When is a lie not a lie? When it's divergent: Examining lies and deceptive responses in a police interview

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Abstract. Using UK police interviews as data, this empirical work seeks to explore and explain the interactional phenomena that accompany, distinguish, and are drawn upon by suspects in performing deceptive talk. It explores the effects of the myriad and often conflicting interactional requirements of turntaking, preference organisation and conversational maxims on the suspect's talk, alongside the practical interactional choices of a suspect attempting to avoid revealing his guilt. This paper reveals a close link between the officer's and suspect's interaction and the patterned organisation of an assortment of divergent utterances produced in response to probing questions that follow a lie. The findings expose a hierarchical interactional order that explains the diverse and conflicting accounts of cues to deception in this field, suggesting that interactional phenomena are systematically enlisted in the orientating to, and the violation of interactional organisation which enables the suspect to produce utterances that protect his position, and can also be directed towards the performance of wider objectives such as reinforcing a claim of innocence or supporting a version of events.

Keywords: Police interview, interactional phenomena, turntaking.

Resumo. Recorrendo a interrogatórios policiais do Reino Unido como corpus de pesquisa, este trabalho empírico procura explorar e explicar os fenômenos interacionais que acompanham, distinguem e que são utilizados por suspeitos na realização de comunicações falsas. O estudo explora os efeitos das inúmeras, e muitas vezes conflitantes, exigências de interação dos turnos de vez (turntaking), organização de preferência e máximas de conversação na conversa de suspeitos, juntamente com as opções práticas de interação de um suspeito na tentativa de evitar a revelação de sua culpa. Este trabalho revela uma estreita ligação entre a interação oficial-suspeito e a organização padronizada de uma variedade de enunciações divergentes, produzidas em resposta a perguntas de sondagem que sucedem a uma mentira. Os resultados expõem uma ordem hierárquica interacional que explica os diversos e conflitantes relatos de pistas que levam à fraude neste campo, sugerindo que os fenômenos interacionais integram sistematicamente a orientação, bem como a violação da organização interacional, que permite ao suspeito produzir enunciados que protejam sua posição, e que podem

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também ser direcionados à realização de objetivos mais abrangentes, como o reforço da alegação de inocência ou à sustentação de uma determinada versão dos acontecimentos.

Palavras-chave: *Interrogatório policial, fenómenos interaccionais, turno conversacional.*

Introduction

Lying and deception are understandably of interest to police officers and those involved in the criminal justice system; predominantly manifesting as a desire to establish means for identifying when a suspect is lying, or used to reverse-engineer a lie in order to reveal the truth. Indeed, this would constitute an extremely useful element of any investigative interviewer's toolkit, and research in this area heavily favours explorations relating to deception detection, using or establishing cues produced by lie-tellers. These include analysing the ability of officers (Vrij and Mann, 2001), and non-officers (often college students, Roach, 2010) to detect lies, the differences between amateurs and experts in doing so (Miller and Stiff, 1993; Kassin and Fong, 1999; Meissner and Kassin, 2002), and increasing the accuracy of this practice.

Moving away from an 'end user' or deception detection perspective, the present research explores and explains the interactional manifestation of lies and deceptive interaction in this setting, focusing on both the lie and the subsequent responses produced by the suspect when the lie is explored by the police officer in the immediately following turns. It uses the terms *lie* and *deception* to describe these two respective elements, although these terms are often used interchangeably in the literature (Vrij and Mann, 2004). Examining lies and deception in-situ can be harnessed by practitioners in a more holistic approach to investigative interviewing, rather than being used to identify cues to deception as a tool to determine the veracity of future talk. This reflects the principle underlying Vrij and Granhag's (2012: 115) call for researchers to "not just be outcome-oriented by focusing on deception detection accuracy only. Instead they should *pay attention also to the processes that explain the outcome*" (emphasis added).

Research on deception often draws data from experimental contexts and uses student participants as subjects (DePaulo *et al.*, 2003). Pollina, Dollins, Senter, Krapohl and Ryan's (2004) research compared data from 'mock crime' and field data and suggests that the differences between the two reinforce the need for real-world data when examining deception in interaction. It is understood that interaction in contexts where there are high stakes, or significant consequences of one's talk being believed, is an important area requiring further research (DePaulo *et al.*, 2003; Frank and Feeley, 2003) where differing levels of motivation can yield findings different from research in contexts where the motivation for deception is less critical. Producing a lie leaves suspects vulnerable to the prospect of being 'caught out', whereas a truthful utterance, or one that avoids a lie does not. When someone engaging in lying is faced with a suspicious recipient, the stresses of producing deceptive utterances are intensified (Van Swol *et al.*, 2012) and the need to appear truthful increases (Buller and Burgoon, 1996).

Due to the attendant particularities of the context, lies in police interviews are likely to be produced by suspects in order to avoid exposure or punishment and are most taxing to produce; 'negative conditioning' tells us to avoid telling these lies wherever possible in order to "avoid the negative effect associated with them" (Battista, 2009: 320). It is reasonable to suggest that in a police interview setting, lies may take on a particular form both

structurally (in conforming to the institutional framework of the interaction) and conceptually (they are most likely to not be produced lightly, but enlisted by the suspect in an effort to distort the criminal justice process or evade potentially serious or life-changing legal ramifications). This is reinforced by the coining of 'high stakes deception' as a concept that has become a discrete area of research in itself (Vrij and Mann, 2001). Lies in police interviews remain under-explored from a conversation analytic perspective, which is in all probability due to the methodological requirement for naturally-occurring rather than laboratory-generated data. It is rarely possible to access interaction as data from contexts such as the UK police interview, a difficulty which is compounded by the need for police interviews which contain demonstrable lies. Conversation analytic research most directly related to the area of deception and police interview interaction appears to be limited to Reynolds and Rendle-Short's (2010) research into lies in investigative interviews broadcast on television in non-judicial interactional settings where interactions involving relatives-in-conflict are mediated by a television host, and also in police-public encounters broadcast on television.

