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Rhetorical moves and identity performance in online child sexual abuse interactions

Volume One

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Doctor of Philosophy

**Centre for Forensic Linguistics
Aston University**

September, 2018

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Thesis Summary

Online child sexual abuse (OCSA) is a pervasive problem facilitated by the anonymity afforded to offenders online. From a largely social constructionist perspective, this thesis explores linguistic expressions of identity by participants across a range of OCSA interactions, including offenders and suspected offenders, victims, and undercover police officers.

The thesis is structured around three individual studies, each involving a different abusive interaction type. Each study employs Swales' (1981; 1990) move analysis framework, exploring how participants use rhetorical moves as a resource for identity performance.

Study 1 concerns a convicted offender who strategically cycled through numerous adopted personas when interacting with victims online. It considers his performance of various identity positions through his use of rhetorical moves across different personas. One persona is found to diverge significantly from the rest, and is identified as a possible reflection of the offender's 'home identity'. Study 2 considers interactions between suspected offenders and undercover police officers posing as offenders. It compares the participants' move use and explores linguistic realisations of supportive exchanges, finding that aside a few notable differences, undercover officers perform the offender identity similarly to genuine suspected offenders. Study 3 explores dark web forum posts authored by 'newbies' attempting to join existing online communities of suspected offenders. It examines the identity positions performed in the posts and considers how positions of competence and expertise contribute to the persuasive process of seeking membership into online offending communities.

Taking findings from these studies, the thesis discusses the possible contributions of move analysis to OCSA research and how rhetorical moves are used as a resource for identity performance, and offers an approach to identity analysis based on rhetorical moves. It concludes by arguing for move analysis as a useful goal-centred approach to identity investigation and describes potential implications of this work for law-enforcement, education and research.

KEY WORDS: online child sexual abuse, identity, move analysis, rhetorical move, strategies

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List of abbreviations

General abbreviations used in this thesis

CEOP	Child Exploitation and Online Protection
CG	Computer-Generated
CMC	Computer-Mediated Communication
CPORT	Child Pornography Offender Risk Tool
CPS	Crown Prosecution Service
CSA	Child Sexual Abuse
CoP/CsoP	Community/Communities of Practice
FP	Forum Post
Hol	Hierarchy of Identities
IIOC	Indecent Images of Children
IM	Instant Messaging
ISP	Internet Service Provider
KIRAT	Kent Internet Risk Assessment Tool
LIWC	Linguistic Inquiry Word Count
MDS	Multidimensional Scaling
NCA	National Crime Agency
O	Offender
OCSA	Online Child Sexual Abuse
P	Persona
PACE	Police And Criminal Evidence act
PJ	Perverved Justice
T	Transcript
UC	Undercover police officer
VBDU	Vocabulary-Based Discourse Units
V	Victim
VoIP	Voice over Internet Protocol

Abbreviations used in instant messaging/forum post data

addy	address
asl	age sex location
atm	at the moment
bj	blow job
brb	be right back
cam	webcam
cba	can't be arsed
dnt	don't
ffs	for fuck's sake
g2g	got to go
ima	I'm going to
kl	cool
lol	laugh out loud
nt	not
nw	now
pls	please
soz	sorry
str8	straight
tbqh	to be quite honest
ty	thank you
u	you
ur	your/you're
wnt	won't
wtf	what the fuck
wuu2	what you up to

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Chapter 1: Introduction

Internet use has steadily increased around the world since the early 1990s (Shannon, 2008). In the UK, 98% of UK households with children now have internet access (Office for National Statistics, 2017) and so for many of us, the wealth of information and communicative platforms offered online have become indispensable tools and a part of our daily lives. But it is recognised that the same freedoms and conveniences we enjoy every day online are also taken advantage of by individuals seeking to engage in inappropriate and illegal behaviour towards children and adolescents (Urbas, 2010; McCartan & McAlister, 2012). So in an increasingly digital world, the sexual abuse of children and adolescents through online media has become a burning issue for parents, caregivers, educators, law enforcers, academics, media outlets and the public at large.

Online child sexual abuse

The sexual abuse of children and adolescents online occurs in various forms (children are classified here as being under 12 years of age, and adolescents as being 12-17 years of age, following Giroux *et al.* (2018)). Among numerous reported abusive practices, adults might target, access and befriend young people in chat rooms and on social networks (Mitchell *et al.*, 2013), as well as network with like-minded individuals (Christensen, 2017a) in order to exchange indecent images of children (IIOC) (Quayle & Newman, 2015), share information and validate each other's interests (Durkin, 1997; Quayle & Taylor, 2003). Consequently there are a number of different terms used to refer to child sexual abuse (CSA) offences (e.g. *online grooming*, *child pornography*, *online child sexual exploitation*, etc.) and those who perpetrate them (e.g. *offender*, *groomer*, *paedophile* etc.). When referring generally to the broad range of offending practices, the current work adopts the construction 'online child sexual abuse' (OCSA) as an umbrella term encapsulating all sexually motivated abusive acts or behaviours perpetrated against children or adolescents in an online environment. Regarding perpetrators, the terms *offender* and *suspected offender* are selected over other available terms because this work considers these individuals in terms of their legal status as having (or suspected as having) committed criminal offences, as opposed to their psychological states or others' social perceptions of them (these issues are discussed further in Chapter 2). For similar reasons, the term *victim* is chosen over other available options like *survivor*, and *IIOC* (as used in UK legislation) is selected over *child pornography* (Crown Prosecution Service, 2017). Following UK legislation, IIOC in the current work refers to moving images and pseudophotographs (computer-generated images)

as well as still images (see Protection of Children Act, 1978, s.1; Sentencing Guidelines Council, 2013).

For the last few decades, researchers have sought to better understand the various facets of OCSA. The majority of research thus far focuses on IIOC offences (Kloess *et al.*, 2015), although increasing attention is being paid to sexualised interactions between adults and children commonly referred to as 'online grooming' (e.g. O'Connell, 2003). A related but far less discussed phenomenon is sexual extortion, whereby victims are blackmailed into complying with sexual demands (Kopecký, 2017). Work has been carried out to determine the prevalence of OCSA in its various forms, and while figures vary considerably, we know it to be a global problem (Davidson & Martellozzo, 2008; UNICEF, 2011). Psychologists and criminologists have set out to describe the characteristics of online offenders and victims, and address unfounded stereotypes (e.g. Wolak & Finkelhor, 2013; Schulz *et al.*, 2016). Other work has addressed the efficacy of various combative approaches, including legislation (e.g. Gillespie, 2006; Eneman, Gillespie & Bernd, 2010; Staksrud, 2013), education (e.g. Davidson & Martellozzo, 2008; Finkelhor, 2014; Whittle, Hamilton-Giachritsis & Beech, 2014), covert policing strategies (e.g. Urbas, 2010; Grant & MacLeod, 2016) and technological solutions (e.g. Cohen-Almagor, 2013; Steele, 2015; Quayle & Newman, 2016). Some have sought to pinpoint the specific qualities of the internet and other technological resources that enable different types of OCSA offending (e.g. Davidson & Gottschalk, 2011; McCartan & McAlister, 2012; Stalans & Finn, 2016).

A central issue is the anonymity afforded to individuals online (Urbas, 2010; McCartan & McAlister, 2012), which can leave the task of policing OCSA and identifying suspected offenders fraught with difficulty (Grant & MacLeod, 2016). This has become even harder to combat since the advancement of the Tor network - a collection of websites, fora and social networks operating under several layers of encryption (McCoy *et al.*, 2008) often referred to as the "dark web" (Chen, 2012, p. 3). Through Tor, individuals are able to meet and exchange abusive material, advice and support in relative safety from law enforcement (McCartan & McAlister, 2012; Westlake & Bouchard, 2016). The issue of offender anonymity thus raises some important questions around what we can learn from examining expressions of identity online, particularly regarding policing tasks like identifying offenders or impersonating other individuals. Research in this area is still in its infancy (see Grant & MacLeod, 2016; MacLeod & Grant, 2017).

While much has been learnt about OCSA offenders and processes in recent years, there is a notable lack of research from linguistics, which is significant considering that textual

communication exists at the centre of much OCSA activity. Whether abuse involves direct communications between adults and children, advice or support exchanged between offenders, or the access and exchange of IIOC, OCSA scenarios invariably involve some element of linguistic interaction, records of which can be a fruitful source of information regarding how the goals associated with OCSA are approached linguistically. There is some linguistic interest in this domain, but the pool of studies is small, and most concern computational methods, which, while useful for addressing matters of automated detection of offenders and offence processes (e.g. Gupta, Kumaraguru & Sureka, 2012; Inches & Crestani, 2012), do not tend to consider how the language in question *functions* to facilitate the abusive practices occurring in OCSA interactions.

It is clear that researchers have as far as possible attempted to keep up with the evolving nature of OCSA as technology advances and online social behaviours develop. But a major problem is that research on OCSA interactions commonly suffers from the scarcity of available, naturally-occurring, real-world OCSA interactions. This means that in most cases, researchers are forced to turn to sources like *pervertedjustice.com*, a website which carries transcripts of online interactions between convicted offenders and adult ‘decoys’ who pose as children (Perverted Justice, 2016). While such transcripts are certainly useful for addressing certain types of questions, it is problematic that the majority of our understanding of adult-child online abuse processes is based on findings from adult-adult conversations. As yet, we do not know how well adult decoys portray children online (Briggs, Simon & Simonsen, 2011; Black *et al.*, 2015), or, therefore, the true limitations of using ‘decoy data’. A related problem is that because decoy data is often the easiest available option, adult-child interactions are privileged in OCSA research, leaving other types of interaction neglected, for example, interactions between offenders. The neglect of other forms of OCSA is further exacerbated by an apparent over-reliance on the term ‘grooming’, which is often used to refer to all sexualised interactions between adults and children, in both academic literature and public messages.

Aims and research questions

As long as OCSA persists, there is clear justification for continued research in this area. Key motivations for this thesis include the general lack of research from linguistics, the dependence on decoy data, the neglect of a diverse range of OCSA interaction types (i.e. those other than interactions between adults and children) and behaviours, and the difficulties associated with identifying offenders online. The first overarching aim of this thesis is therefore to:

- increase understanding of linguistic identity expression in authentic OCSA interactions of various types

Identity is explored largely from a social constructionist perspective based on Bucholtz and Hall's (2005) interactional model that conceptualises identity not as something fixed and internal, but as fluid and constructed through interaction. However, purely constructionist views are identified as problematic and so elements from other theories are also adopted (including Goffman, 1956; Gumperz, 1964; Omoniyi, 2006 and Grant & MacLeod, 2018) (see Chapter 3). The primary analytical framework used is Swales' (1981, 1990) move analysis, which seeks to determine the rhetorical moves in a text, where moves (and lower-level strategies) represent the functions or goals that the text works to achieve. This method is largely unexplored as an approach to identity or OCSA investigation; the underlying theoretical assumption being tested is that individuals' communicative goals are inherently linked to linguistic identity performance, and that rhetorical moves are one type of linguistic resource that individuals can draw upon in order to perform various aspects of identity (individually referred to as either *identities*, *identity positions* or *roles*). The second broad aim of this thesis is therefore to:

- examine the relationship between rhetorical moves and linguistic identity performance and how participants in OCSA interactions approach their respective interactional goals linguistically

To address these research aims, three individual studies are presented, each demonstrating the application of move analysis in exploring identity performance in a different OCSA context and interaction type. Study 1 (Chapter 6) examines transcripts which show an individual offender adopting several online personas when interacting with victims through an instant messenger client. Study 2 (Chapter 7) considers transcripts of instant messaging (IM) interactions between suspected offenders and undercover police officers (UCs) who are posing as offenders. Study 3 (Chapter 8) examines forum posts written by individuals seeking to gain entry into existing online communities of suspected CSA offenders. Each study addresses a set of narrow questions presented within the individual study chapters.

Terminologically, it is inappropriate to refer to the three datasets as *genres*, as they do not typically arise from within established discourse communities (Swales, 1990). Nor can they be described as *text types* as the texts within do not necessarily share linguistic features (Paltridge, 1996; Biber, 1988). It is tempting to refer instead to *speech events* (Hymes, 1972,

1974), but often the transcripts do not reflect the ‘events’ in full or show distinct beginnings or endings to the interactions. Similarly, Levinson’s (1992) notion of *activity types* is somewhat useful but tends to refer to established events with distinct rules, such as job interviews or dinner parties, whereas the datasets in question do not reflect traditional settings with well understood rules. What distinguishes the datasets most obviously is their participant types and structures, and so the three datasets are broadly referred to as *interaction types*, where the term *interaction* refers to the overall linguistic contact between participants, within which one or more individual conversations may occur (this distinction is revisited in the study chapters). The three studies collectively investigate identity performance in OCSA interactions through the use of rhetorical moves in order to address the three main research questions of this thesis:

1. What can move analysis contribute to research into online child sexual abuse?
2. How are rhetorical moves and strategies used as a resource for identity performance by interactants in online child sexual abuse interactions?
3. What can these findings contribute to social identity theory?

Thesis structure

Chapter 2 provides an overview of the literature surrounding OCSA. General findings are presented regarding prevalence, offender and victim characteristics, internet and technological factors and combative approaches. Following this is a discussion on online grooming and the linguistic contributions to this body of work.

Chapter 3 presents a discussion on language and identity, beginning with a brief exploration of the shift from essentialism to constructionism in contemporary identity research with particular reference to Bucholtz and Hall’s (2005) interactional model. It then presents some of the linguistic research which shows how certain identity facets are expressed through the use of particular linguistic forms. Finally, it discusses two identity models (Omoniyi, 2006 and Grant & MacLeod, 2018) identified as being particularly relevant to the immediate research contexts.

Chapter 4 outlines Swales’ (1981, 1990) move analysis framework and discusses some of the difficulties and advantages of its application in forensic and other contexts. It then provides the rationale for selecting this method through a discussion of the relationship between rhetorical moves and identity.

Chapter 5 demonstrates the general methods undertaken throughout the overall project (while specific methods sections are provided within the three individual study chapters). The chapter first provides general descriptions of the data, before presenting two pilot studies which were conducted in order to address difficulties with move analysis identified in Chapter 4. It then details the analytical procedure carried out across the texts and introduces move-maps, which are visual representations of transcripts based on their rhetorical structures. Finally, ethical considerations of the work are discussed.

Chapter 6 presents Study 1, which explores through move analysis the identity positions performed by an individual offender who adopted a range of deceptive online personas in IM interactions with 20 victims.

Chapter 7 presents Study 2, which looks at the performance of the 'offender identity' by UCs in 25 IM interactions between suspected OCSA offenders and UCs posing as offenders, by comparing the rhetorical moves of the two participant types. The study also considers how exchanges of support are realised linguistically in the interactions.

Chapter 8 presents Study 3, which analyses the moves observed in a series of forum posts in order to examine the performance of the 'newbie offender' identity by individuals attempting to gain membership into existing communities of suspected offenders on various Tor fora.

Chapter 9 draws together and discusses the findings from the three studies in order to address the three main research questions of the thesis (see above). It also considers the limitations of this work and possible future directions for research in OCSA and identity.

Chapter 10 presents study conclusions and considers the potential implications of these for law-enforcement, education and research.

As a final note, this thesis refers to two separate sets of appendices. Appendices 1-4 refer to privately stored datasets in Volume 2 of the thesis, which is available to examiners only and not for public consumption. Appendices A-I refer to open material presented at the end of this volume.

Originality and implications

There are three principal ways in which this research offers original contributions to OCSA research. First, this thesis is among a very small portion of OCSA studies to make use of data which concerns genuine offender-victim interactions (Study 1), and an even smaller group employing linguistic methods of analysis. Findings should therefore reflect authentic online interactions, which can be compared with research using decoy data so that we might begin to understand some of the ways in which the presence of adult decoys in place of genuine victims can affect OCSA interactions. Second, this work describes a diverse range of OCSA contexts, two of which - the offender-UC interactions in Study 2 and the offender-offender forum posts in Study 3 - have not, to the author's knowledge, been explored in previous research. In this way, the thesis takes us beyond the issue of online grooming and offers a broader picture of the varied interactions that work to facilitate OCSA than we have at present. Finally, the work makes a theoretical contribution by exploring how identity is performed through the use of rhetorical moves and strategies, and by combining Swales' move analysis with frameworks for identity, it opens up a new, goal-focused approach to identity investigation which balances essentialist and constructionist components.

By increasing understanding of online identity performance and how individuals approach the various communicative goals associated with OCSA, it is hoped that this research will be of benefit in three main areas. First, law-enforcement; an increased understanding of linguistic identity performance in a range of OCSA contexts may aid police officers tasked with identifying individuals, detecting identity deception, and assuming identities online. Second, education; findings from the three studies could inform educational programs delivered to children, parents and caregivers, educators and the general public with particular reference to broadening understandings of the diverse range of behaviours involved in OCSA. Third, research; this work hopes to provide valuable insights which may provide a basis for future research with regards to expanding discussions of OCSA beyond grooming and IIOC offences, as well as adopting new approaches to linguistic identity investigation. It is also hoped that this research will provide a useful basis from which future researchers can continue to explore the relationship between identity and the pursuit of interactional goals, which seems especially important in forensic contexts where goals are often criminally motivated.

