

# **“Send me some pics”: Performing the offender identity in online undercover child abuse investigations**

## **Introduction**

One of the gravest consequences of global internet access - in particular the heavily encrypted portion of the internet often referred to as the ‘dark web’ - is that adults with a sexual interest in children now have online spaces in which to meet, trade indecent imagery, exchange advice and support, and recruit for co-abuse opportunities, all with relative anonymity (Davidson & Gottschalk, 2011; Cohen-Amalgor, 2013; Westlake & Bouchard, 2016; Grant & MacLeod, 2016, 2020; Author *et al.*, *in submission*). Such spaces provide validation of deviant sexual interests, and resources enabling individuals to become more sophisticated offenders regarding abuse strategies and security on and offline (Quayle & Taylor, 2003; Davidson & Gottschalk, 2011; Author *et al.*, *in submission*).

Offender anonymity is one of the most significant challenges to policing online child sexual abuse (CSA). In response, one practice currently being implemented by police forces is the deployment of online undercover police officers (UCs) who are tasked with posing as offenders in order to gather intelligence and evidence on offending individuals, communities and behaviours (Urbas, 2010; Mitchell *et al.* 2012; Grant & MacLeod, 2016, 2020). It is crucial to UCs’ success that they are able to convincingly perform the role of child sexual offender, but online identity deception is not straightforward (Lincoln & Coyle, 2012; MacLeod & Grant, 2017), and this operational task raises some important issues around the expression of identity online. Because this expression is done primarily (if not exclusively) through language, linguists are in a unique position to assist in online undercover investigations and are increasingly being called on for support with identity assumption (MacLeod & Grant, 2017; Grant & MacLeod, 2020).

While little is known about how UCs approach the task of assuming the offender identity online, MacLeod and Grant (2017) note some of the difficulties UCs experienced by UCs when attempting to pose as CSA victims in online account takeover. This scenario involves a UC replacing a child in an ongoing online interaction with an anonymous suspected offender to sustain the interaction and gather information regarding the offender's identity (Grant & MacLeod, 2020). The operational goals here are different to those involved in infiltrating abusive online communities, and as such require different interactional strategies, including the performance of identity traits like youth, and often female gender (see MacLeod & Grant, 2017). The authors found a tendency of UCs performing this task to including an over-reliance on linguistic stereotypes related to the online environment, or by adolescent girls, for example, and the use of repeated strings of interrogatives typical of investigative interviews. Such habitual linguistic choices not only jeopardise the UCs' abilities to convincingly perform the role of victim, they but also threaten the sufficient obfuscation of the professional police officer identity - a phenomenon known as 'identity leakage' (Grant & MacLeod, 2018, p. 168). Some of this is explained by operational constraints, including around the fair collection of evidence -such as the restriction on conducting illegal interviews (in accordance with PACE (1984)) (Grant & MacLeod, 2020), which dictate how evidence must be collected (see PACE, 1984). Promisingly though, the authors show that linguistic training on aspects of language like lexis and spelling, speech acts (Austin, 1962; Searle, 1969), and topic management can help UCs' performances as victims improve substantially, and it follows that the same would be true for the role of offender.

Where UCs are required to pose as offenders, an already difficult task is compounded by the especially high-risk, low-trust nature of online CSA forums in which users are acutely aware of possible police presence (MacLeod & Grant, 2017; Author *et al. in submission*). Because these sorts of interactions typically occur in hidden portions of the internet, we do not know a great deal about how offenders talk to each other online. A paucity of this kind of data has meant that linguistic studies on online CSA have overwhelmingly focused on adult-child

'grooming' conversations (Author & Grant, 2017; Lorenzo-Dus & Izura, 2017; Lorenzo-Dus & Kinzel, 2019) and computational methods for their detection and classification (e.g. Michalopoulos *et al.*, 2010; Gupta *et al.*, 2012; Pranoto *et al.*, 2015; Ioannou *et al.*, 2018). Offender-offender interactions have subsequently been largely obscured from academic and public consideration, despite their devastating impact (see McManus *et al.*, 2016 and Author *et al.*, *in submission*).

Given that online undercover work is so heavily dependent on language, linguistic analysis of relevant online environments can support law enforcement agencies in both training and evaluation of online identity assumption. Driven by the lack of research into offender-offender interactions and the complexity of the task of assuming the offender identity (and suppressing the professional identity) online, this paper presents a case study examining the performance of the offender identity by genuine suspected CSA offenders and one UC posing as an offender in online instant messaging (IM) interactions. Primarily descriptive in its aims, this paper seeks to do the following:

- 1) describe the rhetorical moves used by both genuine suspected CSA offenders and the UC and how they contribute to various expressions of 'offenderness'
- 2) compare ~~move-use~~the use of moves between the two interactant types, identifying areas of inconsistency

The remainder of this paper sets out some of the key issues regarding online identity performance and demonstrates the use of rhetorical move analysis as a tool for identity investigation. It then describes the data and analytical procedure before discussing results.

### **Identity performance and authenticity online**

This work is approached from the social constructionist perspective common in contemporary sociolinguistics that conceives of identity not as something we intrinsically are, but as something we do, or perform, in particular through language (Bucholtz & Hall, 2005; Johnstone, 2011; Grant & MacLeod, 2018). The various identities, or roles, we perform (e.g. parent, spouse, customer, employee) are selected based on their relevance or lucrativeness in each interaction with respect to our communicative goals (Omoniyi, 2006).

Grant and MacLeod's (2018) resource-constraint model describes the types of resources and constraints that impact an individual's capacity to perform various identities. This model is particularly helpful in considering the unequal positions of the interactants here, and the possible disparities in their performance of the offender role. The UC in this study is performing deceptively, which adds a certain complexity to the analysis; in each interaction we are looking at the performance of a role that is genuinely within the repertoire of one interactant but not the other. The resource-constraint model helps unpack this, by describing the various resources available to the suspected offenders and UC, and, crucially, how these might also limit his performance of the offender identity. According to the model, one type of resource comes from the other interactant(s) in a conversation, and one of the ways this occurs is through linguistic accommodation - the processes by which we shift our language towards or away from our interlocutors to reduce or increase social distance (see Giles *et al.*, 1991). The level of accommodation observed between the UC and suspected offenders may offer insights into the UCs' capacity to develop positive social relationships with the suspected offenders by drawing on their various interests and conversational motivations. Another resource type (perhaps the most important in this context) is offered by the individual's sociolinguistic history, which encompasses all past experiences and interactions, including the familial, geographical, educational and professional (Grant & MacLeod, 2018). It is arguably the richest resource type available, and where the UC is most constrained. CSA offenders are able to draw from real

prior experience of abusing in order to perform as abusers - this might manifest as genuine expressions of preference for a particular gender or age group, or specific knowledge of rules around the exchange of indecent images, for example. The UC, on the other hand, is limited in this regard because he lacks this bank of experiential resource and must instead consciously acquire (some approximation of) it through exposure to genuine communications between offenders (Grant & MacLeod, 2018). Of course, many participants of online CSA communities may not have experience of abusing and as such face another set of challenges associated with displaying an authentic offender persona and gaining membership into online offending groups, but even 'newbie' offenders with little or no experience have genuine abusive desires or fantasies to draw on, which the UC does not (see Chiang, 2018).