Lies in interaction

A large body of work focuses on examining linguistic cues, or phenomena, that accompany the act of deception, such as increased pitch (Ekman *et al.*, 1991; Villar *et al.*, 2013), the use of negative emotion words (DePaulo *et al.*, 2003), blinking (Leal and Vrij, 2008), pausing (Reynolds and Rendle-Short, 2010) nervousness, gaze aversion and self-grooming (Inbau *et al.*, 2004) and body language (Ekman *et al.*, 1991). However, a discussion of the range of literature relating to cues to deception is outside of the scope of this paper. The phenomena of interest in this paper are divergent or tangential responses; terms used here to represent all types of responses whereby the suspect does not answer directly, fully, or relevantly given the question asked by the officer in his prior turn(s). This departs from traditional approaches to researching deception, which examine the performance of the lie itself; the present research examines the lie-in-situ and also the deceptive talk (not necessarily a direct lie) that closely follows, produced when the suspect is questioned further by the officer about that lie.

There is a cluster of research that points to self-awareness and self-monitoring of utterances by those engaging in deception, which manifests in deceivers' responses being geared towards modelling words and behaviours they believe to be characteristic of a truthful response (Buller and Burgoon, 1996; Dunbar *et al.*, 2003; Hall and Watts, 2011). Wilson and Sperber (2002) talk about deceivers' linguistic style across entire statements are adaptable to this end. Sip *et al.* (2013) talk about changes in deception activities when the speaker believes their lies can be detected. This manifests in those intending or aiming to successfully and effectively deceive the listener by hiding lies amongst truthful utterances and irrelevant information (Anolli *et al.*, 2002). Picornell (2011, 2013) examined deception in written witness statements, finding that distancing phenomena are used in the performance of deception; manifesting in ambiguity and vagueness, displayed as part of wordy responses (which afford the impression of co-operation and avoid implicating oneself) (also see Buller and Burgoon, 1996 and Hancock *et al.*, 2005), or short, dissociative responses (which give the impression of the criminal as the 'other'). Liars produce shorter responses, and use less exclusive words (DePaulo *et al.*, 2003; Hartwig *et al.*, 2006; Leal and Vrij, 2008), than those telling the truth. Vagueness is widely reported as more frequently seen in deceptive responses than their truthful counterparts (Burgoon *et al.*, 2003; DePaulo

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et al., 2003; Vrij, 2000). Schober and Glick (2011) also found deceivers refer to themselves less often in order to 'linguistically distance' themselves from the act they are accounting for, or to deny the harm it may do. These distancing behaviours are reminiscent of an implicit and interactionally-embedded equivalent of Sykes and Matza's (1957) 'techniques of neutralisation'.

In addition to deceivers' conscious efforts to manipulate their responses in order to adapt to, replicate or model their talk on their perceptions of the officers' expectations of what a truthful utterance looks like, the sequential organisation and turn-type pre-allocation (of questioning to the officer and answering to the suspect (Drew and Heritage, 1992; Heydon, 2005)) have an underlying effect on suspects' talk. Interaction is also intuitively shaped by 'preference organisation', "a structural notion that relates to the linguistic concept of markedness" (Levinson, 1983: 307) and refers to the interactional rather than psychological preference for particular types of response, for instance a summons requires an answer; an offer requires an acceptance and so on (Levinson, 1983). The features of *dispreferred* responses reveal their underlying organisation; "preferred actions are characteristically performed straightforwardly and without delay, while dispreferred actions are delayed, qualified and accounted for" (Hutchby and Wooffitt, 2008: 47).

'Trouble' is another conversation analytic concept relevant to this research as it relates to producing responses that do not align with the content of the prior turn (Levinson, 1983), and can result in non-cooperation or vagueness. Grice's Maxims of conversation are also relevant as they concern the interactional structures guiding the cooperative use of language; the ways in which flouts of these in police interview data (outlined below) resonate with the literature relating to cooperation and vagueness. Flouts of the *maxim of quantity* manifest as the suspect not providing enough information, of *manner* as ambiguous or overly wordy responses, and of *quality* as prosodic distortions of responses or the production of lies in response to questions. Flouts of the *maxim of relation (relevance)* manifest as answers that run contrary to a question's intended meaning, by attending only to part, or not answering the question at all, or providing irrelevant information. This is a particularly useful type of response for guilty suspects attempting to avoid self-incrimination, as they can appear to answer a question, and provide a truthful response whilst avoiding lying or providing information that may incriminate them. The present research identifies the influence of the sequential turn-type pre-allocation, preference structure and maxims of conversation on the interaction of a guilty suspect attempting to protect his 'innocence'. It examines suspects' attempts to balance the often competing requirements of these interactional structures and reveals the impact on the receipt of talk and responses to it.

Establishing the presence of lies

The presence of lies in interaction data is determined through a variety of routes. A customary method is first ensuring that lies are produced, by for example offering monetary incentives to participants to lie convincingly, sometimes coupled with the threat of 'punishments' for not succeeding (Ruffman *et al.*, 2012; Vrij *et al.*, 2004; Hall and Watts, 2011). Willén and Strömwall (2011) generated deception data by asking prisoners to truthfully recall details about their crime and also create a fictional account. External methods of verification are also used; Sanaullah and Gopalan (2012) used interaction in police interviews tested by a polygraph machine, and Vrij and Mann's (2001) research relied on corroborating evidence that the statements made by the accused were lies. A conversation analytic approach requires the lies to occur within and as part of interaction, rather than

being created as part of an experiment or validated through an external mechanism or source. Conversation analytic and ethnomethodological frameworks require the analyst to explore the *participants*' production, understanding and receipt of interaction, rather than the researcher doing so as an *observer*. Reynolds (2011: 6) explores this in depth and suggests that identifying lies within an ethnomethodological and conversation analytical framework is possible when they occur with the:

   i. explicit confirmation by the lie teller that a lie has occurred;
  ii. the explicit labelling of talk as lies by other participants; and
 iii. the 'revision' of a prior turn by a lie teller, thereby changing the course of action, during a disjuncture

In the present study, lies were categorised in line with point i), with the acknowledgement by the suspect at the end of the interview that he had committed the crime (this is presented in extract 8 as the final in the sequence) and therefore his previous denials are retroactively reconstructed as lies. This retroactive labelling still satisfies the requirement of analysing data from the participants', not the analysts' perspective (Schegloff, 1997).

Methodology

The extracts presented as data in this research are drawn from a single police interview of a suspect arrested under suspicion of having stolen a video game and a computer game from a video rental shop; the games were hired using the suspect's name and identification and not returned some weeks after they were due. This paper presents 7 episodes in which the suspect produces lie(s) and engages in episodes of talk to avoid discovery. The analysis follows the suspect through the interview, examining his lies, situating them in the surrounding talk and attempting to explain the interactional processes at work at these and at subsequent moments of deception-avoidance following probing by the officer. It draws on understandings of deception and interactional organisation from across the literature and examines these in the high stakes interaction of the police interview, using conversation analysis and empirical data.