Chapter 2: Online child sexual abuse and linguistic contributions to the literature

Introduction

As online child sexual abuse (OCSA) has become increasingly pervasive in public consciousness, academic interest in the area is also growing (Davidson & Martellozzo, 2008; Whittle *et al.*, 2013a). As might be expected, the topic has received greatest attention from the fields of psychology and criminology, and studies in these areas have contributed considerably to the current understanding of the nature, characteristics and processes involved in OCSA-related offences (see for example Wolak, Mitchell & Finkelhor, 2006; Ospina, Harstall & Dennet, 2010; Whittle *et al.*, 2013a; Christensen, 2017a). While linguistic interest in the subject seems to be increasing, thus far comparatively little research comes from this domain and that which does focuses almost exclusively on a process widely termed *online grooming*, and neglects other varieties of abusive behaviour. The dearth of linguistic research is surprising, as OCSA interactions are predominantly textual and thus provide opportunities to analyse the language used by offenders, victims and other participants, which could strengthen our understanding of the communicative strategies working to facilitate both online and offline sexual abuse. The data necessary for such investigation, however, is of course sensitive and often impossible to obtain. This chapter surveys existing literature on OCSA from a range of disciplines, before demonstrating linguistic contributions to this body of knowledge as well as the need for continued exploration of linguistic methods of inquiry in OCSA contexts.

It is important to note some points about scope. First, due to recent high-profile criminal cases like that of Matthew Falder (see National Crime Agency, 2017) and the Newcastle ‘grooming gang’ identified in Operation Sanctuary (Spicer, 2018), there is growing recognition that vulnerable adults are also targets for online and offline sexual abuse, but the focus of this work remains on children and adolescents. Second, discussions are largely restricted to literature concerning *online* CSA; the wider literature surrounding the psychology and prevalence of offline CSA is abundant (see for example Finkelhor, 1984; Bebbington *et al.*, 2011; Marshall, 2018), but the current review considers this only in relation to its influence on current models of online abuse. Third, although the majority of OCSA-related research focuses on offences associated with accessing, possessing, distributing or producing indecent images of children (IIOC) (Kloess *et al.*, 2015), this review considers this body of work only insofar as providing a context of OCSA offending in light of the immediate research, leaving most of the focus on interaction-based offences (for recent overviews of

IIOC research, see Franke & Graf (2016), Henshaw, Ogloff & Clough (2017) and Steely *et al.*, 2018)). Fourth, as this review aims primarily to outline the linguistic contributions to OCSA research focusing on processes and behaviours involved in online abuse, it does not consider important but peripheral issues such as psychological treatment for offenders and victims (e.g. Merdian *et al.*, 2017; McAlinden, Farmer & Maruna, 2017; Gillespie *et al.*, 2018) or recidivism (e.g. de Almeida Neto *et al.*, 2013; Faust *et al.*, 2015; Seto & Eke, 2015; Drouin *et al.*, 2018). Finally, it does not discuss in detail the extensive negative effects experienced by victims (for recent examples see Swingle *et al.*, 2016; Alix *et al.*, 2017; Noll *et al.*, 2017; Séguin-Lemire *et al.*, 2017; Schreier, Pogue & Hansen, 2017; Tonmyr & Shields, 2017; Walker *et al.*, 2017) other than to acknowledge that a) it is the well-documented physical, psychological and emotional damage inflicted upon victims and their families that makes research in this field imperative, and b) research is beginning to indicate that online abuse can be just as harmful as contact abuse (Whittle, Hamilton-Giachritsis & Beech, 2013; Hamilton-Giachritsis *et al.*, 2017) and perceived by some to be even less manageable (Webster *et al.*, 2012).

The majority of OCSA literature describes a wide range of abusive behaviours but these are generally grouped into the two broad offence types of those involving making and distributing IIOC, and those described as online grooming. This review surveys some of the more general literature surrounding OCSA offences before focusing on online grooming in particular, as this is the focal point of the vast majority of linguistic research in the area. The review is organised according to the following (and sometimes overlapping) themes: *prevalence, offenders and victims, internet and technology affordances, online grooming, combative measures, and linguistic research.*

Prevalence

The prevalence of OCSA is difficult to determine, and accurate figures regarding its pervasiveness may never be captured (Bryce, 2010; Ospina, Harstall & Dennet, 2010; Davidson, 2011; Miller, 2013; Staksrud, 2013; Kloess, Beech & Harkins, 2014; Wurtele & Kenny, 2016). One reason for this is the general underreporting of sexual crimes (Bryce 2010; Kloess, Beech & Harkins, 2014; Wager *et al.*, 2018), which might be influenced by threatening or coercive strategies used to achieve victims' silence (Bryce, 2010). Another reason might be the prospect of intimidating adversarial trial systems and distressing cross-examination (Zajac, Westera & Kaladelfos, 2017). Additionally, prevalence studies tend to focus on offenders, whereas quantitative research regarding children's experiences of online sexual abuse is relatively rare (Staksrud, 2013) (although qualitative studies exploring both

offender (Quayle *et al.*, 2014) and victim (Katz, 2013; Whittle, Hamilton-Giachritsis & Beech, 2013, 2015) perspectives have been carried out). This is significant because offenders too are likely to underreport the frequency of their offences (Briggs *et al.*, 2011). Furthermore, prevalence studies generally do not distinguish between specific abusive behaviours like sexual solicitation and grooming, so it can be hard to understand exactly what sorts of offences are being reported. Another problem is that the manipulative nature of sexual grooming means it can be difficult to recognise (Berson, 2003; Malesky, 2007; Bryce, 2010), and as Gillespie (2004) contends, pinpointing the beginning and end of the process can be virtually impossible.

Naturally then, reported prevalence figures vary. From general population samples in the USA, it was found that between 13.3% (Wolak, Mitchell & Finkelhor, 2006) and 19% (Finkelhor, Mitchell & Wolak, 2000) of 10-17 year olds had received sexual solicitations online, although a 2010 survey found this figure had dropped to 9% (Jones, Mitchell & Finkelhor, 2012). Ybarra & Mitchell (2008) similarly found that 15% of 10-15 year olds had received unwanted sexual solicitations in a one-year period. From the findings of three separate youth internet safety surveys, Jones, Mitchell & Finkelhor (2012) noted a 50% decrease in unwanted sexual solicitations between 2000 and 2010, suggesting this may be due to targeted internet safety campaigns and increasing publicity about criminal prosecutions concerning such offences. However, the authors importantly note that these findings should not be interpreted as a decrease in online predation by adults; the recipients of the solicitations in these studies largely reported that they believed the perpetrators to be young, and furthermore, the majority of these solicitations were rejected (Wolak, Mitchell & Finkelhor, 2006). Mitchell *et al.* (2013) suggest that the general decrease in unwanted solicitations might be partly due to a general change in the way young people interact online, particularly the migration away from open chatrooms to social networking platforms. While this might be taken as an encouraging sign that internet safety education and increased policing efforts are having a positive effective, Mitchell *et al.* (2013) also note that response rates to these sorts of surveys have declined substantially over the past decade.

OCSA in Europe is equally under-researched (Davidson, 2011), but figures reported in the EU Kids Online survey roughly reflect those from US findings, in that 15% of 11-16 year olds reported having received sexual messages online, and 4% expressed being upset by such messages (Livingstone *et al.*, 2011). In the UK, however, Child Exploitation and Online Protection (CEOP) reported a 14% increase in CSA reports in 2013 from the previous year, of which 16% concerned online environments (CEOP, 2013), and more recently the NSPCC reported a 44% increase in the number of incidents of online sexual crimes against children

and young people recorded by police in England and Wales from 2015-2017 (Wager *et al.*, 2018). Regarding grooming specifically, the Home Office (Flatley *et al.*, 2010; Smith *et al.*, 2013) reported that the number of offences recorded by law-enforcement in England and Wales roughly doubled from 186 in 2004-2005 to 373 in 2012-2013. These figures, however, account for both offline and online offences, and it is important to note that UK online grooming offences are not always recorded as 'grooming', especially where such activity leads to more serious offences (McGuire & Dowling, 2013). Regarding IIOC, offences in the UK reportedly increased from 9,744 to 14,497 sentences over an eight-year period between 2006/2007 and 2012/2013 (McManus & Almond, 2014). While there is some evidence that a small portion of offenders progress from IIOC to contact offences (Fortin, Paquette & Dupont, 2018), little is known about cross-over offending rates (McCarthy, 2010), although Howard, Barnett and Mann (2014) found 0.5% of their sample of UK offenders ($n=14,804$) to be convicted of both contact and IIOC-related offences. Wager *et al.* (2018) reasonably surmise that cross-over figures are likely vastly underestimated due to undetected contact offences by IIOC offenders.

While a small number of other EU countries, e.g. Spain (Tejedor & Pulido, 2012; Montiel, Carbonell & Pereda, 2016), Sweden (Shannon, 2008; Brå, 2007), Portugal (Branca, Grangeia & Cruz, 2016), Cyprus (Karayianni *et al.*, 2017) and Germany (Sklenarova *et al.*, 2018) have reported OCSA prevalence figures, these studies are few and far between, as are those from further afield. Regarding online grooming, this may reflect that in many countries grooming itself is not a criminal offence (UNICEF, 2011). It is worth remembering that childhood and sexuality are social constructs (Jewkes, 2010) which shift over time and across cultures, and laws regarding age of sexual consent vary between (and within) countries (Christensen, 2017b) so whether particular behaviours are considered appropriate or deviant is culturally relative (Holmes & Holmes, 2002; McCartan & McAlister, 2012). For global statistics regarding CSA more generally, see Stoltenborgh *et al.* (2011) and more recently Dubowitz (2017).

Unfortunately, the common factor to all reported prevalence figures is that they are mired in uncertainty. But what we do know is that crimes of this nature are underreported, and although some of the literature reports encouraging drops in rates of OCSA activity, it seems that OCSA in all its various forms continues to affect children and young people around the world.

Offenders and victims

The last decade has seen a number of studies focusing on the characteristics of online sexual offenders (e.g. Malesky, 2007; Marcum, 2007; Davidson & Gottschalk, 2011; Briggs, Simon & Simonsen, 2011) and victims (Mitchell, Finkelhor, & Wolak, 2007; Bergen *et al.*, 2013), risk and vulnerability factors (Whittle *et al.*, 2013b), victims' perspectives of online sexual abuse (Leander, Christianson & Granhag, 2008; Katz, 2013; Whittle, Hamilton-Giachritsis & Beech, 2013, 2014, 2015) and risky online behaviours of young people (e.g. Choi, Van Ouytsel & Temple, 2016; DeMarco *et al.*, 2017). The current research is primarily interested in the communicative processes involved in OCSA rather than demographic information, so the following section provides a brief overview of offender typologies and victim characteristics, before addressing just a few key issues around stereotypes from the literature. Again, this discussion focuses on more interactive OCSA offences; for in-depth descriptions of IIOC offenders, see Krone (2004) and Babchishin *et al.* (2018).

Online offender typologies

Research comparing offline and online offenders and abusive practices (including IIOC offenders) has increased in recent years (see, e.g. Long, Alison & McManus, 2012; Jung *et al.*, 2013; Aslan *et al.*, 2014; Seigfried-Spellar, 2014; Babchishin, Hanson & VanZuylen, 2015; Faust *et al.*, 2015; Ioannou *et al.* 2018), but more importantly in the current context, some studies are beginning to discern different types of online offender. One of the most important observations is that not all OCSA offenders share the goal of meeting their victim offline. This was noticed first by O'Connell (2004), and later explored by Briggs, Simon & Simonsen (2011), who identified two subcategories of offender: the *contact-driven*, who aim to engage victims in physical sexual activity, and the *fantasy-driven*, motivated purely by online sexual activity. An important difference between the two groups was that contact-driven offenders maintained a shorter average online relationship with their victims than fantasy-driven offenders, with nearly half attempting offline contact within 24 hours of meeting online. However, from a review of 22 relevant studies, Broome, Izura and Lorenzo-Dus (2018) found considerable overlap in offending behaviours by offenders in both groups, leading the authors to conclude that the fantasy/contact distinction is too ambiguous to be useful. Another issue is that the term 'fantasy' is arguably problematic when used to describe adult-child interactions. While offenders may fantasise about CSA either alone or in conversations with other offenders, where offender-victim interactions are concerned, the abuse is not just imagined or 'acted out', but actually inflicted. In this way the term may serve to diminish the very real exploitation of children and other vulnerable people. Less ambiguous categories

were identified by Tener, Wolak and Finkelhor (2015), who gathered data on 75 OCSA cases and identified four types of offender (the characteristics of which are not mutually exclusive). The first were termed *experts*; offenders who typically had multiple victims to whom they lacked emotional attachment, and who sought sophisticated means to evade detection. The second group were identified as *cynical*; these offenders shared characteristics with the *experts* but were less sophisticated in their methods and had fewer victims. The third group were identified as *affection-focused*, and were characterised as having “genuine feelings of love, care, and affection for victims.” (Tener, Wolak & Finkelhor, 2015, p. 330). The final group were identified as *sex-focused*; these offenders sought immediate sexual contact regardless of age range, but would engage with children and adolescents if the opportunity arose. A more recent typology comes from DeHart *et al.* (2016), who from online communications of OCSA offenders also identified four types: *cybersex-only*, *cybersex/schedulers*, *schedulers*, and *buyers*. There is some overlap between these and other identified groups, for instance, the *schedulers* often sought offline sexual contact relatively quickly, similar to Tener, Wolak and Finkelhor’s *sex-focused* category, and the *cybersex-only* and *schedulers* groups echo the *fantasy* and *contact-driven* categories identified by Briggs, Simon & Simonsen (2011). The *buyers* group were similar to *schedulers* but they would additionally negotiate terms and costs of proposed sexual contact (DeHart *et al.*, 2016).

Victim characteristics

While OCSA victims are most commonly female (Wolak, Mitchell & Finkelhor, 2006; Bryce, 2010; Briggs, Simon & Simonsen, 2011), a significant proportion are male, reported figures ranging from 25% (Bergen *et al.*, 2013) to 34% (Finkelhor, Mitchell & Wolak, 2000) to 40% (Walsh & Wolak, 2005). While Finkelhor, Mitchell & Wolak (2000) note that only half as many boys as girls are targeted for online sexual solicitation, they draw attention to the importance of the considerable 34% figure, especially considering the common perception that OCSA victims are exclusively female. However, from a thematic analysis of eight offender-decoy interactions from the Perverted Justice website, Aitken, Gaskell and Hodgkinson (2018) found that targets’ genders did not impact the themes observed in the offenders’ language, although the authors did notice an increase in sexual words used towards male targets. Adolescent boys reportedly have lower perceptions of online risk than younger boys and girls (Lareki *et al.*, 2017), which increases their vulnerability. Both male and female adolescents between 13-16 years of age are reportedly at higher risk of online predation than younger, prepubescent children (Briggs, Simon & Simonsen, 2011; Livingstone *et al.*, 2011; Whittle *et al.*, 2013a; Bergen *et al.*, 2013, 2014b), although younger children report being more upset by online sexual solicitations than adolescents (Mitchell, Finkelhor, & Wolak, 2001). Possible

reasons for this include adolescents' increased unmonitored internet use and heightened sexual curiosity (McGuire & Dowling, 2013; Nielsen, Paasonen & Spisak, 2015). Those at higher risk often come from dysfunctional and low-income families, have low self-esteem, previous histories of sexual and/or physical abuse and show depressive symptoms (Dombrowski *et al.*, 2004; Wolak, Finkelhor & Mitchell, 2004; Mitchell, Finkelhor, & Wolak, 2005; Mitchell, Finkelhor, & Wolak, 2007; Katz, 2013; de Santisteban & Gámez-Guadix, 2018; Plummer & Cossins, 2018).