The online context itself raises some interesting issues for identity performance. Many online spaces enable us to present ourselves selectively and purposefully by foregrounding those aspects most relevant to the immediate context, and suppressing those less useful (Tagg, 2015). Primarily textual interactions often make physical attributes related to identity (e.g. tone of voice, gender, age, accent, facial expression etc.) less apparent and at times completely inaccessible, allowing certain freedoms for the deliberate manipulation of identity that offline contexts do not afford (Seargeant & Tagg, 2014). But the idea that we can forge entirely new identities for ourselves online has largely been rejected (Herring, 2003; Tagg, 2015), and the notion of authenticity has taken centre stage in much online identity research (see e.g. Newon, 2011; Page, 2014; Seargeant & Tagg, 2014; Tagg, 2015; Leppänen *et al.*, 2015). Seargeant and Tagg (2014) define authenticity in online contexts as 'the extent to which an online persona is seen by interlocutors to relate to the person behind it' (p. 7). Like identity, authenticity is also thought to be socially constructed and dependent on audience perception (Page, 2014), and while it is true that online spaces can enable the deliberate foregrounding and backgrounding of particular identity traits, interactants may be required to exert extra (linguistic) effort to perform identities authentically, especially where physical cues are unavailable (Seargeant & Tagg, 2014).

While the UCs' and genuine suspected offenders' underlying motivations are very different, performing the offender identity authentically is paramount to both groups. Both have the potential to gain substantially from the authentic performance of offenderness, as well as to incur some significant form of loss or damage by failing to do so. For the offenders, it is the reason they engage in the interactions at all - personally identifying as offenders in order to meet with others ultimately enables continued offending. If this performance is deemed inauthentic, they might lose out on potential abuse opportunities, provision of indecent material, and various forms of support. For the UC, failure to perform convincingly as an offender risks losing valuable intelligence and investigative leads, and alerting genuine offenders to police presence in communicative environments they might have believed to be relatively 'safe' from law-enforcement, perhaps further increasing vigilance around security measures.

### **Rhetorical moves in sex abuse interactions**

A rhetorical move is a unit of language which captures a specific communicative function or goal, and which may be broken down into smaller 'steps' or 'strategies' which work, often in combination, to achieve the overall purpose of a move (Swales, 1990; Biber *et al.*, 2007). While traditionally applied to monologic texts, move analysis has in recent years been used to investigate the rhetorical goals of interactants in dialogue (Boon, 2013; Author & Grant, 2017, 2019; Macagno & Bigi, 2017; Author *et al.*, *in submission*).

Author & Grant (2017) demonstrated how the method could be used to examine variation in CSA offender's grooming 'styles', identifying common moves such as rapport-building and escalating sexual content in grooming conversations. In another study (Author & Grant, 2019), the authors analysed IM conversations between a convicted child sexual offender and a

number of victims and described the various moves used in the performance of numerous personas assumed by the offender. In particular they noted two distinct and opposing roles; the 'sexual pursuer/aggressor' and the 'friend/boyfriend', which were indexed by the offender's differentiated use and frequency of rhetorical moves associated with sexual and non-sexual rapport building, maintaining and escalating sexual topics, overt persuasion, and extortion, among others. The current study might be viewed as complementary to this work; where Author & Grant (2019) considers one offender with many online identities, this study investigates one undercover officer's assumption of many interactional roles.

The current study builds on the methods used by Author and Grant (2017; 2019), incorporating a tiered structure for move analysis proposed by Macagno and Bigi (2017). Macagno and Bigi (2017) extend the scope of move analysis to account not just for individuals' conversational goals, but also the shared 'global goals' (p.149) that interactants achieve collaboratively, and they demonstrate this through analysis of interactions including doctor-patient consultations, classroom debates and a courtroom cross-examination. Because the interactions in the current study appear outwardly to occur between two 'equal' individuals, i.e. two adults with a shared sexual interest in children, each with similar general purposes and possibly something to gain from the interaction (e.g. indecent material, support, etc.), the concept of global moves seems a useful one in exploring the 'shared' goals of participants.

## **Methods**

### **Data**

The data for this study was provided by a UK police force and comprises 25 transcripts of IM interactions between one UC and 25 suspected child sexual offenders, which took place on a dark web forum. The term 'suspected' is preferred because although the non-UC interactants'

presence in online CSA environments and demonstrated knowledge around CSA indicates their involvement in either contact or image-related child sex offences, it is unknown whether they have criminal convictions. In all interactions, the UC is posing as an adult with a sexual interest in children, and it should be noted that prior to these interactions, the UC had received some level of linguistic training similar to that described in the introductory section, although not in this specific communicative context. Transcript characteristics are summarised in table 1.