A criticism that could be directed at this study is narrowness in using a single police interview. However, tracking a suspect's deceptions and lying behaviour throughout the course of one interview enables us to examine in detail the performance of multiple lies within the same context, related to the same crime and in response to the same interviewing officer. The suspect's use of interactional phenomena can therefore be contextually-located rather than compared with other suspects' interactional styles. Also variations in deceptive utterances resulting from the difference in the age of the deceivers, including degradations in areas key in deception performance such as memory, social acuity and neurological function (Ruffman *et al.*, 2012) are eliminated. A case-study approach also mitigates other interpersonal variance such as differences in the ease of recall (Leal and Vrij, 2008), the level of heightened stress response (Vrij, 2000) or 'tenseness' (DePaulo *et al.*, 2003) that physiologically changes the deceivers' voice. This approach also enables the examination of deception as a sequence of acts progressing over time (White and Burgoon, 2001), addressing an underexplored area and offering an in-depth analysis of sequential lies within the same interview. Using this method is aligned with Reynolds and Rendle-Short's (2010: 15) conclusion that deception needs to be "examined more closely in the context in which it occurs", and provides evidence for a patterned interactional organisation of deceptive utterances that contributes towards the development of an *interactional* theory of deception which can be used as a framework to analyse other interaction.

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Analysis

Extract 1

In Extract 1 the officer tries to ascertain the link between the suspect and the crime by exploring the suspect's knowledge of the videos and the computer game that were hired. The officer lists the items and the date on which they were hired, followed by the question 'do you know anything about this at all' (lines 142-143). The suspect's later confession to the crime retroactively renders his response 'no I don't' (line 144) as a lie.

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Extract 1 - Someone tall

139.  P1    >wh↑at it i:s< (0.4) >↑i've had a< repo:rt from monolo vid↓eo, (2.9)
140.        that two: videos, namely <sa:dfilm and funnyfilm,> (0.6) >↓and a<
141.        computer g console ga:me (.) fungame two? (0.6) were hired (1.3) on
142.        the twe:nty si:xth of ma:rch nineteen ninety four. (0.4) do you know
143.        anything about thi:s at ↓a[ll
144.  S  →                          [no i d↓on't
145.        (0.5)
146.  P1    r[i::ght
147.  S  →   [except fo:r what edwa::rd (0.3) h↓owes the owner of the sh↓ops told
148.        me alr↓*eady=
149.  P1    =right wha:t has he told yo:u
150.        (0.3)
151.  S  → e:rm so:meone t↓all (1.3) *er (0.7) re:nted out these vide↓os
152.        (1.4)
153.  P1    mhm:
154.        (0.3)
155.  S  → e::rm (0.7) °and hasn't retu:rned ↓em°
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Although the suspect's lie 'no I don't' (line 144) overlaps the officer's question, its placement after the substantive element of the question means it would not appear to distort the suspect's receipt of the officer's turn. The immediacy of the production of suspect's response could be indicative of the officer's long and multi-stage question enabling him to anticipate the question before its completion. His 'except for' (line 147) qualifies his original response; modifying it from 'no I don't' (know anything about this at all) to an account he produces across lines 147-148, 151 and 155. The suspect's provision of this information shows his retroactive attendance to the literal meaning of the officer's question. The tag element of the question 'at all' (line 143) facilitates a broader interpretation of the question than intended by the officer; taken literally, the officer's question is transformed into a request for any knowledge 'at all' about the event described. The suspect's subsequent accounts do not attend to the more likely gloss given the context: 'do you know who committed the crime about which you're being interviewed? Was it you?'

However, as the suspect was responsible for the crime, responding to the gloss would require him to incriminate himself. Therefore, attending to a more literal interpretation of the officer's question, although violating the maxim of relevance, enables him to preserve his position of innocence. The suspect's answer also powerfully supports this position of

innocence. By producing information given to him by the victim (whom he knows by name), the suspect is being a source of information about the culprit to the officer and is aligning himself as someone with whom the victim has discussed the culprit; therefore positioning the culprit as someone else. Additionally, although the suspect does not reveal that he is in fact the 'someone tall' (line 151) he describes, his statement is technically truthful, which means that, in addition to realigning himself as a cooperative and informative participant in the investigation, rather than a perpetrator refuting knowledge of the crime, the suspect is also able to produce a truthful utterance, avoid implicating himself and avoid lying.

In addition to attending to a literal rather than intended meaning of the question, the suspect is also likely to be offering information already known by the officer. However, in his next turn (line 149) the officer's probe question signals the suspect's response as potentially relevant rather than troublesome. This is also evidenced by the officer's minimal response (line 153), which prompts the suspect to continue his account, and the officer's later orientation to the suspect's description (line 290, Extract 3). The unhelpful nature of the response is revealed later, where, after producing a similar tag question, the officer makes an explicit attempt to divert the suspect from producing this type of response again (lines 637/639, Extract 7).

Extract 2

The officer produces two statements, to which the suspect produces minimal responses, and a question that takes an explicit approach to establishing whether the suspect had committed the crime (line 260). Although the statement-statement-question format is similar to Extract 1, the question directly addresses whether the suspect had produced the identification required to hire the videos, whereas his question in Extract 1 (lines 142-143) had asked whether the suspect had any knowledge of them being hired. The suspect lies on line 261, which, after a pause on line 262, prompts the officer to seek an alternative construction of events that could explain the evidence to the contrary.

As the suspect is responding to a hypothetical question, his response 'no idea' (line 266) is technically not a lie. Unlike Extract 1, the suspect doesn't produce suggestions, although any he produces here as to who it 'would be' would constitute a lie. This suggests that tangential information might only be produced as an opportunity to produce truthful talk, perhaps as a respite from lying, and also used to perform second order objectives which support the position of innocence. The suspect does not produce any further information, so after a pause on line 267 the officer supplements his earlier turn by drawing on evidence that challenges the suspect's denial; making reference to the fact that it is only the suspect who has that identification (line 268), and again on line 271, although this is overlapped by the suspect's response. The knowledge claim on line 268 makes it harder for the suspect to continue his denial (Carter, 2013). The pause on line 269 indicates the dispreferred nature of the next turn, supported by the suspect's use of 'well' and its stuttering production (Carter, 2008) (line 270). The suspect draws on divergent but supporting information which could have been usefully produced earlier in response to the question on line 260. Although violating the maxims of quantity, manner and relevance as he produces a wordy and ambiguous response that doesn't provide enough information to answer the question, it enables him to adhere to the sequential order of the interview, and also direct the discussion towards a discussion point where he can provide truthful

information, appear cooperative and avoid implicating himself.