Stereotypes

OCSA offenders are a largely heterogeneous group (Dombrowski *et al.*, 2004; Bryce, 2010; Briggs, Simon & Simonsen, 2011; Bergen *et al.*, 2014a). It is generally found that online sex offenders are not typically 'old'; reports usually show the average male perpetrator to be in his mid-30s (Walsh & Wolak, 2005; Briggs, Simon & Simonsen, 2011) or even younger (see Mitchell *et al.*, 2013) and the offence is certainly not limited to adults (Dombrowski *et al.*, 2004; McKibbin, Humphreys & Hamilton, 2016; Williams & Pritchard, 2017, Lewis, 2018). While the majority are reportedly male (Briggs, Simon & Simonsen, 2011; Bergen *et al.*, 2014a), increasing attention is being paid to female sexual offenders, who may constitute between a quarter and a third of all OCSA offenders (Wager *et al.*, 2018) and operate online in similar ways to their male counterparts (Lambert & O'Halloran, 2008; Elliott & Ashfield, 2011; Miller, 2013; Schulz *et al.*, 2016). Schulz *et al.* (2016) note that female offender prevalence figures tend to depend on the research methods used, comparing youth surveys (Finkelhor *et al.*, 2000; Wolak, Mitchell & Finkelhor, 2006) which report 16-33% female offenders, with offender samples (Briggs, Simon & Simonsen, 2011; Webster *et al.*, 2012) which report 0-4%. Female perpetrators are on average slightly younger than males, at between 26-36 years (Miller, 2013), but most significantly, they are frequently overlooked as potential suspects in sexual crimes, and often evade criminal justice systems and media focus once detected (Vandiver & Walker, 2002; Jewkes, 2010; Elliott & Ashfield, 2011; Miller, 2013; Morgan & Long, 2018). Some explanations for this include the perception that women commit online abuse to serve the desires of male partners (Prat *et al.*, 2014), and the impression that female-perpetrated abuse is somehow less harmful than male-perpetrated abuse (Collins & Duff, 2016). It should be remembered too that abusers may groom or coerce partners or other adults into co-abusive behaviours, and these individuals should also be recognised as victims (McLaren, 2016).

Being alert to 'stranger-danger' is another popular public message when it comes to online abuse, often detracting attention from the fact that such crimes are frequently committed by

individuals known to their victims (Mitchell, Finkelhor, & Wolak, 2005; McAlinden, 2006; Villacampa & Gómez, 2017), including adults working in youth organisations (Wurtele, 2012; Wurtele & Kenny, 2016). Mitchell, Finkelhor, & Wolak (2005) report that nearly as many online sexual offences are committed by family and acquaintance offenders as by those who meet victims online, and cases concerning known-to-victim offenders are reportedly increasing (Wolak & Finkelhor, 2013). Most importantly, there are few differences noted between known and unknown offenders and their abuse processes, so neither group can be considered more or less dangerous than the other (Wolak & Finkelhor, 2013).

A final point is that political and legal discourses around CSA offending tend to frame 'victimness' and 'offenderness' binarily in terms of good and evil (McAlinden, 2014). McAlinden (2014) argues that polarising victims and offenders in this way fosters stereotypes of "ideal victim[s]" as "young, pure, passive and blameless" (p. 185) and offenders as "evil monsters" (p. 187). Such perceptions are over-simplified and negate the complexity of victim and offender behaviours and identities in instances of CSA (McAlinden, 2014). McAlinden cites a number of problems that this can lead to, including the victim-blaming of any child who does not conform to the image of the 'ideal victim', and the obfuscation of culpability of wider society when children are not protected. She reasonably argues that public policy ought to progress from such narrow understandings of victims and offenders.

Internet and technology affordances

It is well acknowledged that many facets of the internet we consider to be positive and helpful are also exploited by OCSA offenders seeking inappropriate interactions with children and adolescents and access to IIOC (Mitchell, Finkelhor & Wolak, 2005; O'Connell, 2004; Kierkegaard, 2008; Davidson & Gottschalk, 2011; McCartan & McAlister, 2012; Quayle *et al.*, 2014; Quayle & Newman, 2015; Stalans & Finn, 2016). This section describes some of the affordances of the internet and related technologies and how they are used by OCSA offenders.

The online world allows offenders to retain anonymity (Cooper, 1997; Urbas, 2010; McCartan & McAlister, 2012; al-Khateeb & Epiphaniou, 2016), which can help to evade apprehension (MacLeod & Grant, 2017) and manipulate personalities and identities in order to maximise appeal to target victims (Berson, 2003; Urbas, 2010; Davidson & Gottschalk, 2011; McCartan & McAlister, 2012; Quayle *et al.*, 2014). This is made even easier by accessible personal information uploaded by young people in chatrooms and on social networking profile pages (Quayle *et al.*, 2014), which can provide offenders with sufficient information about their

targets' physical appearance and location without the risks associated with a physical meeting (O'Connell, 2004). Self-generated images of a sexual nature reportedly constitute one in five IIOC images reported to CEOP (Wager *et al.*, 2018). This issue seems increasingly problematic as we enter the age of "digital exhibitionism", in which 'selfies' are in fashion and young people are increasingly documenting their lives online (Von Weiler, 2015, p. 329), potentially to the point of addiction (Colucci, 2016).

The affordability (Cooper, 1997; Kloess, Beech & Harkins, 2014; Açar, 2016), accessibility (Cooper, 1997; O'Connell, 2003; 2004; Stalans & Finn, 2016) and ubiquity (Davidson & Gottschalk, 2011) of the internet have both widened and diversified the pool of potential OCSA targets (Cooper, 1997) and available IIOC (Quayle & Taylor, 2002; Kloess *et al.*, 2017). Victims may be in a different geographical area and legal jurisdiction to their offenders, and there is no centralised body governing online behaviour, making online offences particularly difficult to track and police (McCartan & McAlister, 2012; Stalans & Finn, 2016). These factors also enable offenders to target multiple victims simultaneously (Berson, 2003; Quayle *et al.*, 2014), and once victims have been approached, to create private virtual spaces in which to continue communicating (Mitchell, Finkelhor & Wolak, 2005). This privacy can be controlled by moving through numerous communicative platforms (Quayle *et al.*, 2014). As McCartan & McAlister (2012) note, the online aspect of this sort of abuse may enable the offender to focus their efforts mostly on the victim and worry less about the victims' surroundings, family and friends.

A further affordance is connectivity; online environments facilitate communication and social networking between offenders (Durkin, 1997). Online offender communities share tips and advice about locating and grooming victims (Davidson & Gottschalk, 2011; McCartan & McAlister, 2012). They provide support, reassurance and validation of adult-child relationships and related offences (Durkin, 1997; Quayle & Taylor, 2003; Davidson & Gottschalk, 2011; Westlake & Bouchard, 2016), and provide recruitment opportunities for co-offending or supportive criminal pursuits (Tremblay, 1993; Cohen-Almagor, 2013) including the sale of children online (Litam & Bach, 2017) (see Study 3 for further discussion on online offending communities).

Wolak & Finkelhor (2013) claim there is little evidence to support the notion that online communication is in some way disinhibited, at least in relation to young people vulnerable to online abuse. It has, however, been suggested that because online communication can be disconnected in time and space from the sender, the internet may have a disinhibiting effect on offenders (Davidson & Gottschalk, 2011; Elliott, 2017). Quayle *et al.*, (2014) support this,

noting that the offenders in their study had compartmentalised their offending behaviour, confining it to online realms while continuing relatively 'normal' lives in between offending episodes. Regarding IIOC offences, Rimer (2017) reached similar conclusions, reporting from a participant-observation study of individuals arrested for IIOC offences that participants perceived online spaces to lack the same levels of "social surveillance" associated with consuming indecent material offline, leading to a "perceived freedom to break norms of childhood and sexuality" (p. 40). There is some evidence, then, that certain aspects of online spaces can disinhibit offending behaviours, whether this involves interactive abuse or IIOC.

The development of mobile internet-enabled technologies (laptops, smartphones, tablets, etc.) has further blurred the boundaries of online and offline life (McCartan & McAlister, 2012). The widespread use of such devices has increased young peoples' online presence, accessibility and vulnerability, and, therefore, offending opportunities (O'Connell, 2004; Livingstone & Smith, 2014). O'Connell (2004) points out that young peoples' mobile devices are privately owned possessions, which vastly decreases parents' abilities to monitor or schedule internet access in a way that might have been possible when family homes tended to share a single computer in a public space. Furthermore, smartphones are now generally well-equipped with location tools (e.g. maps, GPS) and high-quality cameras which can assist offenders in physically locating victims and each other, and in covertly photographing children and young people in public places (McCartan & McAlister, 2012). Webcams, too, are now integral features of most mobile devices, and can play a significant part in OCSA offending (Quayle *et al.*, 2014; Kopecký, 2016). Offenders may use webcams to stream live videos of themselves performing sexual acts and encourage victims to do the same (Shannon, 2008; Kopecký, 2016). Webcams are also used for live-streaming abuse and child prostitution (Açar, 2016). Kopecký (2016) notes a particularly devious practice whereby offenders use a pre-recorded video loop of someone other than him/herself, to make the victim feel comfortable in sexual webcam interactions. Victims' video streams can then be recorded for future trade or blackmail purposes, whereby offenders attempt to extort further sexual imagery or other forms of online or offline engagement from the victim in a practice known as sexual extortion (Europol, 2014; Kopecký, 2016; 2017; Wolak *et al.*, 2018). So as well as interaction-based offences, internet-enabled mobile devices enable the real-time production and distribution of IIOC (O'Connell, 2004; McCartan & McAlister, 2012; Cohen-Almagor, 2013). Steele (2015) reports that tablets and smartphones accounted for 32% of IIOC-related searches conducted through search engine Bing.

Other, more sophisticated tools can also aid online sexual predation, such as virtual ethernet scopes or 'sniffers', which enable the user to gather information about a target victim by

listening to chatroom or instant messaging (IM) traffic (Dombrowski *et al.*, 2004). Another method is the use of Trojan horse or worm viruses to control the victim's computer remotely and copy personal information (Dombrowski *et al.*, 2004).

While the internet and associated technologies may have presented new offending opportunities and methods, this cannot reasonably be described as a causal relationship (Quayle *et al.*, 2014). Studies reporting an exponential increase in OCSA behaviour since the advent of the internet are often not empirically based (Villacampa & Gómez, 2017), and moral panic about online dangers is not productive (Quayle & Cooper, 2015). Jewkes and Wykes (2012) argue that currently there is an over-tendency to situate CSA-related crimes as a problem of online spaces. The authors note that not only does this detract attention from offline sexual abuse, particularly in domestic settings, but it also “deflects from the everyday sexualization of children in numerous cultural forms and works to maintain widespread public tolerance toward that” (Jewkes & Wykes, 2012, p. 935). Finkelhor (2014) supports this, arguing that online environments pose no greater threat to young people than offline environments, and that those dangers which are presented online are more accurately conceived of as extensions of broader social problems which should be treated holistically, rather than as problems unique to the online world. Blaming online technologies, then, is not a useful response to the problem of OCSA. It is important to remember that as well as risks, online spaces bring positive opportunities for young people, but these are reduced (along with digital skills) when parents restrict their children's internet use (Cabello-Hutt, Cabello & Claro, 2018; Rodríguez-de-Dios, van Oosten & Igartua, 2018). Furthermore, the risks posed by online environments can be useful for resilience-building in young people, and it is important to separate the notions of risk and harm when delivering internet safety messages (Livingstone & Görzig, 2014). As well as this, some of the same aspects of the internet that aid offenders also contribute to combating OCSA. For example, online anonymity benefits undercover police officers (UCs) working to apprehend offenders (see Grant & MacLeod, 2016; MacLeod & Grant, 2017). Also, online technologies can facilitate the recording of offences and criminal communications in the form of pictures, videos, emails and chat-logs (Mitchell *et al.*, 2012), which can be extremely important to forensic examiners, police and the courts, as well as researchers aiming to better understand and combat OCSA (Mitchell, Finkelhor, & Wolak, 2005; McCartan & McAlister, 2012; Amuchi *et al.*, 2013; Wolak & Finkelhor, 2013; Lilley, 2016).

Combative measures

Legislation

In terms of IIOC-related offences, UK legislation criminalises the possession, making, distribution and publishing of indecent images or pseudo-images of children (Protection of Children Act, 1978, s.1). ‘Making’ here can refer to the act of opening an email attachment containing IIOC material, downloading IIOC from a website or storing it on computer, and a child is considered a person under the age of 18 (CPS, 2017). Statutes like this are clearly created in attempt to combat forms of OCSA by adults, but recent trends in ‘risky’ online behaviours like ‘sexting’ put young people in consensual relationships at risk of being prosecuted under such laws (Spooner & Vaughn, 2016, Villacampa, 2017).

Regarding more interactive offences, the UK Sexual Offences Act 2003, s.15, was one of the first pieces of legislation in Europe to specifically address sexual grooming (Eneman, Gillespie & Bernd, 2010). The act criminalises “Meeting a child following sexual grooming...” (Sexual Offences Act 2003, s.15), and it was recognised as an important progression in its acknowledgement of the preparatory acts (on or offline) involved in CSA (McAlinden, 2006). It has gone on to influence similar legislation around the world; countries such as Norway, Sweden (Eneman, Gillespie & Bernd, 2010; Staksrud, 2013), Canada, Australia, New Zealand and Singapore (Urbas, 2010; Eneman, Gillespie & Bernd, 2010; Davidson & Gottschalk, 2011; Staksrud, 2013) have now also introduced new laws or amended existing ones to incorporate the act of grooming. Additionally, the EU Council Framework Decision (Article 5) refers specifically to online grooming, and urges EU member states to criminalise the act (EU Council Framework Decision, 2009; Davidson & Gottschalk, 2011), although such recommendations are optional and not legally enforceable (Davidson & Gottschalk, 2011).

While the legal acknowledgement of grooming is a positive step, such laws have been criticised on a number of levels. The UK Sexual Offences Act 2003, for example, does not account for cases where no physical meeting occurs (Eneman, Gillespie & Bernd, 2010). The Swedish law has been criticised for its vague definitions of the evidence required to convict and its low penalty (1 year imprisonment) (Eneman, Gillespie & Bernd, 2010), and Norwegian grooming law has been described as “knee-jerk legislation” which is “redundant, both legally and practically”, largely due to its basis on ill-conceived notions around violence and deceit in relation to grooming (Staksrud, 2013, p. 164). In Singapore, the grooming offence applies only to adults over 21 years, and requires the actual existence of a person

under 16, whereas other countries (e.g. the UK) can convict offenders for attempting to groom UCs posing as minors (Urbas, 2010). It is argued that the lack of consistency in international legislation creates more offending opportunities, and this is partly due to definitional problems (Hillman *et al.*, 2014) (see *Definitions and terminology* section of this chapter). Perhaps the most oft-cited criticism of grooming legislation generally is that it is most often applied reactively, and is unsuited to crime prevention (Craven, Brown & Gilchrist, 2007; Eneman, Gillespie & Bernd, 2010). Gillespie (2006), however, reasonably notes that single pieces of legislation such as s.15 of the UK Sexual Offences Act 2003 are not equipped to address every type of OCSA, and that a series of laws is more likely able to tackle the variety of processes involved. Whatever success is gained by the introduction of grooming legislation, it is widely noted that additional solutions are necessary (Eneman, Gillespie & Bernd, 2010).

Covert investigations

A more proactive approach to combating OCSA is the implementation of online operations which involve undercover police officers (UCs) posing as minors and engaging with offenders (and suspected offenders) in chatrooms or through other forms of social media (Krone, 2005; Gillespie, 2008; Urbas, 2010; Mitchell *et al.*, 2012; Sinclair, Duval & Fox, 2015; Grant & MacLeod, 2016). Law-enforcement agencies have also been known to recruit young people (Urbas, 2010) and forensic linguists (Grant & MacLeod, 2016; MacLeod & Grant, 2017) to aid the successful impersonation of children online (discussed further in the '*Linguistic research*' section of this chapter). This section discusses such operations mainly in reference to UK policing and legal contexts but also US law.

Gillespie (2008) describes the difference between 'static' sting operations, which involve the creation of websites to lure unknown offenders, and 'dynamic' operations, which require active police involvement from the outset, and in which targeted offenders are usually known or suspected. During dynamic operations, UCs will either assume the identity of a particular victim, in order to maintain ongoing communication with an offender, or create a fake persona and spend time investigating chatrooms for offending behaviours (Urbas, 2010; Grant & MacLeod, 2016; MacLeod & Grant, 2017).

Covert investigative methods like this raise legal and ethical questions associated with entrapment and appropriate methods of obtaining criminal evidence (Gillespie, 2008; Urbas, 2010). UK law sanctions the use of UCs under the Investigatory Powers Act, (2016), and UCs are required to act in accordance with the Police and Criminal Evidence Act (PACE)

(1984), which among other things provides that evidence should be collected fairly (Grant and MacLeod, *in preparation*). For example, UK officers are restricted from conducting illegal interviews, so any online chat engaged in by UCs must not amount to what could be classified as such (Grant & MacLeod, 2016).

An important concept recognised in UK courts is that officers must not act as *agents provocateur*, defined by the Royal Commission as “a person who entices another to commit an express breach of the law which he would not otherwise have committed, and then proceeds or informs against him in respect of such offence.” (Lee, 1929). Based on this principle, evidence obtained from sting operations may not be admissible in court in cases where the defendant can show they have been coerced into offending behaviours (Urbas, 2010). However, there are cases where UCs are required to impersonate victims involved in ongoing relationships with abusers, and so it is necessary for them to emulate the victims’ linguistic behaviour as closely as possible, and this may include the initiation of online sexual activity, which, unsurprisingly, proves a difficult task for many UCs (see MacLeod & Grant, 2017). As Grant and MacLeod (*in preparation*) note, such an operation must be legally sanctioned to its particular purpose (where ‘purpose’ refers to intelligence gathering, disrupting online criminal activity, or gathering evidence for a trial) as well as authorised by an individual ranking no lower than the position of Assistant Chief Constable.