<b>Transcript</b>	<b>Length (lines)</b>	<b>Participants</b>	<b>Suspected offender stated identity categories</b>	<b>UC stated identity categories</b>
T1	52	O1 - UC	Male, France	Male, UK
T2	63	O2 - UC	Male	Male
T3	31	O3 - UC	Male, 45, UK	Male, UK
T4	223	O4 - UC	Male, 37, Africa	Male, UK
T5	49	O5 - UC	Female, UK	Male, UK
T6	266	O6 - UC	Male, UK	Male, UK
T7	50	O7 - UC	Male	Male
T8	145	O8 - UC	Male, 50, UK	Male, UK
T9	27	O9 - UC	Not stated	Not stated
T10	42	O10 - UC	Male, UK	Male, UK
T11	62	O11 - UC	Male, UK	Male, UK
T12	46	O12 - UC	Male, 50, USA	Male
T13	171	O13 - UC	Male, 50, UK	Male, UK



T14	89	O14 - UC	Male, 55, UK	Male, 38, UK
T15	56	O15 - UC	Male, UK	Male, UK
T16	74	O16 - UC	Male, 65, UK	Male, UK
T17	230	O17 - UC	Male, 28, UK	Male, 38, UK
T18	69	O18 - UC	Male, 52, UK	Male, 38, UK
T19	68	O19 - UC	Female	Not stated
T20	129	O20 - UC	Male, 50, UK	Not stated
T21	111	O21 - UC	Male, 60, UK	UK
T22	39	O22 - UC	Male, 48, UK	Male, 38
T23	85	O23 - UC	Male, 38, UK	38, UK
T24	45	O24 - UC	Female, 17, UK	Male, 38, UK
T25	91	O25 - UC	Male, UK	Male, UK

Table 1. Transcript characteristics

Transcripts are referred to as T1-T25 and suspected offenders as O1-O25. The transcripts range in length between 27 and 266 lines. Of the suspected offenders, 21 purport to be male, three purport to be female, and one does not mention gender or use a gendered screen name. The majority of offenders state they are in or from the UK, and their given ages range from 17 to 65. It is known that the UC is male and operating in the UK, and this is stated explicitly in the majority of the interactions. Where the UC's gender or location is not stated, it is assumed that he is performing as a UK-based male as there is no evidence to the contrary.

## Procedure

The move analysis procedure followed that demonstrated in Author & Grant (2017; 2019) and Author *et al.* (*in submission*) as based on guidance provided in Biber *et al.* (2007) (see Author & Grant (2017) for a full description of methods and reliability testing). All transcripts were read through several times, and each utterance coded according to its most likely communicative function(s). These were then grouped according to functional or semantic themes in order to identify broad-level moves and lower-level strategies which work to achieve those moves. Borrowing from Macagno and Bigi (2017), established moves were then further grouped into a smaller number of broader categories termed 'global moves', to reflect the overarching interactional goals that appear on the surface to be shared by both the UC and suspected offenders. Labels and descriptions of moves and strategies were continually revised and refined throughout the coding process, and finally, moves, move frequencies and structures were considered in terms of their potential relation to the performance of particular identity positions. A reliability test showed that two coders (including the author) reached 83% agreement of moves identified when independently coding a test sample (10%) of the data.

One limitation of this study is that it only features a single UC. However, that the suspected offenders form the larger group is advantageous; at this exploratory stage of research it is important to gain a good understanding of the moves and identity positions of genuine suspected offenders before we can consider whether and how UCs might achieve something similar. What we can learn from the UC's performance in this case may not be generalisable but can nonetheless raise areas for focus and improvement. It is also acknowledged that this dataset is not a perfect proxy for genuine offender-offender conversations, but more likely provides approximate examples of the sorts of conversations that occur between offenders. Online undercover policing practices such as this are still fairly novel, so even a relatively narrow dataset such as this provides a rare opportunity to gain new and valuable insights into the performance of the offender identity online.

## Ethics

All data was accessed through a UK police force under a data sharing agreement, provisions of which included the secure storage of data on encrypted devices, anonymisation of transcripts and psychological support for the researcher. All illustrative textual examples are taken verbatim from transcripts (with typos corrected) but carefully selected and may be clipped from longer utterances to further preserve anonymity. The University ethics committee approved this agreement and the research, which was conducted in accordance with University ethics guidelines.

## Analysis and discussion

### Moves and identities

The study first seeks to identify the moves used by both the UC and suspected offenders, and the various identity positions performed by their use. This section describes the moves observed in the data as grouped into global moves that represent the interactants' 'joint' interactional goals, and the identity positions they work to perform. Following this, the UC's and suspected offenders' moves and identity performances are compared in terms of move frequency and structure.

Across all 25 interactions, a total of five global moves and 16 sub-moves were identified. These are presented in table 2.

Global move	Sub-move	Function
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1. Relationship maintenance	Greeting	To initiate conversation
	Maintaining conversation	To enable continued/future interaction
	Rapport	To establish/maintain a positive social relationship
	Sign off	To signal conversation departure
2. Character assessment	Identifying interests/experience	To determine interlocutor's sexual interests and level of offending experience
	Reporting interests/experience	To describe sexual interests and level of offending experience
3. Fantasy narrative	Eliciting narrative	To elicit interlocutor's previous, current or planned sexual encounters
	Reporting events	To describe previous, current or planned sexual encounters
	Supporting narrative	To engage with and aid continuation of interlocutor's narrative
4. Support (emotional and practical)	Seeking support	To obtain help or advice regarding on and offline CSA practices
	Giving support	To offer/provide help or advice regarding on and offline CSA practices
	Legitimising CSA	To frame CSA as normal and acceptable and validate interlocutor's sexual interest in children
	Requesting media	To determine interlocutor's possession of indecent material OR to obtain indecent material

5. Sharing Indecent material	Offering/providing media	To offer or provide media files containing indecent material
	Negotiating media share	To reach a trading agreement with interlocutor
	Assessing and managing risk	To gauge and manage the types and levels of risk associated with current interaction and future offending

Table 2. Global moves, sub-moves and functions.

A number of the observed moves work explicitly to perform CSA 'offenderness', specifically *Identifying* and *Reporting interests/experience*, *Eliciting narrative*, *Reporting events*, *Supporting narrative* and *Requesting/Offering/Negotiating media* - all of which focus either on previous abuse or intentions to abuse. Perhaps one of the most important moves in indexing the offender identity is *Legitimising CSA*, as this move above all others impresses that the immediate communicative environment is a safe and appropriate place to discuss CSA desires and offences. Prominent strategies of this move include positive evaluations of abusive narratives, e.g. 'sweet... how far did u get?', normalising CSA behaviours, e.g. '[I watch] just the normal stuff', and euphemising abuse, e.g. 'u having any fun with your 2?'.