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Extract 2 - Who would it be

252.   P1    on the f↑irst of (.) <a:pril nineteen ninety f↓our> the vi:deos that i
253.         earlier stated were hired,
254.         (0.3)
255.   S     mhm
256.         (0.8)
257.   P1    °↓erm° (0.2) and <someone> produced ide:ntificati:on (0.9) for <three
258.         e:lm ro↓ad>
259.         (1.7)
260.   P1    wa:s that yours↓elf
261.   S  →  no
262.         (0.6)
263.   P1    who: would it be: (0.2) who: would have identification for three elm
264.         roa:d if it wasn't (.) yo:u
265.         (0.5)
266.   S     no ide:a
267.         (0.4)
268.   P1    be:aring in m↓ind >its just< yourself
269.         (1.1)
270.   S  →  °yeah we[ll i've had >i would- i would< i wouldn't have no:ne (.)=
271.   P1          [and you are the one who lives th↓ere
272.   S  →  =>coz i haven't (0.4) l↑ived at me mu:ms f↓or (0.9) six ye:ars,
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Extract 3

The officer continues his attempts to establish the identity of the culprit, and Extract 3 opens with his summing up of the information ascertained in the interview so far – a tall man used identification from the suspect's parent's home address when hiring the items. After several turns the officer arrives at the question 'are you denying that it's yourself' (line 312).

There is a long pause on line 313 prior to the suspect's lie, despite there being a long lead-in to the officer's question as in Extract 1 and Extract 2, where the officer's direct question yielded a lie that was not delayed. The pause could be indicative of the dispreferred nature of the turn-to-come, similar to the pause on line 269 (Extract 2). In this extract it is not a knowledge claim that makes it difficult for the suspect to respond, but a question about his stance of denial, which is different from the more straightforward and easily anticipated question of whether he is the culprit (line 260, extract 2), and the implicit question in Extract 1 (lines 142-143). The suspect's response on line 314 is an affirmation of his denial, incorporating a close repeat of parts of the officer's prior turn; minimising the use of 'exclusive words' (DePaulo *et al.*, 2003) enables the suspect to avoid creating a lie with his own words and making himself vulnerable to self contradiction (Hancock *et al.*,

2008).

[ht]

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Extract 3 - I've got a brother

 290.   P1        [s- <so:meone who you said was quite tall,>
 291.             (0.6)

 .

 299.   S         =ye:ah
 300.             (0.3)

 .

 302.   P1        hi:red the:se videos and ga:me
 303.             (0.2)
 304.   S         yeah
 305.             (0.4)
 306.   P1        for the address of thr↑ee e:lm ro↓ad (0.2) which y↑ou >were living at<

 .

 312.   P1        °a-° and >you are< (.) denyi:ng that its yourse:lf
 313.             (1.0)
 314.   S      →  ye:s >i am< °deny:ing ↓it°
 315.             (0.3)
 316.   P1        °r↓i:ght >i jus:°< (1.1) wanna know who: else it could be: >have you
 317.             got any bro:thers< or anthing like that
 318.   S      →  y↑eah >i've go:t a brother,<
 319.             (0.2)
 320.   P1        °r↓ight° >wo:uld it be hi:m<
 321.   S         °no,°
 322.   P1        why: >wo[uldn't h↓e<
 323.   S              [°he lives ↓over downto:wn<°
 324.   P1        °ri:ght°
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The officer's next turn (lines 316-317) is posed in the context of querying who else could have hired the goods, similar to lines 263-264 in extract 2. The suspect responds with an answer that reveals a literal interpretation and selective answering of one part of the question ('have you got any brothers', lines 316-317). Although this violates the maxim of relevance, it enables the suspect to adhere to the turntaking structure of the interview and not only respond without lying and without implicating himself, but also to appear cooperative (albeit temporarily) whilst producing a truthful response. The officer is then compelled to draw out the relevance of the suspect's tangential response (lines 320/322) in order to satisfy the objective of his original question (line 316-317); the suspect's responses then reveal his earlier answer 'yeah I've got a brother' (line 318) as contextually irrelevant.

Extract 4

The officer starts to explore the suspect's possession of one of the stolen items. After establishing the identity of the nephew, the officer asks the suspect 'have you ever brought

him a fungame two' (line 397) in the knowledge that he has evidence that the suspect has indeed done so. The suspect's 'no' (line 399) is a lie (verified by line 896, Extract 8), which is then probed by the officer who uses a knowledge claim, in the form of a statement from the suspect's son, to challenge his denial. Rather than provide literal interpretations of the question (as in Extract 1 and Extract 3) or redirect the talk towards a different topic (as in Extract 2), the suspect overlaps the officer's turn, repeats his denial and lists the games he owns and has borrowed that are similar but not the same as the one in question. Although this response is relevant to the topic of the prior turn, it does not attend to the contradictory evidence presented by the officer and therefore violates the maxims of manner and quantity. In doing so, the suspect is again able to respond to the officer's probe but avoid implicating himself by avoiding addressing the inconsistency in his account. The suspect is able to provide a truthful and informative response whilst appearing cooperative by adhering to the sequential order of interaction.

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Extract 4 - Nephew

391.    P1      °r↓ight who:'s your ne:phew°

-

397.    P1      >have you e:ver< brought hi:m °a° fungame tw↓o

398.            (0.2)

399.    S   →  °n↓o°

400.            (0.6)

401.    P1      °°ri:ght°° whe- whe:n peter was in the:re (1.2) <he: said tha:t> (0.2)

402.            <da:ddy's brought him a fungame two:> (0.2) [°r↓ecently°

403.    S   →                                              [°n:o° >i've got a<

404.            fungame o:ne: an: (0.5) >i er< bo:rrowed e:r (0.3) fungame e:xtr↓a
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Extract 5

Later in the interview the officer continues exploring the topic raised in Extract 4. His so-prefaced question marks his coming turn as an 'upshot' (Heritage and Watson, 1979) of the suspect's earlier denials (lines 399/403, Extract 4).

