"
18	4	11.52	0.0048	recommend	"I'm going to recommend the children be placed in a foster home"
19	4	11.52	0.0048	sworn	"sworn statement"
20	11	10.15	0.013	apartment	Info-Gathering about case
15	4	11.52	0.0048	bueno	Part of expression 'esta bueno'; excluded
16	4	11.52	0.0048	está	Part of expression 'esta bueno'; excluded
21	5	9.53	0.006	called	"called it a night" 3/5
22	5	9.53	0.006	placed	"placed out in a foster home" = 4/5; "placed under arrest" = 1/5
23	5	9.53	0.006	stayed	"stayed there"; Info-Gathering
24	3	8.64	0.0036	adding	"It's not adding up"; uttered close in time to each other
25	3	8.64	0.0036	alex	info about kids; Info-Gathering about case
26	3	8.64	0.0036	daniela	info about kids; Info-Gathering about case
27	3	8.64	0.0036	fatal	all 3 occurrences in same sentence; repetition in repair
28	3	8.64	0.0036	foster	"placed out in foster home"
29	3	8.64	0.0036	interviewed	"being/getting interviewed"
30	3	8.64	0.0036	potty	"Is/was she potty trained?"
31	3	8.64	0.0036	relatives	asking if other relatives were present = 1/3; taking away kids from relatives to put into foster home = 2/3
32	3	8.64	0.0036	response	in reference to being "checked/detected" by polygraph
33	3	8.64	0.0036	slept	Info-Gathering about case
34	3	8.64	0.0036	trained	"potty trained"
35	3	8.64	0.0036	willing	"willing to give... polygraph" = 2/3; "willing to give...statement" = 1/3
36	7	7.9	0.0083	honest	"you [are] be[ing/been] completely/totally honest with me"
37	5	7.1	0.006	bath	asking who gave Mariah baths, when baths were taken (time logistics)
38	5	7.1	0.006	gabriel	info about kids; Info-Gathering about case
39	5	7.1	0.006	man	Camaraderie politeness

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40	4	7.05	0.0048	adriana	info about kids; Info-Gathering about case
41	4	7.05	0.0048	ate	Info-Gathering about case
42	4	7.05	0.0048	black	"black and blue" (about bruises)
43	4	7.05	0.0048	cold	referring to the common cold, which is being attributed to Mariah
44	4	7.05	0.0048	sir	Deference marker; but in context, not so "deferent"
45	8	6.1	0.0095	cps	asking when cps is arriving, saying cps will decide where children go, etc. (kind of holding it over Alvarez's head when Alv becomes agitated that the children will be taken away from the relatives)
46	23	5.98	0.0266	kids	referring to Alvarez/Lucio's kids= 20/23; 3/30 referring to "kids in general" ("Kids play around, but [they're not the likely cause of death]")
47	2	5.76	0.0024	activities	"any/no other activities"
48	2	5.76	0.0024	adults	1/2= asking whether another adult helped with the kids; 1/2= asserting that the bite marks are from an adult
49	2	5.76	0.0024	alexandria	info about kids; Info-Gathering about case
50	2	5.76	0.0024	basically	"basically told me", "So basically yesterday"
51	2	5.76	0.0024	bedrooms	Info-Gathering about case
52	2	5.76	0.0024	biological	"you're the biological father"; info gathering
53	2	5.76	0.0024	capable	asking whether the kids are capable of hurting Mariah, both hits within same turn
54	2	5.76	0.0024	clears	"clears that obstacle" recurrence in repair
55	2	5.76	0.0024	conditions	asking about Mariah's "medical conditions"
56	2	5.76	0.0024	cpr	talking about Alvarez giving CPR to Mariah once 911 was called
57	2	5.76	0.0024	decision	CPS making decision about children in foster home
58	2	5.76	0.0024	diana	info about kids; Info-Gathering about case
59	2	5.76	0.0024	document	"official document", collocates with "oath" and "sworn"
60	2	5.76	0.0024	hands	1/2= asking about how Alvarez administered chest compressions; 1/2= "your hands full" (of responsibilities)
62	2	5.76	0.0024	light	"light" for cigarette, "maybe kids will shed some light"
64	2	5.76	0.0024	mattress	Info-Gathering about case
65	2	5.76	0.0024	medicine	asking about Mariah's cold medicine
66	2	5.76	0.0024	official	"official document"
67	2	5.76	0.0024	phone	asking for phone number of Christina (mattress/storage person), and "giving (CPR) instructions over phone"
68	2	5.76	0.0024	rene	info about kids; Info-Gathering about case

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69	2	5.76	0.0024	stress	"I can just imagine the stress", attributing x to stress
70	2	5.76	0.0024	totally	"you're being totally honest with me"
61	2	5.76	0.0024	la	function word; excluded
71	2	5.76	0.0024	words	"in other words"
63	2	5.76	0.0024	mar	Repair for "Mariah"
72	2	5.76	0.0024	written	(statement)
73	5	5.43	0.006	completely	"completely honest"= 4/5; "completely black and blue"= 1/5
74	5	5.43	0.006	hurt	asking "did [not] you/anyone/ hurt her[Mariah]?"
75	12	4.97	0.0141	yeah	acknowledging an answer; agreement
76	4	4.96	0.0048	blue	"black and blue"
77	4	4.96	0.0048	giving	"giving CPR"= 2/4; "giving instructions (for CPR)"; "giving me a statement"
78	4	4.96	0.0048	richard	info about kids; Info-Gathering about case
79	6	4.82	0.0071	moving	referring to moving house
80	16	4.76	0.0187	old	referring to ages of the children, i.e. "12-year/s-old"= 11/16; "How old?"= 3/16; the "old apartment" = 2/16
81	3	4.68	0.0036	girls	info about kids; Info-Gathering about case
82	3	4.68	0.0036	hyper	referring to their children/boys
84	5	4.19	0.006	remember	"You [Alvarez] have to remember", "remember, there's a little life here"
85	5	4.19	0.006	year	referring to ages of the children, i.e. "12-year-old"
86	22	4.03	0.0254	children	7/22= information-gathering about details involving the children, i.e. which children are home when the others come from school?, how does Melissa discipline the children?; 2/22= talking about (children in general) or the officers' children to minimize actions, or to shut down claims that this was milder "spanking", and not a crime
87	6	3.89	0.0071	school	info about kids; Info-Gathering about case
83	3	4.68	0.0036	todo	function word; excluded
88	27	3.87	0.0308	time	Info-Gathering about case;