Within the general performance of offenderness, other micro-level roles (Bucholtz & Hall, 2005) begin to emerge, particularly around the axis of expertise and inexperience. This is often seen where one interactant takes on the role of 'support seeker' through moves like *Requesting media* and *Seeking support*, and the other responds as 'expert' using strategies of *Giving support* such as offering technological help or advising about particular abuse methods. Expertise can also be performed by *Reporting experience*, *Reporting events* and by *Assessing and managing risk*. This latter move indicates an awareness of the risks associated with the immediate interaction and the ability to navigate the environment while avoiding

detection. The performance of expertise may be used to assist individuals seeking support, or to assert authority, as in the following exchanges around the trade of indecent images:

O25: pc is playing up no doubt  
UC: try a different folder

O7: no installation on that link u sent me  
UC: id google how to install \*program\* and follow the instructions pal

Both suspected offenders in these examples are seeking support by reporting technological difficulties and in both cases, the UC responds with a suggestion for help, but these differ in tone and arguably index different interactional roles. In the first example, the UC provides a simple suggestion for help. In the second example, the response is more condescending and confrontational; his advice to 'follow the instructions' from Google highlights that support was already available to the offender who had simply failed to access it. Additionally, the UC's suggestion is framed as a statement of something he himself would do, and includes the sarcastic sounding endearment term 'pal'. All of these features position the UC as both a knowledgeable technology user and accessor of indecent imagery, and simultaneously position the suspected offender as inexperienced and even unintelligent. The different roles performed by the UC in these exchanges might be invoked by the different ways in which the two suspected offenders reported their complaints; O25 blames only the technology in question, whereas O7 implies the UC may be to blame for sending a bad link.

The availability of support is known to be a key motivator for CSA offenders who talk to each other online (Davidson & Gottschalk, 2011; Westlake & Bouchard, 2016; Author *et al.*, *in submission*), and the current data reflects this; interactants seems naturally sympathetic and encouraging of each other and the interactions rarely become hostile. It is perhaps unsurprising, then, that some of the most prominent identity positions performed are based in the types of relationships formed by interactants. The role of 'friend' is performed largely

through the use of *Rapport* moves. Often this involves expressions of emotional or moral support:

O13: not [accessed any children] so far

UC: too many cameras and fucking busybodies around these days eh?

O23: harder nowadays [to access abuse opportunities]

UC: tell me about it

The first example sees the suspected offender reporting his personal experience of having been unable to access abuse victims. The responding UC performs friendship by expressing empathy towards the offender through complaints about obstacles to accessing victims. The second example shows the suspected offender and UC performing friendship through a joint expression of the hardships involved in seeking victims.

Occasionally, the performance of 'friend' develops into more of a 'sexual interest' role, which is seen through a combination of sexual rapport building and the sharing of sexual images of interactants (such images are shared only by suspected offenders). This is illustrated in the following exchange in which the UC reciprocates the performance of 'sexual interest' and at the same time, attempts to gather evidence in the form of pictures of the suspected offender.

O4: maybe i'm worth it ;-)

UC: send me some pics and i'll let you know

At times, more business-like relationships form, seeing interactants assuming roles like 'trader', 'negotiator' or 'facilitator'. These roles are most commonly performed through the combinative use of moves of *Character assessment*, *Giving support*, *Sharing indecent material* and *Assessing and managing risk*. The following exchange demonstrates the type of risk management that often accompanies moves around image sharing.

UC: u got anything to share looks like you have nothing

O25: i have images and vids... just unhide them when i find someone to share them with

The various roles observed (support-seeker, expert, friend, sexual interest, trader, etc.) reflect the diverse interests and motivations of the individual suspected offenders and work towards the more general performance of offenderness.

## General comparison

Having described the rhetorical moves observed and some of the roles performed by their use, this section considers how similarly the UC performs the offender identity compared with the genuine suspected offenders by comparing frequencies and structures of move use between the two interactant types in general, and then across individual interactions between the UC and 25 suspected offenders.

Figure 1 shows the comparative frequencies of moves used by suspected offenders and the UC across the 25 transcripts.

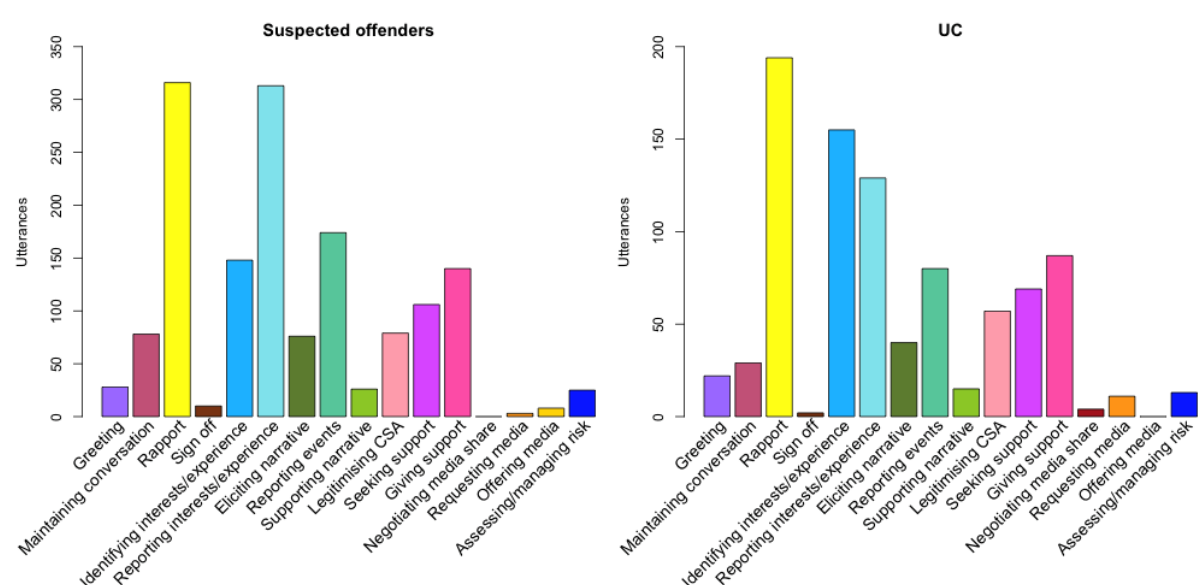


Figure 1. Total move frequencies of suspected offenders and the UC.



Overall, it can be seen that the suspected offenders and UC employed moves at fairly similar rates, both using a high amount of *Rapport*, and low amounts of *Greetings*, *Maintaining conversation*, *Sign offs* and *Supporting narrative*. *Negotiating media share*, *Requesting media*, *Offering media* and *Assessing and managing risk* are also low for both groups. The frequencies of *Identifying interests/experience*, *Eliciting narrative*, *Legitimising CSA*, *Seeking support* and *Giving support* are also similar. The interactions are typically social and friendly in nature, characterised by an emphasis on building rapport, sharing stories and exchanging support.