The US equivalent concept concerns the defence of entrapment, which hinges on two key elements; first, the crime must have been induced in some way by a government agent, and second, the defendant must have lacked the predisposition to engage in the alleged criminal act (United States Department of Justice, n.d.). A study by Peters *et al.* (2013) showed that in such cases, mock jurors were less likely to give guilty verdicts if an online sexual solicitation was initiated by a UC rather than the defendant, establishing the solicitation initiator as a key factor in jury decision-making in online sex sting cases involving the entrapment defence. While there are parallels with UK legislation, Grant and MacLeod (*in preparation*) point out that UK law now tends to focus less on the offender’s preexisting intent to commit a criminal offence, and more on police behaviour. The authors cite a judgment by Lord Nicholls in *R v Loosely (2001) UKHL 53*, which suggests a more appropriate test should be “whether the police conduct preceding the commission of the offence was no more than might have been expected from others in the circumstances” (§23).

Other issues around entrapment and similar laws include whether it is possible to convict an individual of OCSA offences where no child is ever involved (which is possible under UK and Australian law), and that it is impossible to determine whether those convicted as a result of

sting operations would have gone on to offend against real victims in the future (Gillespie, 2008). Urbas (2010) posits that the question of whether grooming has been committed relies on specific legal definitions. Covert operations are therefore extremely complex and require UCs to operate within strict rules and frameworks (Urbas, 2010).

Regardless of the legal and moral debates surrounding covert practices, online sex sting operations are now widespread around the world (Urbas, 2010). But arguably more challenging is the increase of “digital vigilantism”, whereby individuals (e.g. Stinson Hunter) or organisations (e.g. Perverted Justice) engage in similar covert practices involving adults posing as minors online, only with “no legal or moral authority” (Campbell, 2016, p. 345) (see Stinson Hunter, 2016; Perverted Justice, 2016). Perverted Justice (PJ) is an American organisation which trains adults (referred to as ‘decoys’) to pose as minors online and converse with potential OCSA offenders. Decoys wait to be approached in order to avoid the defence of entrapment (van Gijn-Grosvenor & Lamb, 2016). Chat-logs and other evidence are shared with regional law-enforcement agencies, and where cases result in conviction, full chat-logs from the interactions between offenders and decoys are published online (Perverted Justice, 2008). The stated aim of PJ is to reduce OCSA instances by creating an online presence in chatrooms and on social media sites which will instil “an extra bit of paranoia” in the minds of individuals seeking to engage in OCSA (Perverted Justice, 2008). The moral dubiousness and potential interference with policing strategy (Perraudin, 2017) place these sorts of operations at the centre of heavy debate. But even so, the offender-decoy chat-logs published by PJ have fuelled a considerable portion of the OCSA research from psychological, computational and linguistic domains (e.g. Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Chiang & Grant, 2017¹; Cano, Fernandez & Alani, 2014; Pranoto, Gunawan & Soewito, 2015; van Gijn-Grosvenor & Lamb, 2016; Winters, Kaylor & Jeglic, 2017) offering insights into OCSA behaviours and practices which were previously unattainable.

Education

A number of initiatives have been implemented to educate children and adolescents, parents and caregivers about internet safety and various forms of OCSA, including the launch of Safer Internet Day (European Commission, 2016) and The Metropolitan Police Safer Surfing Programme (Davidson & Martellozzo, 2008). CEOP’s Thinkuknow programme is one of the largest scale programmes delivered in the UK (CEOP, 2011), although it has not been rolled

¹ Chiang and Grant (2017) presents a study based on the author’s MA project. Some of the work contributing to this research provides a foundation for the current thesis.

out consistently across the country (Whittle, Hamilton-Giachritsis & Beech, 2014) and its effectiveness is not well understood (Wells & Mitchell, 2008), a problem noted of internet safety resources generally (Wurtele & Kenny, 2016). What is apparent is that teachers often lack the confidence or understanding to deliver online safety messages effectively due to inadequate training (Márquez-Flores, Márquez-Hernández & Granados-Gámez, 2016). Also, the children and young people engaging with these sorts of programmes tend not to retain the proposed safety messages long-term, programme evaluations generally highlighting a need for ‘top-up’ sessions (Davidson, Martellozzo & Lorenz, 2009; Webster *et al.*, 2012). Additionally, such programmes tend to be informed largely by offenders’ accounts of abuse, and would likely benefit from the addition of victims’ perspectives (Whittle *et al.*, 2013a). Other identified gaps in educational programmes are the significance of mobile technologies in OCSA and the possibility of children and young people developing romantic relationships with adults (Wurtele & Kenny, 2016). Finkelhor (2014) adopts a slightly different stance on the matter, calling for “more generic education about life skills, social interaction, emotional intelligence, and media literacy.” (p. 655), rather than specialised internet safety training.

Technology

Technological tools of various kinds are also being developed in response to OCSA (computational linguistic approaches are discussed in the *Linguistic research* section of this chapter). Commercial software like Kasperksy and Norton, for example, now enables users to filter out unwanted content (al-Khateeb & Epiphaniou, 2016), Yahoo and MSN claim to have improved the security of their chatrooms, and British Telecom have simply removed theirs altogether (Davidson *et al.*, 2011). Regarding IIOC offences, it is reported that search engines Google and Bing experienced a 67% drop in IIOC-related searches after implementing search-blocking methods (Steele, 2015). There has also been an increase in the provision of internet hotlines enabling more convenient systems for reporting abuse, for example cybertipline.com (National Centre for Missing and Exploited Children, 2016) in the USA, cybertip.ca in Canada (Quayle & Newman, 2016), safeline.gr in Greece (Safeline, 2010; Christodoulaki & Fragopoulou, 2014) and iwf.org (Internet Watch Foundation) in the UK (Cohen-Almagor, 2013; Internet Watch Foundation, 2016). Some such hotlines form part of a wider global collaboration known as The International Association of Internet Hotlines (INHOPE) (INHOPE, 2016), which incorporates the multidisciplinary perspectives of law-enforcement agencies, government factions and child welfare organisations (Cohen-Almagor, 2013). Also, in US law, Internet Service Providers (ISPs) are required to report all known instances of IIOC to cybertipline.com or face a financial penalty (Cohen-Almagor,

2013), and while no such law exists in the UK, CEOP works with the majority of UK ISPs in the interest of internet safety (Cohen-Almagor, 2013).

Academic researchers are also increasingly calling on technological solutions to aid studies in OCSA, particularly regarding IIOC offences. Westlake, Bouchard and Frank (2017), for example, show the use of automated web crawlers to be an effective solution to IIOC-related data collection. One of the biggest problems in this area concerns the evaluation of *potentially* indecent imagery; determining both the age of a photograph/video subject and the boundaries between what is considered indecent and otherwise proves an extremely difficult task, even among medical and forensic experts (Cattaneo *et al.*, 2009; Ferguson & Wilkinson, 2017; Kloess *et al.*, 2017), despite recommended techniques for visual age estimation (see Mayer *et al.*, 2014). One study showed automated software to out-perform human visual age estimation using images of juvenile faces, although only to a small degree (see Ratnayake *et al.*, 2014). But while the automated method was only marginally more accurate, this sort of software is a positive step towards tackling the problem of age estimation in IIOC, especially considering its “incomparable scanning speed of more than 1,000 images per minute” (Ratnayake *et al.*, 2014, p.807). Considering limited policing resources, a related problem concerns the prioritisation of offenders in terms of policing efforts (Long *et al.*, 2016; Sinclair, Duval & Fox, 2015). Attempts to address this include the development of the Child Pornography Offender Risk Tool (CPORT) (Seto & Eke, 2015) and the Kent Internet Risk Assessment Tool (KIRAT) (Long *et al.*, 2016) which aim to assess the level of risk posed by offenders in relation to both contact and IIOC-related offences.

Other tools have been developed in the interest of managing offender behaviour, such as forensic triage tools aiming to automatically detect suspicious material on suspects’ computers, and software which can be installed to remotely monitor machine use (Lilley, 2016). However, the efficacy of these methods is still unknown, and robust evaluations of these sorts of technologies are needed (Lilley, 2016). From an operational perspective, digital forensics professionals use computational methods to track online messages to individual machines and even single photographs to social media accounts (Dickson, 2006; al-Khateeb & Epiphaniou, 2016). A more victim-centric approach is the mobile application for abuse prevention, aimed at increasing children’s awareness and skills regarding sexual abuse (see Moon *et al.*, 2017). Moon *et al.* (2017) found that children who had used the app did have improved awareness and avoidance skills, but noted the results were not statistically significant. Açar (2016) suggests future technological solutions such as automated chatbots which would converse with possible offenders online, and big data analysis of communications by Voice-over Internet Protocol (V-oIP) companies.

The prominent overall message from the literature on technological combative measures is that all current technologies need robust testing and evaluation, and that law-enforcement agencies, computer scientists and commercial technology companies should endeavour to collaborate on OCSA-related issues as much as possible (Cohen-Almagor, 2013; Sinclair, Duval & Fox, 2015; al-Khateeb & Epiphaniou, 2016; Lilley, 2016). A recent example of such collaboration is Twitter's supportive engagement with the Crown Prosecution Service (CPS) (see Laville, 2016).

Online grooming

Definitions and terminology

One area of particular interest in OCSA research is online grooming. 'Grooming' is a widely used term referring to a strategy "to help turn a sex offender's fantasy into reality, whether online or offline" (Whittle *et al.*, 2013a, p. 3). But despite its increased prominence in public consciousness since the 1980s (Lanning, 2018), the term has proven difficult to define, and as such there is no standard definition (Gillespie, 2004; McAlinden, 2006; Williams, Elliott, & Beech, 2013; Kloess, Beech & Harkins, 2014; Burgess & Hartman, 2018; Elliott, 2017; Lanning, 2018). As McAlinden (2006) points out, grooming definitions are often ambiguous, which can lead to dangerous misunderstandings. One such problematic attempt is the following from the Home Office, which describes grooming as:

A course of conduct enacted by a suspected paedophile, which would give a reasonable person cause for concern that any meeting with a child arising from the conduct would be for unlawful purposes (CEOP, 2016).

Craven, Brown and Gilchrist (2006) raise a number of concerns with this definition. Firstly, it does not account for situations whereby one adult may groom a child for sexual abuse by another adult. Secondly, it uses notoriously ambiguous legal phrases like "course of conduct", and "reasonable person". Finally, it appears to apply only to a (suspected) "paedophile", a term which refers to a "very specific clinical diagnosis" not applicable to all child sex offenders (Craven, Brown & Gilchrist, 2006, p. 288). The sexual behaviour of predators targeting adolescents can be situational rather than preferential, and offending behaviours might be impulsive and opportunistic (Lanning, 2001; 2012; Christensen, 2017a), suggesting not all convicted child sexual offenders have "a true sexual preference for children" (Mitchell *et al.*, 2012, p. 269). On the other hand, paedophiles, i.e. those with a "sexual preference toward prepubescent children", may engage in fantasy but never actually offend against children (Christensen, 2017a, p. 440). Jewkes (2010) attributes this terminological confusion to popular media phrasing such as "convicted paedophile" (p. 15),

where the more accurate term would be 'convicted child sex offender'. Despite these shortcomings, the above definition is cited frequently, appearing on informational websites run by law enforcement agencies and charities (e.g. CEOP, 2016; Survivors Manchester, 2012) and also in academic research (e.g. O'Connell, 2003, 2004).

Another problem seems to be that grooming definitions, particularly in the public sphere, too often centralise the issue of identity deception. For example, the Metropolitan Police Safer Surfing Program web page describes online grooming as a process whereby offenders "disguise [...] themselves as another young person" (Metropolitan Police Service, n.d.) and UK charity Girlguiding, in an online poll targeted at young people, defined grooming as "when someone lies about their age or who they are to get closer to a child" (Girlguiding, 2017). Although occasionally fake personas are used by offenders to appear more similar or appealing to potential victims (McGuire & Dowling, 2013; Miller, 2013; Chiang & Grant, 2018), recent studies show that the majority of grooming offenders present themselves as adult, even making explicit references to age gaps between themselves and their victims (Wolak, *et al.*, 2004; Briggs, Simon & Simonsen, 2011; Williams, Elliott, & Beech, 2013; Chiang & Grant, 2017). Inaccurate and oversimplified definitions are not only dangerous to young people and educators but will likely negatively impact the reliability of prevalence figures regarding OCSA crimes. Furthermore, inconsistent understandings of what grooming entails make the process of establishing consistent legislation targeting the offence considerably more difficult (Craven, Brown & Gilchrist, 2007; Elliott, 2017).

A related issue is that unfocused definitions of grooming seem to have led to an overuse of the term. In a study of Google Scholar searches, Dietz (2018) found 'grooming' to be used increasingly between 1984 and 2016, noting that since 2008, it has featured in "hundreds of articles in the professional literature each year" (p. 28). This widespread use becomes problematic, when, in academic and public spheres, grooming is used as a catch-all term to encompass any and all forms of sexualised interaction between adults and children (see, e.g. O'Connell, 2003; Christodoulaki & Fragopoulou, 2014; Gámez-Guadix, Borrajo & Almendros, 2016; de Santisteban & Gámez-Guadix, 2017; Villacampa & Gómez, 2017). As Kloess, Hamilton-Giachritsis and Beech (2017) put it, studies "consistently refer to children being groomed and merely imply that abuse has occurred" (p. 3). OCSA behaviours are numerous and diverse (Wager *et al.*, 2018), and grooming is one (albeit complex) type which may or may not feature in instances of online abuse. Sorell (2017) notes that grooming is a preparatory act which is "justly criminalized" (p. 705) because it is, in and of itself, harmful. It is important therefore to consider grooming as distinct from other forms of sexually abusive behaviour while recognising that different behaviours might overlap in the abuse process

(Chiang & Grant, 2017; Elliott, 2017; Kloess, Hamilton-Giachritsis & Beech, 2017). Sexual extortion, for example, involves more aggressive and coercive techniques like blackmail and threats, which are employed to gain a victim's compliance to engage in both online and offline sexual activities, or to ensure the victim's non-disclosure where abuse has already occurred (O'Connell, 2004; Craven *et al.*, 2006; Wells *et al.*, 2007; Europol, 2014, Kloess, Beech & Harkins, 2014; Wolak *et al.*, 2018). But this serious act scarcely receives the focused attention it deserves (but see Kopecký (2017) and Wolak *et al.* (2018) for the most in-depth treatments to date). In most cases it is just briefly mentioned as part of the grooming process (e.g. O'Connell, 2003; Webster *et al.* 2012; Pranoto, Gunawan & Soewito, 2015), whereas it is argued here (and elsewhere, e.g. Elliott, 2017; Kloess, Hamilton-Giachritsis & Beech, 2017) that sexual extortion behaviours along with other forms of abuse are better conceived of as distinct from grooming. Kloess *et al.* (2017) address this problem in their work by differentiating between *direct* and *indirect* conversational approaches by offenders, where the *direct* approach involves no preparatory grooming element but is "highly sexualized [...], making a sexual motive immediately obvious" (p. 9).

Over-reliance on the term 'grooming' (and related labels, i.e. 'groomer(s)', 'groomed') could be damaging because it potentially obscures a wide range of other behaviours and processes involved in OCSA, particularly those more aggressive and coercive, which should be recognised by educational programs and public messages. Currently, there is a risk of overlooking these dangers and therefore under-educating (or worse, ill-informing) young people and educators/caregivers about abusive online behaviours (Wurtele & Kenny, 2016). The current research, then, takes grooming in its narrower sense, adopting a definition which addresses the preparatory nature of the offence as in the following from Craven, Brown and Gilchrist (2006, p. 297):

A process by which a person prepares a child, significant adults and the environment for the abuse of this child. Specific goals include gaining access to the child, gaining the child's compliance and maintaining the child's secrecy to avoid disclosure. This process serves to strengthen the offender's abusive pattern, as it may be used as a means of justifying or denying their actions.

This definition broadly accounts for a range of processes involved, encompassing both actions and motivations involved in child grooming. It is unimportant that it does not pertain specifically to online grooming, because the behaviours and purposes involved in online and offline grooming generally appear to be consistent (Whittle *et al.*, 2013a), and online social spaces can be considered just as 'real' as offline spaces (Oeldorf-Hirsch, Birnholtz & Hancock, 2017).