There is an exchange of affirmatives from line 479-483, where the officer seeks and receives confirmation twice from the suspect that he had not lent the game to his nephew. The 'well' the officer produces at the beginning of his next statement (line 487) indicates that his turn is interactionally dispreferred; in this turn the officer states his intention to verify the facts with the nephew, which suggests that he doesn't agree with the suspect's repeated affirmations, or is not using these elicited responses as information. The officer's statement announces a subject to be visited 'later on', and then addresses the subject in his very next turn (line 489). The unexpected nature of this question is reflected on line 492, in the suspect's delayed response, turn-initial 'e::rr', and its hesitant production (Hutchby and Wooffitt, 2008).

The suspect's response violates the maxims of quantity and manner, and, unlike all the previous extracts, he does not then go on to produce a (seemingly) cooperative or informative response, and the content of his turn (being unsure of where his young nephew, and therefore his sister lives) suggests his response is also not used (as it is in all

the previous extracts) as an opportunity to say something truthful, or directed towards a divergent topic. However, this avoidance, ambiguity and non-cooperation enabled the suspect to respond to the officer's turn and therefore maintain adherence to the turntaking sequence of the interview whilst avoiding producing the required information that would lead to his lies being revealed. The suspect's response is not topicalised by the officer, who instead overlaps it with his question 'how old is john' (line 491); interrupting the suspect before he finishes his turn, despite the implication of saying that he didn't have an 'exact' address (line 491) being that he may have, or go on to provide, an approximate one. This swift change of question may also be symptomatic of the fact that the officer's previous four probing questions after the suspect has lied each resulted in a divergent response from the suspect. This is supported by the officer's explicit attempt to draw the suspect away from entering into a similar divergent and either unhelpful or irrelevant utterance in the final extract (lines 639/641, Extract 7).

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Extract 5 - Exact address
476.   P1    >so if i: was to spe:ak to< j↓ohn he would say that (0.5) you haven't
477.         lent him fungame tw↓o
478.         (0.2)
479.   S   → yea:h
480.         (0.4)
481.   P1    ye:ah
482.         (0.2)
483.   S   → °yeh°
484.         (0.4)
485.   P1    °r↓ight°
486.         (0.3)
487.   P1    °>well if° i get his< details later o:n °then i'll s[pea:k to h↓im°
488.   S                                                          [yeah, sure
489.   P1    oka:y (0.2) >wh↑ereabouts< does jo:hn li:ve
490.         (0.7)
491.   S   → e::rr i >haven-hav↓en't< (0.6) °got the exa:ct addr↓ess [but° ↓e:r
492.   P1                                                           [how o:ld is j↓ohn
493.         (0.6)
494.   S     twelve
```

Extract 6

Prior to the interaction shown below, the officer summarises his thoughts on what occurred; the suspect hired the items using his own ID, and didn't return them. The suspect then provides non-committal responses to each of the officer's claims. Extract 6 begins with the officer explicitly requesting a response to his thoughts on what happened. None is forthcoming, shown in the silence on line 602, and the officer proceeds to suggest a hypothetical situation in which the suspect may have not returned the items to the store.

The suspect's laughing response on line 609 indicates a lack of alignment (Carter,

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2013) with the officer's proposed story. The officer's turn 'I think you know what it's about' (line 614-615) is then an invitation to the suspect to provide his own explanation of why he kept the videos and computer game. After a long pause, the suspect issues a lie – 'no' (line 618), and continues the turn by introducing a different topic; his annoyance at being 'dragged out of bed' for the interview (line 618). Although his response violates the maxims of relevance and quantity, and doesn't appear cooperative or informative, it enables the suspect to provide a response to the officer's question (as in all extracts thus far). It also enables the suspect to avoid implicating himself as he moved swiftly on from his short, detail-sparse lie onto a divergent topic away from the crime and onto one where he could make a longer, truthful statement (assuming the suspect was indeed annoyed at being awoken early to attend the police station). On line 627 the officer voices his own annoyance; the sub context of his turn 'couple of video games and videos or whatever' and his bubbling-through laughter (Carter, 2013) indicate this annoyance is directed towards the suspect's continued denials of a minor crime involving such low-value goods.

```
Extract 6 - Annoying

601.   P1     >wha:t have you to< say about th↓at

602.          (0.3)

603.   P1     >a:ll it is is< (.) >i mean< (0.6) >for the sake of< two: video games

604.          and a compu:ter g↓ame, >i mean< i dunno if you forgot to return them,

605.          ↓or (1.3) you've passed them o:n to somebody else, (0.6) or you've

606.          >just thought< w↓ell >you know< i'll keep the:se i'm going on holiday

607.          fairly soon,

608.          (0.3)

609.   S      ((breathy)) °°h..ur h..ur h..ur°°

610.          (2.7)

611.   S      hu::r=

612.   P1     >le:ts just< get this a:ll cleared ↓u[p

613.   S                                          [ye[ah yeah i've you kno:w ↓i've

614.   P1                                            [>i thi:nk (.) i thi:nk< you

615.          know wha:t (.) i th↑ink you know what it's ab↓out

617.          (1.5)

618.   S   →  no:, [i(.)<i find it>very ann↓oying that i've been dragged out of b↓ed

619.   P1         [>it's g-<

620.   P1     ↓mmm

621.   S      you kn↓ow

622.          (0.3)

623.   P1     i mean i:find it very °ann-°h..h..y-anno(hh)ying as we:ll >yo:u kno:w<

  -

627.   P1     >co:uple of< video games and (0.3) vide:os, >or whatever,<
```

Extract 7

In Extract 7 the officer continues to attempt to draw information from the suspect.

Following his unsuccessful attempts in extract 6 and at the beginning of Extract 7, where his statement is met with a very long silence (line 632), the officer issues a clear prompt for the suspect to respond – 'don't ya' (line 633).

The suspect's 'no' (line 635) is distorted and softened with bubbling-through laughter, indicative of the suspect's discomfort with being made vulnerable in producing a lie at this stage of the interview. This is supported with the increasing lack of responses and increasingly transparent lack of cooperation from the suspect in the final episodes of lies and deceptions in the interview (Extract 6 and Extract 7). The long pause on line 636 is indicative of the officer anticipating further detail from the suspect following his one word denial 'no' in the previous turn. When this is not forthcoming, the officer issues a prompt for more detail – 'you're saying that you don't know anything about it at all' (line 637). After a further pause in which the suspect does not respond, the officer, on lines 639/641, then quickly qualifies his question.