The high overall similarity reflects the generally similar performances of offenderness, but there are also some important differences between the UC and suspected offenders, particularly in the moves associated with sharing interests, experiences and events. The suspected offenders use *Reporting interests/experience* around a third more than the UC, and around twice as much as *Identifying interests/experience*. This points to the fact that the suspected offenders have both real CSA experiences and desires that the UCs do not, and a greater motivation to share them. The UC's comparatively high use of *Identifying interests/experiences* speaks to his primary aim of gathering intelligence and detecting illegal activity. The similar rates of both moves by the UC show that while he makes more inquiries about the offenders than he receives, he still readily describes his 'own' experiences, if not to the same extent. The suspected offenders are also seen *Reporting events* notably more than the UC. Again, this is likely because they have a wide breadth of real experience from which to draw when engaging in this act of story-telling. The UC, of course, lacks the experiential resource necessary to offer detailed narratives of sexually abusive activity. Additionally, the suspected offenders are likely receiving genuine pleasure from sharing abuse stories - perhaps in the form of sexual arousal or 'bragging rights' - in ways that the UC can only pretend to.

Another discrepancy is that the UC *Requests media* slightly more than the offenders, most likely due to operational goals associated with identifying producers and consumers of abusive material. Directly requesting indecent images has been identified as an unsuccessful strategy likely to evoke reprimand and result in rejection from some online abuse communities (Author et al., in submission), emphasising the importance of this linguistic behaviour in the performance of offenderness for both UCs and novice offenders alike. Additionally, the suspected offenders tend to *Assess and manage risk* slightly more than the UC, perhaps because the potential risks for suspected offenders (e.g. criminal conviction, incarceration, public vilification, etc.) are more personally significant than those for the UC.

Structurally, there is little difference in move use between the UC and suspected offenders. Interactions typically begin (regardless of who initiates them) with global moves of *Establishing and maintaining relationship* and *Character assessment*, by which interactants appear to be gauging the other's general interests as well as the associated risks and gains of the interaction. This pattern occurs across the majority of conversations (88%), and its prevalence suggests that these moves together work to form an important preparatory groundwork phase from which interactants can progress to other topics and conversational goals. Most commonly this means the progression to phases of *Fantasy narrative* (the sharing of real or invented sexually abusive scenarios) and *Support*, reflecting these moves as fairly ordinary motivators for offenders in these sorts of interactions. *Media sharing* moves are seen in roughly a third of conversations (36%) and are initiated fairly equally by the UC and suspected offenders, typically towards the ends of interactions. It is important to note that these conversations are introductory; it may be the case that over time, once more trust has developed between interactants, conversations might exhibit more discussions around image sharing.

While the UC's move use is generally close to that of the suspected offenders, it is possible that the small differences observed (in particular the UC's comparatively limited tendency to describe sexual and abusive interests, experiences and events, and increased tendency to request media) mark a notable departure from the linguistic behaviours of genuine offenders in these sorts of interactions, raising a red flag for offenders ever-suspicious of covert online police activity. UCs are of course restricted in this online task by operational policies which accounts for some of this discrepancy, which means it is vital that they are able to (as far as possible) consciously gather the experiential resources necessary to emulate the communicative strategies of genuine suspected offenders.

## Comparing individuals

For a more nuanced look at comparative move use, the following section considers move frequencies across the 25 individual interactions.

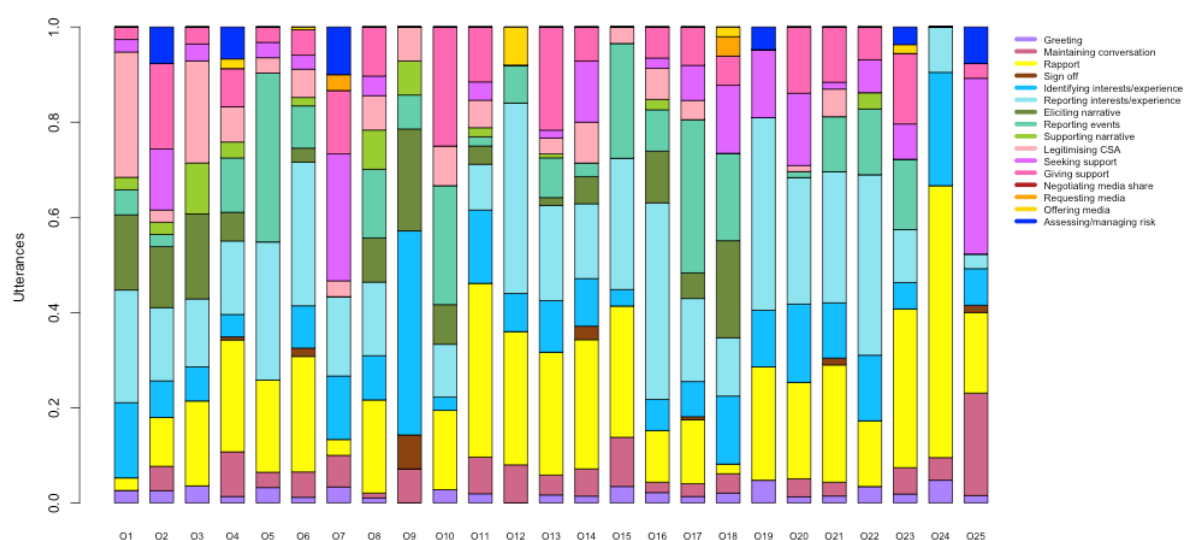


Figure 2. Move frequencies of 25 suspected offenders in conversations with UC.

Figure 2 illustrates move frequencies of the 25 suspected offenders in their conversations with the UC, and demonstrates considerable individual variation. O1, for example, spends about a

third of the time *Identifying* or *Reporting interests/experiences*, whereas O25 does this only a fraction of the time, concentrating far more on *Seeking support*. This variation reflects the wide range of interests and motivations that bring these suspected offenders into such interactions, but it is also likely influenced to an extent by the UC's move use. Figure 3 illustrates the UC's move frequencies in the same conversations.