Process and characteristics

Current models describing online grooming largely stem from psychological and criminological research on CSA pre-dating the internet. These earlier studies largely focused on the motivations of abusers (Finkelhor, 1984), and psychological factors causing offenders to be vulnerable to abusing, including antisocial attitudes and low self-esteem (Marshall & Barbaree, 1990), and cognitive distortions which justify sexual aggression (Hall & Hirschman, 1992; Szumski & Zielona-Jenek, 2016). While this research has greatly influenced more recent theories of CSA (e.g. Ward & Siegert, 2002; Craven, Brown & Gilchrist, 2006; Olson *et al.*, 2007; Sullivan & Sheehan, 2016), these early models tended to neglect the processes involved; particularly the gradual and considered approaches often associated with grooming (Craven, Brown & Gilchrist, 2006; Ward, Polaschek & Beech, 2006). It is now recognised that grooming is a heavily goal-driven process (Elliott, 2017), which significantly impacts whether further abuse occurs, leading to a greater research focus on grooming practices (Whittle *et al.*, 2013a) and the emergence of models specifically describing grooming processes (e.g. O'Connell, 2003; Craven, Brown & Gilchrist, 2006; Olson *et al.*, 2007; Webster *et al.*, 2012; Elliott, 2017). One of the most widely accepted of these comes from Craven, Brown and Gilchrist (2006). Following an extensive literature review, the authors established three forms of grooming: "self-grooming, grooming the environment and significant others and grooming the child" (p. 297). This model responded to concerns that previous research had focused only on the grooming of the child, neglecting the grooming of families, communities, and local criminal justice systems (McAlinden, 2006). Although the model is predominantly based on literature regarding offline grooming, each of its three identified grooming types are echoed in later research on online grooming (e.g. O'Connell, 2003; Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Chiang & Grant, 2017).

In previous years, online grooming occurred most commonly in chatroom environments and through instant messaging (IM) services (37% and 40% respectively) (Wolak, Mitchell & Finkelhor, 2006), but more recently it is reported that most solicitations of minors happen on social networking sites (Mitchell *et al.*, 2013). While online and offline grooming strategies often overlap (Marcum, 2007; Wolak *et al.*, 2010; Black *et al.*, 2015), it is increasingly suggested that online environments encourage and enable a distinct set of grooming techniques (O'Connell, 2003; Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Christensen, 2017a), and even new types of offender (Briggs, Simon & Simonsen, 2011). Grooming is inherently predatory and manipulative in nature (Berson, 2003; Malesky, 2007); offenders are known to search for potential victims in chatrooms and social networking sites (Berson, 2003; Malesky, 2007; Mitchell *et al.*, 2013), sometimes looking for sexually

suggestive screen names (Dombrowski *et al.*, 2004). Offenders may engage in various types of deception, including lying about their name, age or using false profile pictures (de Santisteban & Gámez-Guadix, 2017), although this perhaps occurs less than is commonly perceived. Also, behaviours associated with identity deception and concealment are not necessarily restricted to sexualised conversations between adults and children; Bergen *et al.* (2014a) found equal rates of identity deception in adult-child and adult-adult conversations of a sexual nature, but importantly they also noted that identity deception increased the likelihood of children sending sexual pictures and engaging in 'cybersex'.

A central element of online grooming is rapport-building, which can be aided by personal information gathered from targets' online profiles (Berson, 2003; O'Connell, 2004; Quayle *et al.*, 2014, Chiang & Grant, 2017; Elliott, 2017). Rapport-building can also involve promises of love and compassion (O'Connell, 2004; Marcum, 2007), expressions of appreciation (Shannon, 2008), offers of gifts or money (de Santisteban & Gámez-Guadix, 2017; Elliott, 2017), and flattery (Ospina, Harstall & Dennet, 2010; Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Chiang & Grant, 2017). Such strategies crucially work to gain a victim's trust (Olson *et al.*, 2007) and instil some sense of a special bond between victim and offender (O'Connell, 2004; Shannon, 2008). This bond can aid the offender in further isolating the victim from family and other protectors (Shannon, 2008). Grooming also involves the normalisation of sexual content and desensitisation of victims through exposure to sexually explicit conversation (Ospina, Harstall & Dennet, 2010; Briggs, Simon & Simonsen, 2011; Miller, 2013; Chiang & Grant, 2017) and pornographic imagery, sometimes including nude images of the offenders themselves (Berson, 2003; Malesky, 2007; Briggs, Simon & Simonsen, 2011).

Offenders may take steps to assess and mitigate various risks associated with detection such as inquiring about the victim's home and family life, suggesting secrecy, and controlling the personal information they disclose (Bergen *et al.*, 2014b; Chiang & Grant, 2017; Elliott, 2017). A related strategy is to gauge a target's willingness to maintain secrecy and to engage in sexual contact (Craven, Brown & Gilchrist, 2006; Wolak *et al.*, 2010; Briggs *et al.*, 2011; Bergen *et al.*, 2014b) before possibly arranging offline contact (Webster *et al.*, 2012; Cohen-Almagor, 2013; Whittle, Hamilton-Giachritsis & Beech, 2014). Bergen *et al.* (2014b) found suggestions of secrecy to increase the likelihood of both online and offline sexual contact, highlighting this as a particularly important red flag in OCSA interactions. Ultimately, whether online or offline, the grooming process is an exploitation and expansion of the power imbalance between victim and offender (Dombrowski *et al.*, 2004; McAlinden, 2006; Ospina, Harstall & Dennet, 2010; Kloess, Beech & Harkins, 2014), which can leave victims confused,

embarrassed, self-blaming, suffering from post-traumatic stress disorder or suicidal ideation, or denying the abuse ever occurred (Cossins, 2002; Alix *et al.*, 2017).

Research into online grooming has provided invaluable insights into the behaviours and processes involved, but our understanding remains limited, and researchers do not always agree about where the boundaries between grooming and other forms of sexually abusive behaviour lie. One significant reason for this seems to be a general over-reliance on the term *grooming*, which is too often used to account for all forms of online sexual contact between adults and children. But based on current widespread usage, Dietz (2018) predicts that it will likely remain popular for a long time to come, so while there may indeed be overlap, it seems vital that we recognise the wide range of distinct behaviours involved in OCSA, to ensure that public educational messages remain accurate and relevant.

Linguistic research

The sorts of contributions linguistic research can make to current understandings of OCSA are only just becoming apparent. Although not directly related to the immediate research, it is important to acknowledge the significant and growing body of work in computational linguistics and natural language processing. Over much of the last decade, researchers in these fields have been developing computational tools aimed at the automated detection and classification of online grooming interactions (see Michalopoulos, Mavridis & Vitsas, 2010; Gupta, Kumaraguru & Sureka, 2012; Inches & Crestani, 2012; Cano, Fernandez & Alani, 2014; Michalopoulos, Mavridis & Jankovic, 2014; Pranoto, Gunawan & Soewito, 2015; al-Khateeb & Epiphaniou, 2016; Gunawan *et al.*, 2017; Rebedea & Cardei, 2017), including the detection of age-deception (see Ashcroft, Kaati & Meyer, 2015). A particularly encouraging indicator of the scale of interest in OCSA in computational linguistics is the emergence of competitions requiring entrants to submit computational solutions to potential offender identification (see Inches & Crestani, 2012). As well as approaches from computer science, there are a small number of studies from psychology which take a computational approach to language analysis, such as Baryshevtsev and McGlone (2018), who used automated methods to investigate pronoun use in online grooming conversations. While the potential contact/fantasy distinction remains under debate, the authors found that contact-driven offenders used more second person pronouns and fewer first person pronouns than their adult decoy ‘victims’ and suggested this emphasis on the ‘victim’ functioned to make them feel special. A similar study concerning genuine abusive conversations between offenders and victims was carried out by Chiu, Seigfried-Spellar and Ringenberg (2018), who found contact-driven offenders to use fewer first person pronouns than the group identified as

fantasy-driven. Much of the psychological work in this area makes use of tools like Linguistic Inquiry Word Count (LIWC), a piece of software which groups textual input into various psychological and content categories using in-built dictionaries (Chung & Pennebaker, 2012). However, the stated aim of the tool is to aid the discovery of how language “reveal[s] our thoughts, feelings, personality, and motivations” (Pennebaker Conglomerates, n.d.), and is thus far more within the scope of psychological analysis than linguistic. Studies using LIWC have usefully reported on various OCSA behaviours (see, e.g. Cano, Fernandez & Alani, 2014; Black *et al.*, 2015; Drouin *et al.*, 2018) and online identity deception (see Drouin *et al.*, 2018a), but this sort of ‘bag of words’ approach to language analysis tends to rely on word frequency, and negate grammar and syntax, so it does not allow a close consideration of the functionality of language.

So while computational methods are advantageous for tackling particular types of problems, there remain important pragmatic questions around the way language is used in OCSA interactions that greatly benefit from a human analyst and a more manual approach. While studies of this kind are currently scarce, the small body of work appears to be growing. Naturally, most that does exist is concerned primarily with online grooming or other sexualised interactions between adults and children, because these interactions are predominantly textual and when stored, become useful linguistic artefacts for analysis.

Much of the current understanding of OCSA is based on interviews, surveys and focus groups with offenders and victims (e.g. Webster *et al.*, 2012; Katz, 2013; Whittle, Hamilton-Giachritsis & Beech, 2013; Bergen *et al.*, 2014a; Quayle *et al.*, 2014; de Santisteban & Gámez-Guadix, 2017; de Santisteban *et al.*, 2018; Groenestein *et al.*, 2018; Lahtinen *et al.*, 2018) and law-enforcement personnel (e.g. Mitchell *et al.*, 2012), as well as official police reports (e.g. Shannon, 2008; Cohen-Almagor, 2013) and clinical data (Briggs, Simon & Simonsen, 2011). While these are of course valuable, findings from such sources depend heavily on the honesty and accuracy of participants’ recollections and interpretations of prior events, which are then reinterpreted by researchers (Briggs, Simon & Simonsen, 2011; Williams, Elliott, & Beech, 2013). Chat-log transcripts, conversely, can capture “behaviours as they occurred in their natural environment and in real time...” (Williams, Elliott, & Beech, 2013, p. 139). They allow the researcher to examine in detail how language is used to achieve the various goals associated with different forms of OCSA. It seems clear that linguistic analysis of chat-log transcripts may offer important insights that are not attainable from other kinds of data.

Perhaps the widest reaching study of this kind comes from O'Connell (2003), who, posing as young females between 8-12 years, gathered around 50 hours of chatroom conversations between herself and would-be child groomers. Using "sociolinguistic profiling techniques" (p. 8), O'Connell established a unified typology of online grooming, purporting that offenders may progress through six stages. First is the *friendship-forming* stage, in which the offender initiates contact and establishes friendship with a child by making general inquiries regarding name and age, and about other social networks frequented, and possibly requesting non-sexual photographs of the child. The *relationship-forming* stage builds on this, whereby the offender inquires about the child's family, school life and hobbies in attempt to "create an illusion of being the child's best friend" (O'Connell, 2003, p.7). The *risk assessment* stage follows, and sees the offender gauging the likelihood of detection by gathering information about the child's surroundings. The *exclusivity* stage involves the offender's suggestions of special bonds and secrets shared with the child, and the *sexual* stage sees the offender's introduction and escalation of sexualised language in order to accustom the child to sexual discussion. Finally, the *fantasy enactment* stage involves the offender engaging the child in sexual activities either on or offline, through gentle persuasion or overt coercion. When abuse has occurred, offenders might attempt some form of damage control, which can involve positive encouragement and praise (O'Connell, 2004). In addition to these stages, O'Connell also notes online abusive behaviours described as "hit and run" (p.10), where offenders showed no interest in damage limitation or further contact.

O'Connell's model was pioneering in demonstrating the usefulness of analysing chat-log transcripts to determine common patterns in online grooming, and has significantly influenced subsequent research (e.g. Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Chiang & Grant 2017), including some of the computational tools aimed at detecting and classifying grooming conversations (Michalopoulos, Mavridis & Vitsas, 2010; Gupta, Kumaraguru & Sureka, 2012; Pranoto, Gunawan & Soewito, 2015; Ioannou *et al.*, 2018). However, the model suffers from some flaws. Firstly, the "sociolinguistic analytical techniques" (O'Connell, 2003, p. 5) employed are never explicitly described, and the method looks closer to a thematic content analysis (see Braun & Clarke, 2006); either way, the lack of detail means it remains unclear as to how each of the six stages was derived (Chiang & Grant, 2017). A more common criticism though is that the model portrays grooming as a gradual, staged process. While online grooming has been likened to a gradual seduction (Berson, 2003; Craven, Brown & Gilchrist, 2007; Ospina, Harstall & Dennet, 2010; Christensen, 2017b), more recent studies indicate that the strategies involved are employed relatively quickly and typically do not occur in the suggested sequential order (Webster *et al.*, 2012; Williams, Elliott, & Beech, 2013; Black *et al.*, 2015; Chiang & Grant, 2017; Aitken,

Gaskell and Hodkinson, 2018). For example, Black *et al.*'s (2015) analysis of 44 chatroom transcripts used both LIWC and content analysis methods, and found that while several of their eight identified grooming techniques were consistent with O'Connell's (2003), assessing risk, introducing sexual content and arranging physical contact were employed extremely early on in conversations. Their eight identified grooming techniques, in descending order of frequency are: [mentions of] *travel plans*, *flattery/compliments*, *parents' work schedule*, *inappropriateness of behaviour*, *internet dangers/safety assurances*, *online sting operations*, *sexuality in the context of relationships*, and *trusting relationships* (Black *et al.*, 2015). Similar results were found by Williams, Elliott, and Beech (2013), who, in a thematic analysis of eight chatroom grooming transcripts, identified three main themes: *Rapport-Building*, *Sexual Content* and *Assessment*. This study too, found each of O'Connell's (2003) grooming stages to be present; however, every one occurred within the first hour of conversation, suggesting a more rapid progression than O'Connell's (2003) model proposes. While recent findings tend to move away from the idea of grooming as a staged process, it is plausible that O'Connell's (2003) analysis reflected some form of chatroom grooming behaviour at the time of data collection, and that grooming practices have evolved in the intervening years as a consequence of technological advancements and an ever-growing online population.

Although thematic content analysis is used to qualitatively describe language, the framework arose from psychology rather than linguistics (see Braun & Clarke, 2006), and it does not enable the researcher to "make claims about language use, or the fine-grained functionality of talk" (Braun & Clarke, 2006, p. 28). However, it aims to capture and describe patterns of meaning across textual data (Braun & Clarke, 2006) and in this way it is possible that the goals of thematic analysis may overlap with more linguistic approaches. For example, Williams, Elliott, & Beech (2013) demonstrate that when applied to chat-log grooming transcripts, thematic analysis allows the inductive identification of themes which are comparable to findings from more linguistic research, i.e. O'Connell's (2003) *stages*, Black *et al.*'s (2015) *techniques* and Chiang & Grant's (2017) *moves* (below). Thematic analyses can therefore be usefully considered alongside more overtly linguistic approaches.

One of these linguistic approaches is Chiang and Grant's (2017) move analysis of chatroom grooming interactions using PJ data, which aimed to identify some of the functions of grooming language and indicated the presence of 14 rhetorical moves used by offenders:

1. Greeting
2. Building Rapport
3. Sexual Rapport
4. Maintaining Current Interaction
5. Assessing Likelihood and Extent of Engagement

6. Assessing Accessibility
7. Assessing and Managing Risk
8. Assessing Personal Criteria Fulfilment
9. Assessing Own Role
10. Introducing Sexual Content
11. Immediate Sexual Gratification
12. Maintaining/Escalating Sexual Content
13. Planning/Arranging Contact
14. Sign off

It can be seen that many of these moves overlap with previous findings but similar to Williams, Elliott, and Beech (2013) and Black *et al.* (2015), this analysis showed great variation between the rhetorical structures of conversations, i.e. no clear, common sequence of moves was apparent. Chiang and Grant's (2017) work showed how the linguistic framework of move analysis (see Swales, 1981, 1990), which is centrally concerned with identifying and describing communicative functions, can be applied to chat-log transcripts of online grooming interactions, focusing on how offenders linguistically approach various goals associated with grooming. This research is expanded upon in Chiang and Grant (2018), whereby the authors apply the same analytical methods to show one offender's construction of a range of online identities (see Study 1 in Chapter 6).

Other linguistic analysis in the area is more fine-grained, for example Lorenzo-Dus and Izura (2017) examined and syntactically described the compliments that offenders used in attempt to gain victims' trust. They found that those chat-logs depicting rapid grooming processes contained more sexual compliments related to victims' physical appearance than those depicting a slower process. However, they also found that offenders tended to balance their use of sexual and non-sexual compliments (albeit to differing degrees), demonstrating how non-sexual compliments might aid the development of trust by implying sexual topics or reframing them as 'romantic' (Lorenzo-Dus & Izura, 2017, p. 75). Importantly, they note that online grooming education and detection tools tend to prioritise the identification of sexual content in online grooming interactions, and thus call for a greater research focus on mechanisms of trust development which may not involve obviously sexual elements.