```
Extract 7 - Get it cleared up

630.   P1     ∘i∘ just wa:nna get this matter cleared u:p and i th↑ink you know a

631.          bit more abo:ut i:t tha:n what you're >letting o:n<

632.          (4.0)

633.   P1     don't ya:

634.          (0.3)

635.   S   →  n(h)o:

636.          (1.2)

637.   P1     >you're sa:ying that you< don't know a:nything about it at ↓all

638.          (0.5)

639.   P1     >apart from what you heard the [other d↓ay< >apart from what you=

640.   S   →                                 [oh w↓ell (.) the only thi:ng=

641.   P1     =heard< ye:sterd↓ay

642.   S   →  =apart from what you told me yesterda:y tha[t he's already caught=

643.   P1                                               [∘r↓ight∘

644.   S   →  =so:meone (0.[..h]5) taki:ng f- (0.2) vid↓eos out on my me:mbership,
```

He orients to the suspect's earlier response (line147, Extract 1) to a similar question he asked regarding if the suspect knew 'anything about this at all' (lines 139-143, Extract 1). This anticipation of, and attempt to deflect, the suspect from a similarly literal interpretation leading to a similarly divergent response demonstrates the officer's interpretation of the suspect's earlier divergent response as neither sought nor useful, despite never explicitly attending to this at that time. Despite these efforts, the suspect overlaps the officer's qualification to offer a repeat of information from a previous dialogue with the officer (that the victim had already caught someone using the suspect's membership, lines 642/644). The 'change of state' token 'oh' (line 640) (Heritage, 1984), suggests the officer's qualification was unexpected by the suspect; the 'well' that follows this, a marker that the statement-to-come will not align with the prior utterance (Holtgraves, 2000), suggests that he is about to produce the type of response the officer has shown an explicit preference against regardless. Similar to Extract 1, the suspect takes a broad interpretation of the

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officer's prior turn; transforming it into something akin to 'tell me anything apart from what you have already told me earlier'. As in Extract 1, in deviating from discussing his involvement in the crime, the suspect violates the maxim of relevance, but in doing so he is interactionally able to avoid implicating himself, to produce something truthful and to orient himself as a source of information and as a cooperative outsider. This frame of reference was claimed by the suspect as ratified by the victim in Extract 1, and in this extract ratified by the officer himself 'apart from what *you told me* yesterday that he's already caught *someone*' (lines 642/644), with the implication that that 'someone' is an individual other than the suspect.

Extract 8 – The Truth

```
Extract 8 - The truth

849.    P1      i:t <c↑ould> >have been a< misunderstand↓ing (0.5) ·right,· (0.3)so

850.            i'm a:sking you n↓ow, (.) i:s it a misunderstand↓ing, (0.5) ha:ve you

851.            taken those videos ↓out, (0.5) ·>and<· not returned them for

852.            >what↑ever re:ason< (.) be:st known ·>to<· yours↓elf (0.7) and ↑if you

853.            ha:ve are you prepared to take them b↓↓a (.) t- t- to give them b↓ack

854.            (0.4)

855.    S   →   y↓es

856.            (0.8)

857.    P1      yes wh↓at

858.            (0.4)

859.    S   →   i will take them b↓ack

        .

875.    P1      [so:(.)you to↑ok the games(.)[you to:ok the games o:ut >yo:u've been<=

876.    S   →   [ye:s i've been l↓ying          [yes

877.    P1      =lyi:ng (.) but you to:ok the games o:ut (.) and you intend to ret↓urn

        .

884.    P1      a:lri:ght o:ka:y fair eno↓ough (.) but youve got (1.[1] >we've go:t=

885.    S                                                         [((clears throat))

886.    P1      = we go:t f↑u- f↑ungame tw↓o yeah,

887.            (0.8)

888.    S   →   f↑ungame tw↓o, sa:df↓ilm ·↓and·

889.            (1.2)

890.    P2      ·funnyfi:lm·

891.    P1      ·[funny f↓ilm·

892.    S   →    [·funny f↓ilm ye:ah

893.            (0.7)

894.    P1      right whe:re are they n↓ow

895.            (0.3)