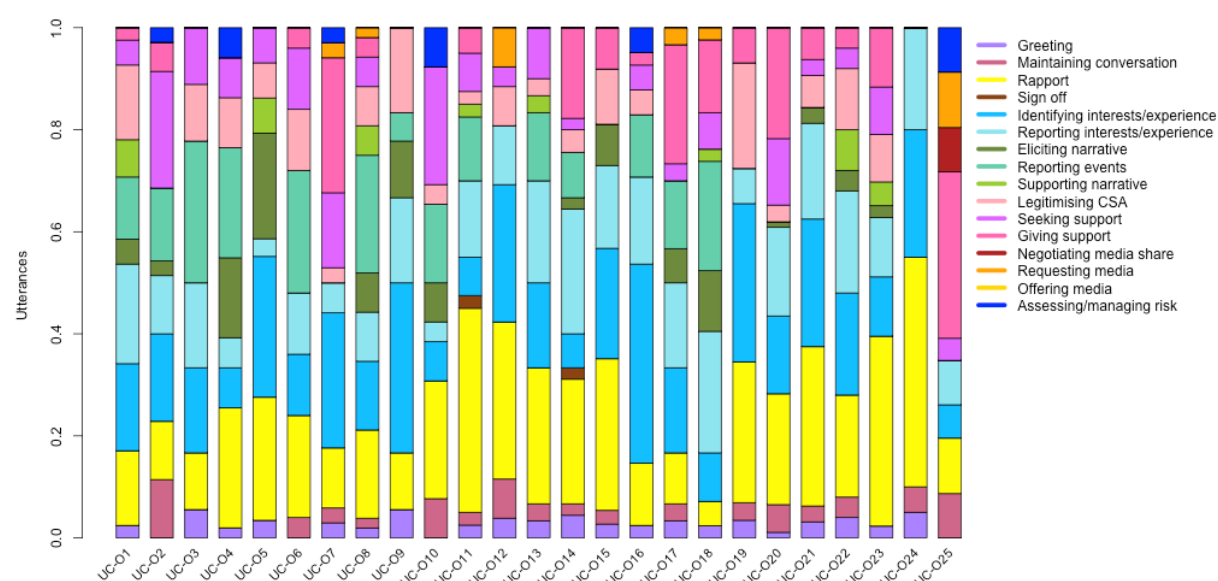


Figure 3. Move frequencies of UC in conversations with 25 suspected offenders.

The likeness between the two figures is clear, demonstrating that the UC's move frequencies and variation across the 25 conversations is remarkably similar to that of the suspected offenders. This suggests a considerable degree of linguistic accommodation between interactants, and displays the UC's ability to adapt his move use across conversations with suspected offenders of varying interests and interactional goals as he switches fluidly between a variety of identities both within and between interactions. Roles including friend, sexual interest, support seeker, expert, trader, co-fantastist, etc., are selected according to their relevance regarding the apparent interests of the suspected offenders and lucrativeness in respect to the UC's operational goals (Omoniyi, 2006).

The level of similarity also reflects the generally cooperative and amicable nature of these interactions. When collapsed down to just the global moves (see figure 4), the parallels become even more pronounced.

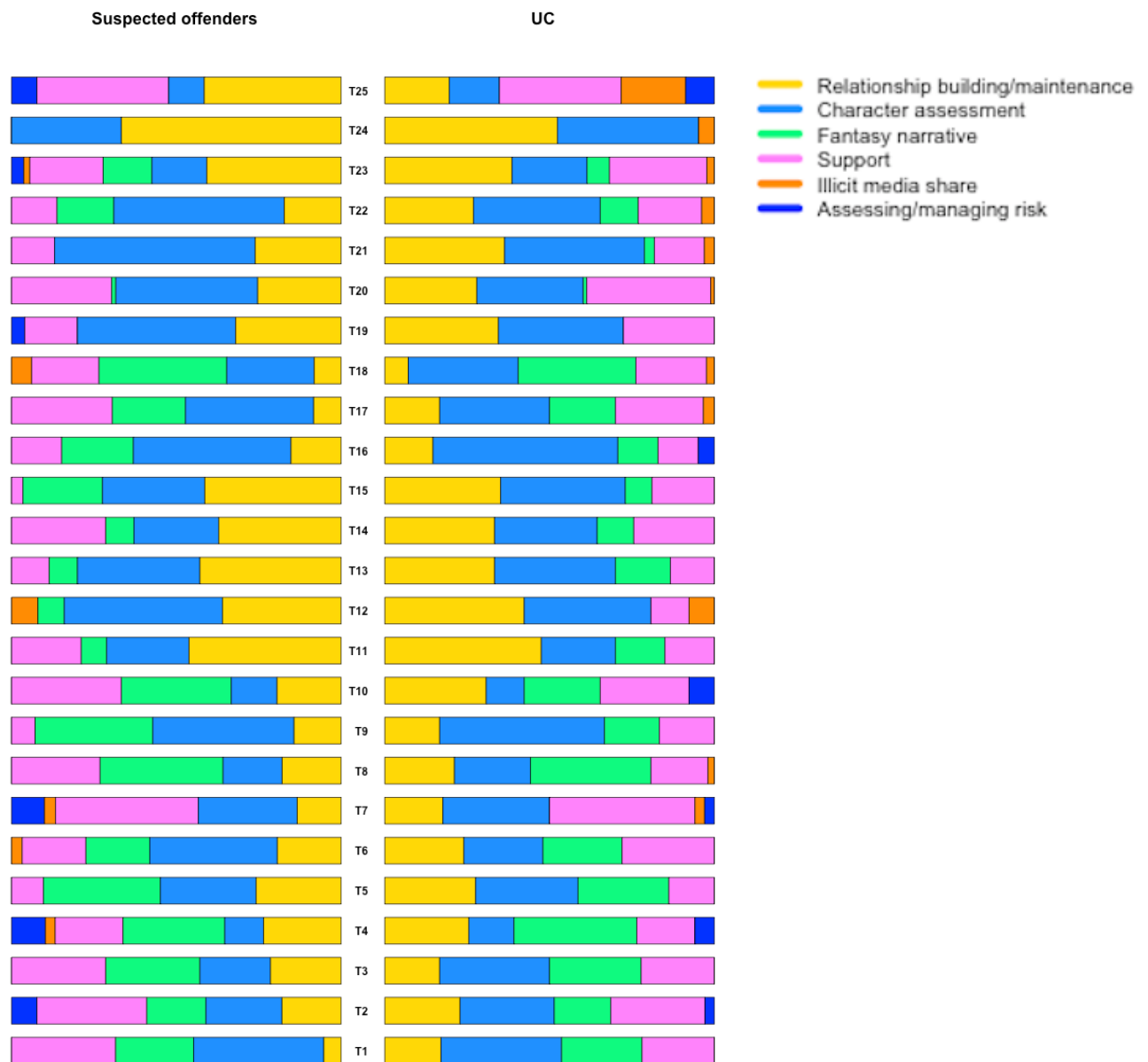


Figure 4. Comparative global moves of suspected offenders and UC.