Another important area of linguistic research relates to the task of online identity assumption, and over the last decade, linguists have been involved in assisting specially trained undercover police officers (UCs) with the difficult task of acquiring new linguistic personas (see Grant & MacLeod, 2016; MacLeod & Grant, 2017). Online identity deception can be extremely difficult. Lincoln and Coyle (2012) note that individuals engaged in IM chat are generally successful in gauging the age and sex of their interlocutors even when their interlocutors are being consciously deceptive about these aspects of their identities. Drouin,

Boyd and Romanelli (2018) provide evidence to the contrary, however, observing in their study that untrained individuals were able to deceive others regarding their age and gender. Groenestein *et al.* (2018) found that of a group of 102 adolescent girls, the majority were confident in their ability to accurately assess the age of a stranger in online interactions, but only 43% were correct in their assessments. Regardless of the difficulty of online identity deception, its success in an undercover policing context is crucial. UCs are sometimes required to impersonate known individual victims or offenders, in order to sustain contact with and gather information on targeted offenders that will lead to their identification (Grant & MacLeod, 2016). They might also impersonate offenders and converse with unknown suspected offenders through encrypted CSA-related darknet sites, in order to gather information on the practices and users therein (see Study 2 in Chapter 7 for a fuller account of this). MacLeod and Grant (2017) noted a tendency of UCs to rely on linguistic stereotypes regarding the language used in online environments, or by adolescent girls, for example. To aid UCs in the successful assumption of online identities, the authors offer linguistic training which focuses on different levels of language based on Herring's (2004) classification system for computer-mediated discourse, namely levels of "structure, meaning, interaction and social behaviour" (MacLeod & Grant, 2017, p. 161). The structural level involves lexis and spelling, the meaning level incorporates speech act theory (Austin, 1962; Searle, 1969), and the interactional level concerns topic management, turn length and openings and closings of interactions. One of the most important findings from this work is that structural changes in an individual's language (i.e. lexis and spelling) are the most noticeable and therefore most likely to arouse suspicion to those wary of potential identity deception. Structural issues were also reported to be the easiest for UCs to address in their own language after linguistic training. Changes at the levels of meaning and interaction were also important, but less so than structural features, and this observation can aid the prioritisation of linguistic elements as the focus of study in cases where UCs have limited time in which to acquaint themselves with a new linguistic persona. This work has also led to the development of a software tool called Identik, which can assist UCs in linguistic analysis and training. While the authors acknowledge the large amount of work still to be done in this area, including on the social behavioural element of the linguistic persona, they have demonstrated a positive and important application of linguistics in a real-world OCSA context.

So it can be seen that linguistic research has contributed important insights about the communicative processes involved in OCSA interactions including aiding the identification of online offenders. However, a limitation common to the majority of this work (and studies from all disciplines using online chat-logs as the primary data) is that the chat-logs analysed are frequently obtained from *pervverted-justice.com* and thus concern adult decoys posing as

victims rather than actual children (e.g. Marcum, 2007; Gupta, Kumaraguru & Sureka, 2012; Inches & Crestani, 2012; Williams, Elliott, & Beech, 2013; Cano, Fernandez & Alani, 2014; Black *et al.*, 2015; DeHart *et al.*, 2016; Lorenzo-Dus, Izura & Pérez-Tattam, 2016; Chiang & Grant, 2017; Lorenzo-Dus & Izura, 2017; Winters, Kaylor & Jeglic, 2017; Baryshevtsev & McGlone, 2018; Ioannou *et al.*, 2018). While PJ decoys receive training in areas like creating credible online profiles of target victims, chatting online and using webcams (Garrett, 2007), it is unclear exactly what this training entails. Most importantly, we do not know how authentically the decoys impersonate children (Briggs, Simon & Simonsen, 2011; Black *et al.*, 2015), and how far their presence impacts offenders' strategies. Another issue is that undercover researchers in this area (as in O'Connell's 2003 study) are likely predisposed to "act the fantasy victim", and maintain conversation despite content being uncomfortable (Williams, Elliott, & Beech, 2013, p. 150), and it seems likely that this problem extends to adult decoys, whether these are PJ volunteers or UCs (see, e.g. DeHart *et al.*, 2016). This behaviour is likely to influence the strategies of online offenders, potentially resulting in inaccurate reflections of genuine OCSA interactions. One problematic example of the use of PJ data can be seen in Ioannou *et al.* (2018), who compare "grooming characteristics [...] of victims targeted online [...] and offline" (p. 291). The authors gathered offender-decoy transcripts from perverted-justice.com and court transcripts from West Law UK (2016) to carry out the comparison, but make no reference to how many (if any) of their described victims are genuine children, or the potential ramifications that this significant discrepancy might have on their findings. However, it remains true that chat-logs featuring adults decoys still involve genuine attempts at online grooming and related OCSA crimes by offenders, and as such, they remain worthy of investigation as long as their limits are recognised.

Of course, the sensitive nature of textual data depicting OCSA makes genuine instances extremely difficult to obtain for analysis. One response to this problem is Grant and MacLeod's (2016) exploration of the use of experimentally elicited data in the context of OCSA and identity assumption, whereby the authors recruited undergraduate and post-graduate students and undercover police officers to participate in online IM conversations. Their findings showed that elicited conversational data can reveal important insights regarding how identities are expressed and manipulated through language, as well as the sorts of linguistic features (e.g. discourse markers, topic introductions, speech acts) that inform how we detect impersonation (Grant & MacLeod, 2016), and as previously mentioned, this work has gone on to inform training programmes on online identity assumption delivered to a UK police force (Grant & MacLeod, 2016). Promisingly, there is a small number of studies for which authentic OCSA-related material has been obtained (see Kloess *et al.*, 2015, 2017; Kopecký *et al.*, 2015; Chiu, Seigfried-Spellar & Ringenberg, 2018), and some of

this work is beginning to indicate some interesting differences between interactions involving adult decoys and genuine victims (this is discussed in detail in Study 1), but far more is needed in order to start getting a true sense of the benefits and limitations of using data featuring adult decoys.

The availability of data like that from PJ, coupled with the absence of other types, leads to another, broader issue in OCSA research, which is that most studies tend to focus on offender-victim (or decoy) interactions. While this is important work, there are a range of other types of OCSA interaction that need considering in order to gain a fuller picture of OCSA offending, for example, offender-offender interactions which have seldom been explored (but see McManus *et al.*, 2016).

Conclusion

Even in its relative scarcity, it can be seen that linguistic research has thus far contributed importantly to our understanding of how language works towards the various interactional goals of OCSA offenders. We have also seen some of the practical benefits of linguistic exploration, for example in supporting computational tools for the automated detection of OCSA. In addition to this, it has been shown that linguistic expertise can positively impact law-enforcement operations aimed at combating these sorts of crimes, in areas like online identity assumption. So linguistic methods have already addressed important gaps in OCSA research, but there are many more to fill. One problem identified with the current research landscape is the over-reliance on the term ‘grooming’, and the subsequent problems this can cause - and most significant - the obscuring of other types of OCSA behaviour. Another concern is the wide-spread dependence on interactional data featuring adult decoys and the potential misrepresentation of genuine OCSA interactions in the literature. Finally, it has been noted that the small amount of linguistic OCSA research which does exist is largely (if not entirely) limited to adult-child/decoy interactions, negating the many other types of interactions that facilitate OCSA (such as offender-offender). There are clear benefits to further linguistic research, and while it is hoped that sensitive data can be made accessible for this purpose, alternative datasets and experimental methods have proven useful and ought to be pursued. The current work aims to address the issues identified by presenting studies that focus on identity in a range of different communicative contexts and participant types within the broader OCSA context. The following chapter provides an overview of some of the key discussion points in identity theory and identifies the explanatory models which inform the theoretical stance of this work.

Chapter 3: Language and identity in online child sexual abuse interactions

Introduction

Identity has become an increasingly prominent issue in social science research over the last few decades; in Bauman's words, it is "the loudest talk in town", the burning issue in everybody's mind and tongue" (2004, p. 17). The subject has received greatest attention in anthropology (e.g. Bauman, 1977; Bauman & Briggs, 1990) sociology (e.g. Goffman, 1956), social psychology (e.g. Tajfel, 1982; Tajfel & Turner, 1979), and various linguistic disciplines, most notably linguistic anthropology (e.g. Ahearn, 2012; Eckert & Rickford, 2001; Mendoza-Denton, 2002; Bucholtz & Hall, 2004a), sociolinguistics (e.g. Gumperz, 1982; Le Page & Tabouret-Keller, 1985; Johnstone, 1996, 2009; Joseph, 2004; Omoniyi & White, 2006) and more recently, forensic linguistics (e.g. Matoesian, 2001; Grant & MacLeod, 2016; MacLeod & Grant, 2017; Grant & MacLeod, 2018).

It is no surprise that identity is of interest to linguists, as language and identity are thought to be inherently linked, or as Joseph (2004) asserts, "ultimately inseparable" (p. 13). Of all the semiotic resources at our disposal for expressing identity, language is considered the "most flexible and pervasive" (Bucholtz & Hall, 2004a, p. 369). Joseph (2004) argues that the reason that the relationship between the two is so important is that when language is analytically reduced to matters of form and function, "...something vital has been abstracted away: the people themselves. Their identity inheres in their **voice**, spoken, written or signed." (p. 21, original emphasis).

However characterised, the relationship between language and identity is demonstrated time and again through studies which show various aspects of identity as constructed through a range of linguistic forms. But for various reasons - most pertinently the lack of available data - issues around identity have rarely been explored in forensic contexts such as OCSA interactions (but see Grant and MacLeod (2016; 2018). This seems like a fruitful place to begin addressing important issues associated with the anonymity afforded to offenders online. The current work aims, therefore, to investigate identity construction in three distinct OCSA contexts: offender-victim IM interactions, suspected offender-UC IM interactions and 'newbie' offender-suspected offender forum posts. To this end, it is first necessary to explore some of the most salient issues in identity research.

This chapter first offers a brief overview of some of the significant concepts and developments in identity research, particularly regarding issues around essentialist and constructionist stances. It then presents an overview of contemporary identity work structured around a critique of Bucholtz and Hall's (2005) five-point interactional model of identity, which synthesises identity research from a wide range of sociocultural disciplines. This discussion picks up on particular issues pertinent to the current research contexts and includes some of the linguistic literature which illustrates the performance of various identity positions through particular linguistic forms. Limitations of the interactional model are then discussed, followed by the presentation of two further frameworks (Grant and MacLeod's (2018) resource-constraint model and Omoniyi's (2006, 2011) hierarchical model), which address some noted concerns with the interactional model. The chapter concludes by arguing that these models, along with the interactional model, seem particularly suitable for exploring identity in the current research context. The literature in this field is vast, therefore this chapter aims only to elucidate the most useful and salient aspects of contemporary analytical frameworks for the specific research contexts in question.

From essentialism to constructionism

In early psychosocial research, identity was held to be something ultimately fixed and consistent in individuals over time (Brubaker & Cooper, 2000; Bucholtz & Hall, 2004a). This view was prevalent in Freudian-influenced psychological work based on the premise that 'self-hood' is primarily housed within the mind of the individual (as discussed by Bucholtz & Hall, 2005), and that individuals each possess some kind of stable 'core' identity (Joseph, 2004; Block, 2013; discussed by Benwell & Stokoe, 2006). In a similar way, early identity studies in sociolinguistics tended towards the essentialist *variationist* approach (see Labov, 1966), which focused on describing the variation in linguistic forms and structures across pre-defined groups or populations (e.g. of the same age, gender, or social class) (Omoniyi & White, 2006; Paltridge, 2012). Sociolinguistic variationism has long since been criticised for leading to oversimplified descriptions of broad social categories and treating these as distinct, bounded, and internally homogenous (Brubaker & Cooper, 2000; Bucholtz & Hall, 2004a). Conversely, contemporary work in sociolinguistics tends to start with the supposition that linguistic variation within and across individuals is the norm (Grant & MacLeod, 2016) and it is more interested in individual choice and exploring how variability might be used as a resource for personal expressions of identity (Johnstone, 1996).

Joseph (2004) summarises some of the most important theoretical and methodological developments in recent language and identity research:

1. The shift from seeing language forms linked to identity as being by-products of other activities, to seeing them as important, functional activities in their own right.
 2. The shift from seeing language as something that determines aspects of speakers' lives, to something that speakers control and use deliberately and strategically (see Ahearn (2012) for a discussion on linguistic relativity).
 3. The shift from focusing only on the self-identity of individuals or groups to granting equal status to others' perceptions and interpretations.
 4. The shift from identifying only broad, institutionally recognised categories to identifying 'micro' groups.
 5. The shift from *essentialism* to *constructionism*, i.e. from viewing identity as something given and fixed, to something fluid, constructed and performed.
- (Adapted from Joseph, 2004, p. 41-42)

The most widely documented and debated theoretical issue concerns Joseph's fifth point: the contrasting perspectives of traditional *essentialist* approaches with now widely adopted *social constructionist* approaches, and their utility in identity analysis. (It is worth noting that the terms *constructionist/ism* (Joseph, 2004), *constructivist/ism* (Brubaker & Cooper, 2000), and *poststructuralist/ism* (Block, 2013) seem to be used interchangeably in identity research, with little discussion about terminological choices. The current work adopts the term *constructionist/ism*, for no reason other than consistency).

So contemporary identity work seeks to address not only questions of “who we think we are”, but also “who we act as being” (Moreno & Sierra, 2017, p. 147). In linguistics, Le Page and Tabouret-Keller's (1985) work is often cited as an important turning point in this respect; they were among the first to treat identity in terms of acts that we perform, rather than something innate within the individual. In contrast with variationism, their work treated language as “essentially idiosyncratic” (Le Page & Tabouret-Keller, 1985, p. 2) rather than as something predetermined by an individual's position in a particular social category. Since this work, numerous scholars in the social sciences (and elsewhere) have contributed to the now popular conceptualisation of identity as something that is (at least partially) emergent through language and interaction, continually constructed and (re)negotiated, fluid, dynamic, and

multiple (Bauman & Briggs, 1990; Bauman, 2000; Joseph, 2004; Bucholtz & Hall, 2004a, 2004b; 2005; Omoniyi & White, 2006; Paltridge, 2012; Seargeant & Tagg, 2014).

The interactional model

Bucholtz and Hall (2005) usefully synthesise much of this literature from a range of disciplines, in particular sociolinguistics, linguistic anthropology, discourse analysis and social psychology, which they collectively call “sociocultural linguistics” (p. 586). Their model draws from work on communication accommodation theory (Giles, Taylor & Bourhis, 1973; Giles, Coupland & Coupland, 1991) and social identity theory (Tajfel & Turner, 1979), theories of language ideology (Silverstein, 1979; Irvine & Gal, 2000), indexicality (Ochs, 1992), style, (Eckert & Rickford, 2001; Mendoza-Denton, 2002) and models of identity (Le Page & Tabouret-Keller, 1985). The result of this is a descriptive model of identity which hinges on five basic principles:

1. *The emergence principle*: Identity is a product of the interaction through which it emerges, as opposed to the pre-existing source of linguistic and other semiotic practices. It is therefore a social and cultural rather than internally psychological phenomenon.
2. *The positionality principle*: Identities encompass macro-level demographic categories like age and gender, as well as local cultural positions and temporary, interactionally-specific roles, such as ‘evaluator’ or ‘engaged listener’.
3. *The indexicality principle*: Linguistic forms can (directly or indirectly) index social meanings and identity relations. This is done through such processes as overt labelling, implicature and presupposition, stances, styles, and linguistic structures and systems. Indexical links are ideological, stemming from agreed norms shared amongst specific social groups.
4. *The relationality principle*: Identities are not independent or autonomous, rather, they acquire social meaning only in relation to other available identity positions and other social actors. Identity relations do not just revolve around sameness and difference, but also genuineness and artifice, and authority and delegitimacy.
5. *The partialness principle*: Identities may be partly intentional, partly habitual (and therefore less than fully conscious), partly resultant of interactional negotiation, partly

constructed by others' perceptions, and partly a product of broader ideologies and structures.

(Adapted from Bucholtz & Hall, 2005, p. 585).

Emergence and positionality

As the authors point out, it is the first two principles which challenge the more traditional view of identity as something internal and static. The emergence principle instead seeks to present identity as a product which is continually created and negotiated through interaction. The positionality principle importantly widens the scope of what might be considered identity categories, to include local and situationally specific roles ('micro identities') alongside broader demographic groups ('macro identities'). Central to both of these principles is the notion that identities are not something we *have* or *are*, but rather things that we *do* or *perform* (Goffman, 1956; West & Zimmerman, 1987; Butler, 1990; Jaffe, 2000).