896.    S   →   ·err >le:nt th↓em< to m↓e neph↓ew·
```

Conclusion

This research has explored the systematic production of divergent responses to the officer's questions immediately following a lie. Patterns within the data indicate a structured preference relating to the production of deceptive or divergent responses, which are closely linked to the interactional construction of the officer's prior turn, and governed by the suspect's adherence to the turntaking structure of the police interview. Lies were short, lacked detail and used few original words (echoing DePaulo *et al.*, 2003 and Hartwig *et al.*, 2006, while deceptive responses, produced following the officer's probing into the lie produced in a prior turn, were consistently accompanied by divergent talk. This satisfies the suspect's interactional requirement for responding and also allows the longer and more detailed response required by this type of question to be performed while avoiding a detailed lie, alleviates the cognitive load associated with being required to produce a detailed response (Vrij and Granhag, 2012) and reduces the risk of self-contradiction by avoiding the production of a lie (Hancock *et al.*, 2008). The divergent talk enables the suspect to maintain adherence to the turntaking structure of the interview whilst avoiding self-implication (all extracts), and to appear cooperative (Extract 1, Extract 3, Extract 4 and Extract 7), informative (Extract 1, Extract 2, Extract 4 and Extract 7) and truthful (Extract 1, Extract 2, Extract 3, Extract 4, Extract 6 and Extract 7); these are all traits that can usefully be attributed to truth-tellers and are also consistent with the research discussed in the earlier review of divergent talk in the literature.

The suspect's orientation to the structure of turntaking is evident even when this response is a lie; the data shows that the interactional preference for responding supersedes the preference for not being untruthful. However, this does not uniformly result in the suspect producing a lie in response to a question about the crime. Conflicts between the suspect's need to protect himself from discovery when faced with probing questions from the officer, and the interactional demands of the context often lead to a forfeiting of other interactional compacts. Specifically, through preference organisation (Extract 5 and Extract 7) and maxims of conversation, in particular those governing relevance (extracts 1, 2, 3, 6 and 7), quantity (extracts 2, 4, 5 and 6) and manner (Extract 2 and Extract 4). These manifest in ambiguity, vagueness, dissociative responses and the production of irrelevant information; all of these interactional manifestations of dispreferred response types and violations of the maxims of conversation are represented in the literature discussed at the beginning of this paper as indicative of deceptive interaction.

Despite the conflicting demands on the suspect and the subsequent violations of interactional frameworks, every case presented demonstrates the suspect's adherence to the sequential order of turntaking and attribution of question turns to the officer and answer (response) turns to the suspect. This is done in an ordered way, and these can be further exploited to attain objectives in line with the question that is being asked and in accordance with their status as a (guilty) suspect engaged in the business of avoiding self-incrimination. These findings are similar to those of Wilson and Sperber (2002) who explored the adaptable linguistic styles of deceivers. This could account for the difficulties (Picornell, 2011) in finding similarities in cues to deception across contexts (and indeed even between contexts); the present research argues that combinations or bundles of interactional phenomena are flexible and drawn on by deceivers in accordance with the question and the deceiver's basic and further objectives.

Duran *et al.* (2010: 441) posit that "the sender's maintenance of both their own false

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reality and the receiver's ostensible reality comes at the price of cognitive resources". The present study argues that this cost is reflected in the suspect's neglect of interactional relevance in the business of attending to responding to the officer. It is suggested that resources useful to the suspect in protecting his position of innocence, such as saying something relevant, truthful, cooperative or informative, are discarded, if need be, in order to preserve the two basic concerns of adhering to the sequential structure of turntaking and of avoiding implicating himself, regardless of the implausibility of the response this produces. This also addresses questions (for example posed by Picornell (2013), on the reasons for different response types across the verbose-short response and direct-indirect response spectra. The present research suggests these are part of deception management, employed in accordance with the strategic and interactional requirements of the deceiver and the receiver.

The "discomfort and unpleasantness of having to maintain and defend a lie to a suspicious partner" (Van Swol *et al.*, 2012: 98) is seen in the suspect's explicit referral to being annoyed in Extract 6. The repeated suspicion and challenge of the suspect's denials and versions of events also ultimately appear to exhaust the divergent response route of the suspect, resulting in a breakdown of the suspect's adherence to the sequential order of turntaking in the final two instances of lying and deception (once in Extract 6, line 601, and twice in Extract 7, lines 633 and 637) before the suspect finally confesses (Extract 8). Buller and Burgoon (1996) suggest that if the deceiver realises their lie is suspected by the receiver, then this has an effect on the deceiver's interaction; the degradation of the suspect's adherence to the structure of turntaking in Extract 6 and Extract 7 provide some evidence towards a cumulative effect of the systematic and repeated suspicion on the interactional design of the suspect.

In addition to detailing the impact of the officer's question styles on the manifestation of deceptive responses, this paper proposes an underlying interactional explanation for the differences across the literature regarding the astounding variety in form, function and frequency of deception cues. Echoing Reynolds and Rendle-Short's (2010: 12) research concerning response latency, the present research found interactional phenomena (or deception cues) were "not a random 'by-product' of deception, they are interactional resources used by participants for specific purposes".

This paper posits that what would traditionally be described in the literature as cues to deception are essentially phenomena drawn on by the suspect in enabling their production of a non-self-implicating response that can also be directed towards supporting their account in a variety of ways. The findings suggest that, rather than cues to deception, these phenomena are in fact the suspect's attempts to satisfy the often conflicting interactional requirements and their own particular objectives in the interview, in response to probing questions. The findings support a call to move away from explorations that identify, collect and use cues to deception as a way to predict and understand it. It suggests that a focus directed towards the influence of the questioner's talk on the deceiver's response would ultimately provide a more useful understanding of the manifestation of deception, by reframing it as part of interactional design rather than a collection of discrete cues drawn upon at the point of deception. This renewed interpretation of deception cues and the perceptible link between the officer's question type and the suspect's interactional design has clear implications for the direction of future research into deception in this context. The observations made here have the potential to be used in evaluating interactions where

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deception is suspected but not admitted, and could have a real and practical impact on interview training and practice.

References

Anolli, L., Balconi, M. and Ciceri, R. (2002). Linguistic styles in deceptive communication: dubitative ambiguity and elliptic eluding in packaged lies. *Social Behavior and Personality: An International Journal*, 31(7).