Each bar in figure 4 represents the frequency of global moves used by the 25 suspected offenders (left) and the UC (right) in each interaction. Again, the two sides are almost mirrored, showing a strong degree of communicative accommodation between interactants.

This phenomenon – the convergence towards another’s communicative style – is well documented at lower levels of linguistic production, such as through accent features and specific lexical choices (Giles & Ogay, 2007). Studies have also found it to be a feature of online instant messaging (e.g. Riordan *et al.*, 2012). But it is rarely observed at this more functional communicative level that sees interlocutor’s conversational goals shifting towards each other. What the figures do not show, however, is any potential direction of accommodation, i.e. which interactant’s linguistic behaviour is shifting more towards that of the other. Arguably though it is the UC who is better motivated to converge linguistically to appear similar to the suspected offenders. Every offender, regardless of individual interests, is potentially useful to the UC in some way, and the longer the UC can remain engaged with an offender, the greater their chance of obtaining useful information. The suspected offenders, on the other hand, are driven by real and specific CSA-related interests, and are probably less likely to sustain a high-risk interaction with a stranger who does not share those interests and from whom they might not benefit.

Regardless of which interactant converges more towards the other, and despite the discrepancies in move use, it seems the UC has for the most part managed to acquire the necessary linguistic resources to successfully perform the role of offender in the context of CSA-related IM chat conversations. This is partly evidenced by the fairly equal use of moves and the cooperative nature of the conversations. It is of course in the UC’s interest to ensure high cooperation, but it might not have been achieved were it not for his identity being perceived as an authentic CSA offender (Seargeant & Tagg, 2014). Other evidence of the UC’s success is that no offenders in the dataset challenge or question his authenticity, although an offender’s mistrust could result in immediate termination of the interaction rather than confrontation (MacLeod & Grant, 2017). Reflecting on this, nothing from the final lines of the transcripts suggest the suspected offenders were suspicious, but it is possible that suspicions went unvoiced.

The overall similarity between the suspected offenders' and UC's moves also inspires confidence in these interactions being somewhat representative of authentic offender-offender interactions. As authentic interactions can be extremely difficult for researchers to access, these suspected offender-UC interactions form at least a close proxy dataset for observing the linguistic behaviours and activities engaged in by offenders when they converse with each other.

## Conclusions

This study has described a range of rhetorical moves used by a group of suspected child sexual offenders and an undercover officer posing as an offender, and how these moves contribute to the performance of a number of roles associated with the offender identity. It has shown that overall, the UC performed offenderness fairly convincingly, and that the strategy of linguistic accommodation is a fruitful one for UCs in this particular identity assumption task. Most striking was the UC's demonstrated capability to adapt his positions as necessary both across and within conversations with suspected offenders of diverse interests and pursuits. An important part of this success is likely due to the fact that the UC had spent time studying similar conversations and equipping himself with the necessary sociolinguistic and technological resources to assume such a range of identity positions within the sphere of CSA offending. The study also showed small discrepancies between the interactants, specifically around the UC's comparative reluctance to share experiences of sexual and abusive encounters, and increased tendency to inquire about the possession of indecent material. These differences are relatively minor but may form important target areas for training in online identity assumption in this context. It is important to remember that the UC has an increased linguistic awareness from having undertaken linguistic training in online identity assumption, but the extent to which this contributed towards his apparent success remains unclear. The

same analysis conducted on interactions before and after training would help as an evaluative tool in this regard.

The UC's performances focused on the assumption of interactional, micro-identity positions rather than broad identity categories like gender or age, which can be more difficult to conceal convincingly (Lincoln & Coyle, 2012). In this way, the role of female child victim, for example, may pose more of a challenge for some UCs than the adult male offender. UCs may therefore benefit from specialised linguistic training targeting specific interaction types and participant structures, in order to fully explore the range of identity positions available to (and expected of) them in different online scenarios. It would be beneficial to replicate this analysis with conversations in which UCs are required to perform as victims, to see how identity positions like age, gender, and other facets of 'victimness' are performed. It would also be useful in future work to compare conversations like these with those in which offenders explicitly raise suspicion about UCs' authenticity, so that particular moves might be identified as making UCs more or less susceptible to identity leakage.

Anonymity remains a significant hurdle to policing online CSA, but not a barrier. This paper has demonstrated how the linguistic method of move analysis may be a useful tool both for training and evaluation of UCs in performing target identities and successfully infiltrating criminal communities online. Linguistic analysis of offender-offender interactions addresses an important gap in our understanding of how language functions to facilitate online CSA, and can inform guidance to assist investigators in high-stakes online undercover operations. To continue exploring new approaches to combating CSA and other internet-facilitated crimes, continued collaboration between police forces and linguists in this and other online criminal domains is essential.



## References

Austin, J.L. (1962). *How to Do Things with Words*. Cambridge, MA: Harvard University Press.

Biber, D., Connor, U. & Upton, T. A. (2007). *Discourse on the Move: Using Corpus Analysis to Describe Discourse Structure*. Amsterdam, Philadelphia: John Benjamins Publishing Company.

Boon, A. (2013). 'Identifying Moves in an IMCD Session.' *Bulletin of Toyo Gakuen University*, 21(1): 219-235.

Bucholtz, M. & Hall, K. (2005) 'Identity and Interaction: A Sociocultural Linguistic Approach.' *Discourse Studies*, 7(4-5): 585-614.

Cohen-Almagor, R. (2013). 'Online Child Sex Offenders: Challenges and Counter-Measures.' *Howard Journal of Criminal Justice*, 52(2): 190–215.

Author. (2018).

Author. & Grant, T. (2017).

Author. & Grant, T. (2019).

Author., Nguyen, D., Towler, A., Haas., M. & Grieve, J. (*in submission*)

Davidson, J. & Gottschalk, P. (2011). 'Characteristics of the Internet for Child Sexual Abuse by Online Groomers.' *Criminal Justice Studies*, 24(1): 23–36.