Goffman's (1956) work on self-presentation first introduced the idea of identity as performance, likening the performances by actors on a stage to the performances by social actors in everyday interactions. According to Goffman, like theatre actors, as social actors we perform various roles depending on the social contexts in which we find ourselves. For example, we (likely) communicate and behave differently in interactions with a professional superior to how we might with friends at the pub, or as patients in a medical consultation. As we perform different roles, social meanings are ascribed to them and to the social actor by the audience (whoever observes and reacts to the performance). Goffman continues the theatrical metaphor by referring to our deliberate self-presentational behaviours as being performed on the "frontstage", and differentiating these with "backstage" performances in which we are unconstrained by audience expectations and social norms, and in which we can be our uninhibited selves (Goffman, 1956, p. 78). According to Goffman, all social performance, regardless of whether the actor has specific objectives in mind, can involve the intentional *giving* as well as unintentional *giving off* of information about the actor, both of which inform the identity positions conveyed to the audience.

Goffman's performative view feeds into the notion that identity is constructed through interaction, and certain elements of it relate well to the current research, in particular the idea that each of the three research contexts might represent a different "virtual stage" (Rellstab, 2007, p. 778) on which the individuals perform their identities. While Bucholtz and Hall's (2005) interactional model relies on the notion of performativity, it diverges significantly from

Goffman's view by rejecting the idea of an essentialised, pre-performance actor, i.e. the stable 'self' who animates the performances.

Also influential to the idea of identity performance is Austin's (1962) and later Searle's (1969, 1975a, 1976) seminal work in pragmatics on performative language (later known as *speech act theory*). This work contended that the things we say or write perform particular actions, given that those utterances are *felicitous*, i.e. that certain contextual conditions are met. For example, one category of speech acts proposed by Searle (1976) is *directives*, whose primary function is to prompt the hearer into some form of action, and includes speech acts like suggestions, commands and requests. Among others, the felicity conditions required for directives include a) that the speaker genuinely wants the hearer to undertake the specified action, and b) that the speaker believes the hearer is capable of performing the action. Such ideas have been carried across to identity work, for example Butler (1990) demonstrated that like speech acts, gender is performed under various felicity conditions (Bucholtz & Hall, 2004a).

It is worth noting that there exist varying interpretations and uses of the term *performance* in identity research. Some use it to refer to our enactment of identities in everyday interactions (e.g. Bauman & Briggs, 1990; Bauman, 2000; Grant & MacLeod, 2016). Bucholtz and Hall (2004a) instead reserve the term to describe instances of "...highly deliberate and self-aware social display", which they distinguish from "mundane interaction" (p. 380). For Bucholtz and Hall (2004a), the notion of performance as a deliberate and marked display of identity contrasts with what they call (linguistic) *practice* - those linguistic activities which are more often habitual and therefore "less than fully intentional" (p. 380), similar to Goffman's (1956) distinction between *giving* versus *giving-off* information as we perform identity. The distinction between deliberate and unintentional/habitual performance seems particularly salient in relation to the current research, because the online context enables us to present ourselves selectively and purposefully by foregrounding those aspects most relevant to the immediate context, and suppressing those less useful (Tagg, 2015). As Seargeant and Tagg (2014) note, primarily textual online interactions often mean that physical attributes related to identity (e.g. tone of voice, gender, age, accent, facial expression etc.) are less apparent and at times completely inaccessible. Thus the online context allows certain freedoms for the deliberate manipulation of identity that offline contexts do not afford. It seems somewhat unnecessary, however, to introduce further terminology by taking on Bucholtz and Hall's (2004a) *performance* and *practice*. Instead, the current research uses *performance* in reference to all identity construction but finds Goffman's (1956) notion of frontstage and backstage performance a useful concept in distinguishing between everyday mundane

interactions and seemingly deliberate displays of identity, in that much of the current work deals with highly self-aware performances of false identity.

Today, the notion that identities (whether macro-level social categories or micro-level situationally specific roles) are performed is commonplace, and the range of identity facets investigated is extremely diverse (see for example Rellstab's (2007) exploration of online chat users 'staging gender', Juzwik and Ives' (2010) investigation of 'teacher identity' performance, or Healey's (2009) work on 'fangirl' identity). Much of this work draws on the third principle of the interactional model; indexicality.

Indexicality

The principle of indexicality describes the mechanism by which particular linguistic forms come to index (or 'point to') social meanings and positions (Bucholtz & Hall, 2005). One of the earliest to introduce the concept to identity research was Ochs (1992), who examined the linguistic indexing of gender. Ochs (1992) explained that social meanings can be indexed directly, or indirectly "through a chain of semiotic associations" (Bucholtz & Hall, 2004a, p. 378). Ochs demonstrates indirect indexing with an example from Japanese, a language with particular particles which can be used at the end of an utterance to mitigate its force. These mitigating articles are not in themselves associated with a particular identity category but with the *stance* of deference - a stance which, in turn, is typically associated with the female gender in Japanese culture (Ochs, 1992). Bucholtz and Hall (2005) point out that as in this example, the intermediate connections between stance and identity can become so widely recognised that they become obscured.

Expressing particular stances, or "epistemic orientations to ongoing talk", is just one of the processes through which we can index social meanings (Bucholtz & Hall, 2005, p. 594). Indexing is also done through the pragmatic means of implicature and presupposition, which depend on the hearer's ability to accurately infer the speaker's implied meaning(s) (Bucholtz & Hall, 2005). To illustrate implicature, Bucholtz and Hall take Liang's (1999) example of homosexual men and women who might choose to use gender-neutral terms in reference to their partners, in order to convey their sexual identity to those who infer the intended understanding, whilst hiding it from others. Presupposition, on the other hand, assumes some existing knowledge or belief on the part of the hearer and involves certain information being taken for granted (Beaver, 1997). Bucholtz and Hall demonstrate this with an example from Ehrlich (2001), who describes a defence lawyer in a rape trial making frequent references to the choices and options available to the victim, thereby presupposing that the

victim could have chosen differently and somehow prevented their rape. As well as these indirect pragmatic forms, indexing is done directly through overt labelling and categorisation of identity positions, for instance CSA offenders' labelling of themselves or others as 'paedophiles' (see Study 3 of this thesis).

Indexing can occur on all linguistic levels, from micro-level phonological and grammatical forms to macro-level languages and dialects (Bucholtz, 1999; Bucholtz & Hall, 2005). It is important to note that indexing on any level depends on ideological structures, because the associations we make between language and identity arise from our expectations of cultural norms experienced within the specific social groups that we inhabit (Bucholtz & Hall, 2005). The following section describes some of the literature which shows the particular linguistic features observed to index specific identity positions.

Some research has sought to investigate identity performance within particular contexts, for example in language learning (e.g. Norton, 2000, 2011; Jenkins, 2006), online environments (e.g. Palomares & Lee, 2010; Newon, 2011; Leppänen *et al.*, 2014; Seargeant & Tagg, 2014) and forensic contexts (e.g. Matoesian, 2001; Grant & MacLeod, 2016; 2018; *in preparation*). Other work focuses on broad social identity categories like gender (e.g. Lakoff, 1975; Butler, 1990; Cameron & Kulick 2003; Rellstab, 2007; Herring, 1993; 1994; 1999; 2000; Herring & Paolillo, 2006), ethnicity (e.g. Le Page & Tabouret-Keller, 1985; Joseph, 2004; Harris, 2011), religion (e.g. Joseph, 2004; Spotti, 2006; Peuronen, 2011), and age (e.g. Nini, 2014; Grant & MacLeod, *in preparation*). To give an example of the linguistic features associated with one of these categories, Herring's (2003; 2004) extensive work in language and gender performance online shows that gender can be indexed by features such as verbosity, assertiveness, profanity use, politeness, emoticons and laughter terms, among others. She notes, however, that although these features have been seen to correlate to gender categories, they are by no means absolute, and exceptions to each case are easy to find (Herring, 2003).

As well as considering broad macro-level categories, identity researchers have also shown identity performance as situationally specific (Bauman, 2000). Studies include the performance of roles like friendship (Green, 1998), motherhood (Mackenzie, 2017), masculinity (Preece, 2006), professional identity (e.g. Mullany, 2006; Tse & Hyland, 2008), and expertise (Newon, 2011; Peuronen, 2011; Vásquez, 2014). Other work considers institutionally-relevant identities like that of 'nerds' (Bucholtz, 1996; 1999), 'jocks' and 'burnouts' (Eckert, 1989) in American high schools. Bucholtz's (1999) study on girls who identify as nerds offers one of the richest demonstrations of indexicality as it occurs on

multiple levels of linguistic production. Levels include phonological (see also Mendoza-Denton's (2011) study on the indexicality of creaky voice), syntactical, lexical and discoursal. Additionally, Bucholtz (1999) shows that the use of particular features can index both the alignment with particular identity positions and the rejection of others. She refers to these behaviours as *positive* and *negative identity practices* respectively. Negative identity practices refer to what is termed elsewhere as *othering*; described by Coupland (1999) as "the process of representing an individual or a social group *to render them* distant, alien or deviant" (p. 5, original emphasis). Bucholtz illustrates positive identity practices with her observation that the girls in her study indexed 'nerdness' in part on the lexical level, through the use of formal vocabulary including Greco-Latinate forms. Negative identity practices were seen in the girls' rejection of oppositional identities by the avoidance of slang terms popular among other groups in the school. This work demonstrated the importance of the communities frequented by individuals as resources for identity performance (see also Leppänen *et al.*, 2014).

A micro identity position of particular interest in the current research is expertise, and this is partly because of its persuasive rhetorical value (Vásquez, 2014) and how this serves the offenders'/suspected offenders' and UCs' various pursuits. There is a small number of studies reporting on the linguistic features seen to index expertise as well as related aspects of identity like authority and experience (Newon, 2011; Peuronen, 2011; Vásquez, 2014). Newon (2011), for example, shows some of the ways that leaders of a collaborative gaming guild in World of Warcraft perform as experts, such as referencing expert knowledge and previous experience relevant to the particular mission in which the group was partaking. Another method they used was issuing instructions to team mates framed in notions of obligation and duty, using auxiliary modal constructions like "need to" or "have [got] to" (Newon, 2011, p. 138). These modal expressions were identified as being less severe than other available choices like "should" and "must", and Newon argues that the mitigated options functioned to negate the force of the directives issued and minimise potential face threats (Brown & Levinson, 1987) to team members. Newon also noted the use of hedging device 'I think', which worked to mitigate team leaders' assertions of expert knowledge, and at the same time, to diminish their responsibility for potentially unfavourable decisions. Both methods made for effective leadership strategies (Newon, 2011) and worked to index the guild leaders as experts in this domain.

Two closely related aspects to expertise are authority and experience (Vásquez, 2014). Looking at identity construction in online hotel reviews, Vásquez (2014) found that review writers asserted their authority by positioning themselves as both experienced travellers and

“reasonable” people (p. 77). These positions served to support the reviewers in persuading other site users to trust their recommendations (or condemnations). Some of the linguistic features which contributed to these claims of authority were the use of extreme case formulations like ‘always’, ‘only’ and ‘never’, and superlatives like ‘worst’, and these were often emphasised orthographically using italics, bold fonts and capitalisation (Vásquez, 2014).

Grant and MacLeod’s (*in preparation*) work reports on a number of other aspects of identity in OCSA interactions, for example the performance of age, which, the authors explain, is an important facet of children’s identities, particularly where age has a direct bearing on the criminality of the interactions in question. The authors show that age can be indexed through explicit statements, as well as topic initiations regarding school or parents, for example.

A key point regarding the indexicality principle is that indexical links rely on ideological associations which stem from agreed sociocultural norms shared amongst groups. But beyond this, Bucholtz and Hall’s (2005) model does not explore the relationship between identity performance and community affiliation. Sociolinguists and linguistic anthropologists have been describing types of linguistic communities since at least the 1960s (e.g. Labov, 1966). One of the earliest concepts, discussed by (among others) Gumperz (1964, 1968) and Hymes (1972) is the *speech community*. The speech community was conceptualised by Gumperz (1968) as any group that interacted frequently and could be differentiated from other groups on the basis of a shared set of linguistic forms and social norms. In part because of its heavy focus on shared linguistic forms and social variables (e.g. gender, class, locality), which negated issues of diversity within groups and individuals, other concepts were proposed, one of the most prominent being the *discourse community*, developed by Swales (1990). Swales’ notion of the discourse community instead centralises the beliefs, values and, most importantly, goals shared by community members. It is also concerned with how members achieve their shared goals through communication and, in particular, recognisable genres. While it is tempting to describe groups of online offenders as belonging to discourse communities, issues of genre make this difficult to explore in any detail, because communications between offenders remain, for the most part, elusive, often to offenders themselves (issues of genre in forensic contexts are discussed further in Chapter 4). A more useful concept in regard to the current project, and one drawn on in much identity research, is the theory of *communities of practice* (CsoP) (Lave & Wenger, 1991; Wenger, 1998), which focuses more on the shared interests and practices of its members.

The notion was developed by Lave and Wenger (1991) and Wenger (1998) and presented as a social system for learning. Drawing from these and other works in the area, Eckert (2006) provides one of the fullest definitions of the community of practice (CoP):

A community of practice is a collection of people who engage on an ongoing basis in some common endeavor. Communities of practice emerge in response to common interest or position, and play an important role in forming their members' participation in, and orientation to, the world around them. It provides an accountable link, therefore, between the individual, the group, and place in the broader social order, and it provides a setting in which linguistic practice emerges as a function of this link. Studies of communities of practice, therefore, have considerable explanatory power for the broader demographics of language variability. (Eckert, 2006, n.p.).

So from this constructionist view, CsoP are not rigid and pre-defined but emergent out of negotiation and interaction between members who claim and reject membership (Angouri 2016). In later work, Wenger, McDermott and Snyder (2002) expounded the key components necessary for the development of CsoP:

1. The domain - a shared field of interest that binds the community and instills "a sense of common identity" (Wenger, McDermott & Snyder, 2002, p. 27). Membership necessarily involves some commitment to this interest.
2. The community - a group of individuals who engage in shared activities around the domain of interest, building relationships and sharing information.
3. The practice - the resources that are shared and developed, the learning activities that are engaged in and the knowledge that is negotiated and organised by the community. Members are thus considered practitioners in some sense.

So CsoP exist around common interests, experiences and interactions, and similar to Swales' (1990) notion of *discourse communities*, around the linguistic efforts to attain shared goals. Once a CoP is established, group norms and ideologies begin to emerge (Wenger, 1998; Herring, 2001; Meyerhoff, 2002). The concept has proven useful in much identity research (e.g. Eckert, 1989; Eckert & McConnell-Ginet, 1992; Johnstone, 1996; Bucholtz, 1999; Joseph, 2004; Newon, 2011; Paltridge, 2012; Zappavigna, 2014a, 2014b; Tagg, 2015; Grant & MacLeod, 2016, 2018), perhaps because, as Eckert puts it, "the community of practice is a prime locus of [...] identity and linguistic construction" (Eckert, 2006, p. 684). Joseph (2004) argues that identities are partly established in terms of how they rank in relation to others who share the same group identity. He notes that one of the advantages of the CsoP theory is its openness; that the researcher can establish the existence of a CoP as

long as behaviour demonstrating shared group norms can be evidenced. Bucholtz (1999) notes that it is this theory that enables identities to be explained in terms of individuals' positive and negative identity practices (rather than static identity categories), i.e. the alignment with desired identity positions, and the rejection of others. Grant and MacLeod (2018), too, adopt the concept in their identity model, to explain all the various resources that communities make available for the production of identity, as well as the constraints they impose. The fact that CsoP come together through interactions around shared interests and goals (as opposed to geographically determined communities like neighbourhoods or villages) means that framework can be used to explore online communities (see e.g. Herring, 2001; Tagg, 2015), which is what makes the concept particularly useful in the current research.

Tagg (2015) drew on the concept and explored a range of reasons that people come together online, proposing that "virtual communities" may fall into the following categories:

1. Shared interest groups based on interests and hobbies, mutual support and the completion of tasks or commercial transactions.
2. Groups of common social variables, for example language, or nationality.
3. Hashtag communities, which form briefly around a temporarily shared interest in a topic.
4. Extensions of existing offline social networks.
5. Node-oriented networks, whereby individuals are connected by a mutual friend or contact.

Tagg (2015) makes clear that these community types have fuzzy boundaries and are not exclusive. What is significant, she argues, is that each group forms around members' shared interests, goals, values and experiences, rather than wide demographic categories, and that they "extend the types of social organisation available to people in a pre-digital era..." (p. 166). One example of identity research in online communities comes from Grant and MacLeod (*in preparation*), who observed from their data that OCSA offenders operating in online CsoP drew upon knowledge of the different values of indecent images of children (IIOC) as well as technical rules which aid its secure exchange, in their performance as community members. These ideas correspond with Tener, Wolak & Finkelhor's (2015) description of CSA offenders categorised as experts.

In relation to Study 3 in the current work, it is easy to see how the groups of suspected offenders are better conceived of as online CsoP than either speech communities or

discourse communities, because they are mostly describable in terms of their participation and practice in shared interests and activities (in this case, sexual interests in children and adolescents), rather than social classifications or shared linguistic forms. They sit therefore most comfortably in Tagg's first category, but within this wider characterisation of offenders, the study also exhibits sub-groups of narrower interests, across which norms and practices vary; one group, for example, is largely concerned with CSA-related 'artwork', whereas others are more structured around sharing advice and fantasies.