Battista, P. (2009). Deceivers' responses to challenges of their truthfulness: Differences between familiar and unfamiliar lies. *Communication Quarterly*, 45(4), 319–334.

Buller, D. B. and Burgoon, J. K. (1996). Interpersonal deception theory. *Communication Theory*, 6, 203–242.

Burgoon, J., Blair, J., Qin, T. and Nunamaker Jr, J. (2003). Detecting deception through linguistic analysis. In *Proceedings of the Symposium on Intelligence and Security Informatics*, 91–101, New York: Springer-Verlag.

Carter, E. (2008). *Policing talk: An investigation into the interaction of the officer and the suspect in the police interview*. Phd thesis, University of Essex.

Carter, E. (2013). *Analysing police interviews: Laughter, Confessions and the Tape*. London: Continuum.

DePaulo, B. M., Lindsey, J. J., Malone, B. E., Muhlenbruck, L., Charton, K. and Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), 74–118.

P. Drew and J. Heritage, Eds. (1992). *Talk at Work: Interaction in institutional settings*. Cambridge: Cambridge University Press.

Dunbar, N. E., Ramirez Jr., A. and Burgoon, J. K. (2003). The effects of participation on the ability to judge deceit. *Communication Reports*, 16, 23–33.

Duran, N. D., Hall, C., McCarthy, P. M. and McNamara, D. S. (2010). The linguistic correlates of conversational deception: Comparing natural language processing technologies. *Applied Psycholinguistics*, 31(3), 439–462.

Ekman, P., Sullivan, M., Friesen, W. and Scherer, K. (1991). Face, voice and body in detecting deception. *Journal of Non-verbal Behaviour*, 15(2), 125–135.

Frank, M. G. and Feeley, T. H. (2003). To catch a liar: Challenges for research in lie detection training. *Journal of Applied Communication Research*, 31, 58–75.

Hall, M. and Watts, C. (2011). A multi-dimensional evaluation of vocal deception. Symposium poster presentation. http://www.jmu.edu.iiia/wm_library/A_Multidimensional_Evaluation_of_Vocal_Deception.pdf (last accessed 04/03/14): James Madison University Institute for Infrastructure and Information Assurance.

Hancock, T. J., Curry, L. E., Gootha, S. and Woodworth, M. T. (2005). Lies in conversation: An examination of deception using automated linguistic analysis. In *Proceedings of the 26th Annual Conference of the Cognitive Science Society*.

Hancock, J. T., Curry, L. E., Goorha, S. and Woodworth, M. (2008). On lying and being lied to: A linguistic analysis of deception in computer-mediated communication. *Discourse Processes*, 45, 1–23.

Hartwig, M., Granhag, P. A., Stromwall, L. and Kronvist, O. (2006). Strategic use of evidence during police interviews: When training to detect deception works. *Law and Human Behavior*, 29, 469–484.

Heritage, J. (1984). A change-of-state token and aspects of its sequential placement. In J. M. Atkinson and J. Heritage, Eds., *Our masters' voices: The language and body language of politics*, 299–345. London: Methuen.

Carter, E. - When is a lie not a lie? When it's divergent

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Heritage, J. and Watson, D. R. (1979). Formulations as conversational objects. In G. Psathas, Ed., *Everyday Language: Studies in Ethnomethodology*, 123–162. New York: Irvington.

Heydon, G. (2005). *The Language of Police Interviewing.* Hampshire: Palgrave Macmillan.

Holtgraves, T. M. (2000). Preference organisation and reply comprehension. *Discourse Processes*, 30(2), 87–106.

Hutchby, I. and Wooffitt, R. (2008). *Conversation Analysis: Principles, Practices and Applications.* Cambridge: Polity Press, 2 ed.

Inbau, F. E., Reid, J. E., Buckley, J. P. and Jane, B. C. (2004). *Criminal Interrogation and Confessions.* Massachusetts, USA: Jones and Bartlett, 4 ed.

Kassin, S. M. and Fong, C. T. (1999). "I'm innocent!": Effects of training on judgments of truth and deception in the interrogation room. *Law and Human Behavior*, 23(5), 499–516.

Leal, S. and Vrij, A. (2008). Blinking during and after lying. *Journal of Nonverbal Behaviour*, 21, 87–102.

Levinson, S. (1983). *Pragmatics.* Cambridge: Cambridge University Press.

Meissner, C. A. and Kassin, S. M. (2002). "He's guilty!": Investigator bias in judgments of truth and deception. *Law and Human Behavior*, 26(5), 469–480.

Miller, G. R. and Stiff, J. B. (1993). *Deceptive Communication.* California: Sage Publications.

Picornell, I. (2011). The rake's progress: Linguistic strategies for deception. In *Proceedings of IAFL 10th Biennial Conference*: Aston University: Centre for Forensic Linguistics.

Picornell, I. (2013). Analysing deception in written witness statements. *Linguistic Evidence in Security, Law and Intelligence*, 1(1), 41–50.

Pollina, D. A., Dollins, A. B., Senter, S. M., Krapohl, D. J. and Ryan, A. H. (2004). Comparison of polygraph data obtained from individuals in mock crimes and actual criminal investigations. *Journal of Applied Psychology*, 89(6), 1099–1105.

Reynolds, E. (2011). Overcoming the analyst's problem: Researching lies in conversation analysis and ethnomethodology. In *12th International Pragmatics Association Meeting.*

Reynolds, E. and Rendle-Short, J. (2010). Cues to deception in context: Response latency/gaps in denials and blame shifting. *British Journal of Social Psychology*, 50(3), 431–449.

Roach, J. (2010). Home is where the heart lies? A study of false address giving to police. *Legal and Criminological Psychology*, 15, 209–220.

Ruffman, T., Murray, J., Haberstadt, J. and Vater, T. (2012). Age-related differences in deception. *Psychology and Aging*, 27(3), 543–549.

Sanaullah, M. and Gopalan, K. (2012). Distinguishing deceptive speech from truthful speech using MFCC features. *Recent Advances in Electrical and Computer Engineering*, 167–171.

Schegloff, E. A. (1997). Whose text? Whose context? *Discourse and Society*, 8, 165–187.

Schober, M. and Glick, P. (2011). Self-deceptive speech: A psycholinguistic view. In I. C. Piers, Ed., *Personality and psychopathy: Critical dialogues with David Shapiro*, 183–200. New York: Springer.

Sip, K. E., Carmel, D., Marchant, J. L., Li, J., Petrovic, P., Roepstorff, A., McGregor, W. B. and Frith, C. D. (2013). When Pinocchio's nose does not grow: Belief regarding lie-detectability modulates production of deception. *Frontiers in Neuroscience*, 7, 16.

Sykes, G. and Matza, D. (1957). Techniques of neutralisation: A theory of delinquency. *Sociological Review*, 22(6), 664–670.

Carter, E. - When is a lie not a lie? When it's divergent

Language and Law / Linguagem e Direito, Vol. 1(1), 2014, p. 122-140

Van Swol, L. M., Braun, M. T. and Malhotra, D. (2012). Evidence for the pinocchio effect: Linguistic differences between lies, deception by omissions, and truths. *Discourse Processes*, 49, 79–106.

Villar, G., Arciulia, J. and Paterson, H. (2013). Vocal pitch production during lying: Beliefs about deception matter. *Psychiatry, Psychology and Law*, 20(1), 123–132.

Vrij, A. (2000). *Detecting lies and deceit: Psychology of lying and its implications for professional practice.* Chichester: Wiley.

Vrij, A., Evans, H., Akehurst, L. and Mann, S. (2004). Rapid judgements in assessing verbal and nonverbal cues: Their potential for deception researchers and lie detection. *Applied Cognitive Psychology*, 18, 283–296.

Vrij, A. and Granhag, P. A. (2012). Eliciting cues to deception and truth: What matters are the questions asked. *Journal of Applied Research in Memory and Cognition*, 1, 110–117.

Vrij, A. and Mann, S. (2001). Who killed my relative? Police officers' ability to detect real-life, high stake lies. *Psychology, Crime and Law*, 7(2), 119–132.

Vrij, A. and Mann, S. (2004). Detecting deception: The benefit of looking at a combination of behavioural, auditory and speech related content cues in a systematic manner. *Group Decision and Negotiation*, 13(1), 61–79.

White, C. H. and Burgoon, J. K. (2001). Adaptation and communicative design: Patterns of interaction in truthful and deceptive conversations. *Human Communication Research*, 27, 9–37.

Willén, R. M. and Strömwall, L. A. (2011). Offenders' uncoerced false confessions: A new application of statement analysis? *Legal and Criminological Psychology*.

Wilson, D. and Sperber, D. (2002). Truthfulness and relevance. *Mind*, 111, 583–632.