Giles, H., Coupland, J. & Coupland, N. (eds) (1991). *Contexts of Accommodation: Developments in Applied Sociolinguistics*. Cambridge: Cambridge University Press.

Giles, H. & Ogay, T. (2007). 'Communication Accommodation Theory.' In Whaley, B. B. & Samter, W. (eds), *Explaining Communication: Contemporary Theories and Exemplars*. Mahwah, NJ: Lawrence Erlbaum, pp. 293-310.

Grant, T. & MacLeod, N. (2016). 'Assuming Identities Online: Experimental Linguistics Applied to the Policing of Online Paedophile Activity.' *Applied Linguistics*, 37(1): 50-70.

Grant, T. & MacLeod, N. (2018). 'Resources and Constraints in Linguistic Identity Performance: A Theory of Authorship.' *Language and Law/Linguagem e Direito*, 5(1): 80-96.

Grant, T. & MacLeod, N. (2020). *Language and Online Identities: The Undercover Policing of Internet Sexual Crime*. Cambridge: Cambridge University Press.

Gupta, A., Kumaraguru, P. & Sureka, A. (2012). 'Characterizing Pedophile Conversations on the Internet using Online Grooming.' *Proceedings from CoRR*, 2012.

Herring, S. C. (2003). 'Gender and Power in Online Communication.' In Holmes, J. & Meyerhoff, M. (eds). *The Handbook of Language and Gender*. Oxford: Blackwell, pp. 202-228.

Ioannou, M., Synnott, J., Reynolds, A., & Pearson, J. (2018). 'A Comparison of Online and Offline Grooming Characteristics: An Application of the Victim Roles Model.' *Computers in Human Behavior*, 85: 291-297.

Johnstone, B. (2011). 'Dialect Enregisterment in Performance.' *Journal of Sociolinguistics*, 15(5): 657-679.

Leppänen, S., Møller, J. S., Nørreby, T. R., Stæhr, A. & Kyttölä, S. (2015). 'Authenticity, Normativity and Social Media.' *Discourse, Context and Media*, 8: 1-5.

Lincoln, R. & Coyle, I. R. (2012). 'No-one Knows You're a Dog on the Internet: Implications for Proactive Police Investigation of Sexual Offenders.' *Psychiatry, Psychology and Law*, 20(2): 294-300.

Lorenzo-Dus, N. & Izura, C. (2017). "'cause ur special": Understanding Trust and Complimenting Behaviour in Online Grooming Discourse.' *Journal of Pragmatics*, 112: 68-82.

Lorenzo-Dus, N. & Kinzel, A. (2019). "So is your mom as cute as you?": Examining Patterns of Language Use by Online Sexual Groomers'. *Journal of Corpora and Discourse Studies*, 2(1): 1-30.

Macagno, F. & Bigi, S. (2017). 'Analyzing the Pragmatic Structure of Dialogues.' *Discourse Studies*, 19(2): 148-168.

MacLeod, N. & Grant, T. (2017). "'go on cam but dnt be dirty": Linguistic Levels of Identity Assumption in Undercover Online Operations Against Child Sex Abusers.' *Language and Law / Linguagem e Direito*, 4(2): 157-175.

McManus, M. A., Almond, L., Cubbon, B., Boulton, L. & Mears, I. (2016). 'Exploring the Online Communicative Themes of Child Sex Offenders.' *Journal of Investigative Psychology and Offender Profiling*, 13:s 166-179.

Michalopoulos, D., Mavridis, I. & Vitsas, V. (2010). 'Towards a Risk Management Based Approach for Protecting Internet Conversations.' *Proceedings from the 9th European Conference on Information Warfare and Security ECIW*, 201-208.

Mitchell, K. J., Wolak, J., Finkelhor, D. & Jones, L. (2012). 'Investigators Using the Internet to Apprehend Sex Offenders: Findings from the Second National Juvenile Online Victimization Study.' *Police Practice and Research*, 13(3): 267-281.

Omoniyi, T. (2006). 'Hierarchy of Identities.' In Omoniyi, T. & White, G. (eds). *Sociolinguistics of identity*. London, New York: Continuum, pp. 11-33.

Newon, L. (2011). 'Multimodal Creativity and Identities of Expertise in the Digital Ecology of a World of Warcraft Guild.' In Thurlow, C. & Morczek, K. (eds). *Digital Discourse: Language in the New Media*. Oxford: Oxford University Press, pp. 131-153.

Page, R. (2014). 'Hoaxes, Hacking and Humour: Analysing Impersonated Identity on Social Network Sites.' In Seargeant, P. & Tagg, C. (eds). *The Language of Social Media: identity and community on the internet*. Basingstoke: Palgrave Macmillan, pp. 46-64.

Police and Criminal Evidence (PACE) Act 1984. [Online]. Available at: <http://www.legislation.gov.uk/ukpga/1984/60/contents>. [Accessed: 19th December 2019].

Pranoto, H., Gunawan, F. E. & Soewito, B. (2015). 'Logistic Models for Classifying Online Grooming Conversation.' *Procedia Computer Science*, 59: 357-365.

Quayle, E. & Taylor, M. (2003). 'Model of Problematic Internet Use in People with a Sexual Interest in Children.' *Cyberpsychology & Behavior*, 6(1): 93-106.

Riordan, M. A., Markman, K. M. & Stewart, C. O. (2012). 'Communication Accommodation in Instant Messaging: An Examination of Temporal Convergence.' *Journal of Language and Social Psychology*, 32(1): 84-95.

Seargeant, P. & Tagg, C. (eds) (2014). *The Language of Social Media: Identity and Community Online*. Basingstoke: Palgrave Macmillan, 1-20.

Searle, J. R. (1969). *Speech Acts*. London: Cambridge University Press.

Swales, J. (1990). *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.

Tagg, C. (2015). *Exploring Digital Communication: Language in action*. Abingdon: Routledge.

Urbas, G. (2010). 'Protecting Children From Online Predators: The Use of Covert Investigation Techniques by Law Enforcement.' *Journal of Contemporary Criminal Justice*, 26(4): 410-425.

Westlake, B. & Bouchard, M. (2016). 'Liking and Hyperlinking: Community Detection in Online Child Sexual Exploitation Networks.' *Social Science Research*, 59: 23-36.