It has been shown that on various levels, language is used to index a range of macro and micro identity positions, and that CsoP can be a useful and even necessary additional concept in considering how identities are performed. While the current work seeks to inductively identify the identity positions performed across the three research contexts, the contexts themselves suggest particular positions of interest. These are explored in detail within the individual studies, but mainly surround the performance of 'offenderness'.

Relationality

The relationality principle holds that identities can only acquire social meaning "in relation to other available identity positions and other social actors" (Bucholtz & Hall, 2005, p. 598). These identity relations revolve around numerous axes, including *adequation and distinction*, *authentication and denaturalization* and *authorization and illegitimation* (Bucholtz & Hall, 2005). These axes, collectively termed "tactics of intersubjectivity" (p. 599), are discussed at length in Bucholtz and Hall (2004b), but in relation to the current research, it is the second pair of tactics - authentication and denaturalization - that seems particularly salient.

Authentication and denaturalization relate to the authenticity of constructed identity positions. Authentication focuses on how "identities are discursively verified" and denaturalization considers the possible threats to identities otherwise perceived to be coherent (Bucholtz & Hall, 2005, p. 601). One reason this is important to the current research is because of the online context, which brings "new conditions" to the issue of authenticity (Leppänen *et al.*, 2015, p. 1). The idea that we can forge entirely new identities for ourselves online has largely been rejected (Herring, 1993, 2000, 2003; Tagg, 2015), and authenticity in online environments is increasingly being discussed in identity research (see e.g. Newon, 2011; Seargeant & Tagg, 2014; Page, 2014; Vásquez, 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). The authors pose that one of the reasons that authenticity is particularly important in identity management

online, is that authenticity is the anchor for social communication. This idea comes from the Gricean notion of conversational cooperation (Grice, 1975), i.e. that interlocutors generally cooperate by following certain rules about the exchange of information, and assume that their interlocutors are observing the same rules. Seargeant and Tagg (2014) argue that without the anchor of authenticity, there would be no baseline from which interlocutors can build and follow a set of shared interactional rules. The authors note that another factor to impact online authenticity is that the exact makeup of a social media user's audience may be unknown. In online environments like social networking sites, the collective readership of a status update, or tweet, for example, is likely made up of a diverse range of contacts from disparate areas of that user's life which become "flatten[ed]" into a single audience; a concept known as "context collapse" (Marwick & boyd, 2011, p. 122). The user must then deal with the tension of conveying an authentic identity to a number of different individuals and groups whose specific ideas of that user's identity are presumably varied (Ellison, Steinfeld & Lampe, 2011).

Another reason that authenticity is particularly important to the current research is that all three studies involve subjects for whom the successful projection of authentic identities determines the outcomes of their communicative goals. Indeed, it is hard to think of an interactive situation where this is not true, but in these particular contexts, the conversational goals are often quite narrow and unlawful, and the efforts to attain them often seem consciously strategic, even where the surface goal of interactants appears to be merely to engage in casual conversation. But Page (2014) argues that authenticity is a socially constructed product of discursive interaction dependent on audience perception. So it may be that online social media users have to exert extra effort in projecting their identities authentically, especially where the identity cues available offline are unavailable (Seargeant & Tagg, 2014). This seems particularly important regarding Studies 1 and 2, which involve participants performing false identities with the deliberate intention to deceive; as Seargeant and Tagg (2014) point out, expectations of authentic identity construction become most apparent when the sense of authenticity has been violated, as in situations involving online scamming or impersonation. But authenticity is also important to the individuals in Study 3 in their attempts to persuade existing communities of suspected offenders to grant them membership. Newon (2011) found authenticity to be an integral part of both community membership and individual expert status, and the same is likely true of offending communities. Vásquez (2014) notes that authenticity is particularly meaningful in acts of persuasion, especially in the ability to convince another of one's credentials and experience. So although deception is not central to interactions in Study 3, the individuals' memberships into various offending communities seems highly dependent on their ability to perform

authentically as CSA offenders, especially in an environment in which regular forum users are naturally suspicious of potential undercover law-enforcement personnel (MacLeod & Grant, 2017).

Partialness

Bucholtz and Hall's (2005) final principle states that identity construction may be partly deliberate, partly habitual and unconscious, partly through negotiation and contestation, partly through others' perceptions and representations, and partly a result of ideological processes and structures. This principle seeks to highlight the myriad ways in which "identity exceeds the individual self", and in doing this, accounts for its "constantly shifting" nature (p. 605). The authors observe that particular types of analysis will draw out particular aspects of the principle.

At the heart of the partialness principle lie issues of structure and agency frequently raised in identity research (see e.g. Bucholtz, 1999; Ahearn, 2001; Duranti, 2004; Bucholtz & Hall, 2004b; Tse & Hyland, 2008; Duff, 2012; Block, 2013). Block (2013) argues that the tension between structure and agency is under-explored, and gives one of the most in-depth treatments of the subject. For Block (2013), agency is often and adequately accounted for in identity research, and he exemplifies this with a number of fairly consistent definitions of the term, including the following from Duff (2012): "Agency... refers to people's ability to make choices, take control, self-regulate, and thereby pursue their goals as individuals leading, potentially, to personal or social transformation" (p. 413). Structure, Block argues, is less well defined, and while linguistic studies tend to acknowledge that agency is shaped and constrained by structure (as well as facilitated by it), most research - including Bucholtz and Hall's (2005) interactional model - pays far greater attention to agency and diminishes the importance of the relationship between the two. Bucholtz and Hall (2005) offer the partialness principle partly as a resolution to the problem of how far identity depends on agency and structure. Partialness, they argue, incorporates both, allowing us to observe identity as it is interactionally constructed within the constraints of wider social structures. Even so, Block (2013) argues that the empirical studies which provide the basis for the interactional framework lean more towards agentic than structural explanations for identity.

In drawing from such a wide breadth of research, the interactional model goes a long way in describing how identity is constructed through social interaction and is one of the widest-reaching in contemporary identity work. But as demonstrated, those who tend towards a

middle ground between essentialist and constructionist approaches take issue with its overwhelming focus on the constructed nature of identity.

A related debate in psychology is framed in terms of a relativism/realism dichotomy, where social constructionism is seen as implying the relativist stance that rejects the notion of universal 'facts' or 'truths', purporting instead that claims about the world are based on subjective perceptions relative to the cultural and historical contexts in which they are made (Luper, 2004). Psychologists have been increasingly interested in the constructionist view since the late 1980s (Parker, 1998), perhaps in part due to its "liberatory promise of [...] anti-essentialism" (Burr, 1998, p.21). As Burr (1998) notes, an approach that allows the consideration of a range of alternative constructions over a single universal reality implies the possibility of change, of reconstructing a social reality of our choosing. This view, however, is criticised on a number of grounds, one being its opposition to scientific empiricism on which traditional psychology is based (Parker, 1998). In other words, we cannot create united theories about the world and human behaviour and at the same time believe there are infinite alternative constructions of reality. Another concern is that the constructionist view threatens critical psychology by treating important social issues like inequality and oppression as mere ways of "interpreting the social text" (Burr, 1998, p.23). A realist approach, on the other hand, would seek to describe these issues as objective realities based on empirical evidence.

With these criticisms in mind, taking a purely constructionist approach to the current work would inevitably lead to some theoretical problems. First, only by retaining essentialist notions of the participants types can we differentiate the three main groups under discussion (i.e. offenders, victims and undercover police officers) and more accurately interpret their interactional motives, which seems particularly important in this forensic context in which manipulation and deceit are prominent linguistic goals. Second, if the research aims to explore ways of identifying individual offenders, it cannot assume that individuals can entirely reinvent every aspect of themselves at will; it must be able to account for some form of essentialised actor to identify.

In psychological discourse analysis, Sims-SchoutenWillig, Riley and Willig (2007) offer the concept of critical realism as a balanced approach between purely constructionist and realist positions. Critical realism, the authors explain, holds that social realities are constructed by language but also constrained by particular limitations and possibilities external to discourse. In this way, it describes meaning as being created through interaction while being impacted by non-discursive aspects of the interactional context. This approach is arguably more suited to the current research than the constructionist view alone.

Retaining essentialism

Block (2006; 2013) raises the concern that strongly constructionist perspectives like Bucholtz and Hall's tend to rely uncritically on the assumption that identity is fluid and performed. Others too have considered the place of more essentialist components in their explanations of identity (e.g. Bucholtz, 2003; Bucholtz & Hall, 2004a; Joseph, 2004; Sallabank, 2006; Grant & MacLeod, 2016, 2018). Joseph (2004), for example, explains that one of the pitfalls of rejecting essentialist views entirely is that doing away with essentialist identity categories risks losing a degree of analytical rigour. Instead, he argues it is best to retain these categories as important but not absolute, while keeping the focus on the individual aspect of constructionism. Joseph's (2004) argument for preserving some form of essentialism in identity theory is that identity construction necessarily depends "on a widespread belief in the essentialism of identities." (p. 90). Beliefs about essentialist identity categories are, Joseph argues, what shape and motivate identity creation, and it is therefore imperative that identity analysts leave room for both elements in their approaches (Joseph, 2004). Bucholtz (2003) echoes this, arguing that the notion of authenticity relies on essentialism, in that the authentic performance of group membership depends on essentialist perceptions of what constitutes a 'genuine' group member. Grant and MacLeod (2016) note that sociolinguistic authorship profiling depends on the assumption that social categories like gender, ethnicity and age correlate with particular linguistic categories. Bucholtz (2003) contends that essentialism facilitates the description of previously undescribed groups, and proposes a distinction between essentialism and *strategic essentialism*, the latter describing the deliberate alignment with particular social groups, which is dependent upon essentialist ideas about that group's identity. Additionally, Bucholtz (2003) argues that "for group members, essentialism promotes a shared identity, often in opposition to other, equally essentialized social groups" (p. 401). This is particularly relevant in relation to the data for Study 3, which exhibits individuals attempting to join various established communities. Following this view, these individuals must carry some essentialist notions (whether accurate or not) about the practices and characteristics of the groups they are wishing to join, as well as the identity practices involved in membership, in order to pursue their goal of constructing a common identity. Interestingly though, these ideas are not carried through to the interactional model.

Underpinning much of this discussion is the recognition that people cannot simply perform any identity position of their choice at any time. In linguistics, some of the earliest work acknowledging the potential constraints on individual's abilities to perform various identities came from Gumperz (1964) and Hymes (1974). Gumperz (1964) introduced the notion of social actors drawing from "verbal repertoires", which he defined as "the totality of linguistic

forms regularly employed in the course of socially significant interaction.” (p. 137). Gumperz asserted that social actors adopt roles or “statuses” (p. 139) in relation to others, and that the range of linguistic forms available to each interactant relates to the specific parameters of that interaction in terms of what is grammatically and socially appropriate, and in accordance with the interactants’ aims. Gumperz’s work (like Bucholtz and Hall’s (2005)), suggested that social identities are indexed by interactants’ choices of linguistic forms, but it also described the various constraints on interactant’s abilities to adopt particular roles. Hymes’ (1974) SPEAKING model, too, sought to describe the contextual details of an interaction that can impact the language used by interactants (i.e. Setting/Scene, Participants, Ends, Act sequence, Key, Instrumentalities, Norms). The work of both Gumperz (1964) and Hymes (1974) importantly acknowledged that individuals are not entirely free to speak and act in any way they choose in social situations, i.e. their potential for identity performance is limited. Such constraints on identity performance are not accounted for by the interactional model.

A more recent example of this perspective comes from Herring (2007), who created a system for classifying computer-mediated communication (CMC). Herring’s system is derived from a review of CMC literature and demonstrates how agency in CMC is constrained by various technological and situational factors. Technological factors include (among others) synchronicity (whether users are required to be online at the same time), persistence of transcript (the length of time that messages remain on a recipient’s screen), available channels of communication (text, video, audio, etc.), and anonymity and privacy functions (Herring, 2007). Situational factors include (among others) participant structure (one-to-one vs. one-to-many), participant characteristics (e.g. demographics, computer proficiency, role, status, etc.), purpose of communication, topic or theme, activity type (e.g. job announcement, informal exchange, virtual sex, etc.) and norms which indicate behavioural expectations. Importantly, Herring (2007) points out that each of the factors has been empirically observed to impact communication *in some cases*, and they are not to be viewed deterministically. She makes clear that both lists are open-ended and are ordered arbitrarily with the assumption that different CMC contexts will see different factors rise to prominence. Herring’s (2007) system, then, views speaker agency as necessarily constrained by various technical and social structures. But while the scheme provides a useful framework for describing CMC contexts in detail, it tends to focus on fixed categories and structure over agency to an extent which challenges the concept of identity as a fluid performance.

Approaches like those of Gumperz (1964), Hymes (1974) and Herring (2007) have been criticised for being overly deterministic. This was raised in particular by Johnstone (1996), whose seminal work describing the linguistic individual argued that linguistic systems should

not be seen as the cause of linguistic behaviour, but as resources for individual expression. She showed that individuals are able to “create distinct voices” (p. 28) by pushing or breaking conventional boundaries, demonstrating that knowledge of grammatical and social rules (or constraints) can be used strategically in the performance of identity. Johnstone developed these ideas further particularly in her (e.g. 2006, 2011) work on Pittsburghese, where she introduces to sociolinguistics (borrowing from linguistic anthropology) the concept of “enregisterment”, i.e. “processes and practices whereby performable signs become recognized (and regrouped) as belonging to distinct, differentially valorized semiotic registers by a population.” (Agha, 2007, p. 81). In a review of past and current approaches to sociolinguistic research (often recognised as occurring in three distinct waves), Eckert (2012) hails Johnstone’s contextualisation of linguistic variation in terms of enregisterment as a particularly important contribution to the third wave. First-wave variation studies, (e.g. Labov, 1966; Trudgill, 1974) Eckert (2012) explains, were largely based on survey data and tended to focus on drawing links between linguistic forms and macrosocial categories like age, ethnicity and socio-economic status. Second-wave studies (e.g. Milroy, 1980; Rickford, 1986) built on these ideas by introducing ethnographic methods to explore relationships between the same broad categories and the local categories within (e.g. Milroy’s (1980) study on variation across individuals’ network types in working class Belfast). Importantly, much of this second wave of research served to illustrate the use of vernacular forms as both a result of speakers’ own agency, and a way of expressing local or class identities (Eckert, 2012). As Eckert (2012) notes, third-wave sociolinguistics tends not to focus on static identity categories or view variation as markers of these categories; rather, it sees variation as constructing as well as reflecting social meaning, and most importantly, it centralises the linguistic and stylistic practice by which meaning is made (e.g. Bucholtz and Hall, 2005; Eckert, 2000; Johnstone, 2011). The current work primarily aims to explore linguistic expressions of macro and micro identities, and, in particular, show how certain language choices construct particular social meanings in a range of specific interactive contexts. In this sense, it seems to sit comfortably within this third-wave of sociolinguistic research.

The dichotomy of identity as innate and internal versus socially constructed remains a central issue. But where researchers traditionally focused on one or other of these positions, more recent work tends to recognise the two concepts as extreme ends of a spectrum, and see identity as involving a synthesis of the individual and the social; as Gumperz and Cook-Gumperz (2007) put it, “...the two are intertwined and it is the continuity of the person that we work to maintain through acts of speaking.” (p. 478). It seems clear that the current research would benefit from taking a more balanced approach to identity investigation, one which enables the consideration of identity as fluid and performed through interaction, as well as

impacted by various contextual factors associated with each individual interaction type. There are two models in particular which lend themselves to the current research in this way.

Identity in the current research

The resource-constraint model

Grant and MacLeod (2018) bring together the two positions in an explanatory framework they call the resource-constraint model. This model draws from the work of Johnstone (1996; 2009) and Kredens (2002; 2003) on the linguistic individual, and sees each contextual factor that can influence an individual's language as "simultaneously operating as both a constraint on, and a resource for, their identity performance." (p. 12). The authors identify four types of resource which individuals can draw from to perform their identities. These include sociolinguistic history, physicality, interactional context and interactants themselves.

An individual's sociolinguistic history comprises all their past experiences and interactions, thus accounting for family history as well as "geographical, educational, and professional histories", all of which act "as an influence on one's personal and unique biography" (Grant & MacLeod, 2018, p. 87). Physical resources include aspects of the individual's physical appearance which may be more or less within their control. This resource type also includes the physicality of the brain, which, the authors note, impacts receptive and productive linguistic skills including the function of memory, which is critical to the accessibility of one's own sociolinguistic history. This is supported by Sokol, Conroy and Weingartner (2017), who found that individuals with high memory recall abilities tend to exhibit a stronger sense of "continuous identity", which they define as "a sense of persistent identity wherein the present self is seen as overlapping with the past and future selves" (p. 84). Contextual resources form a large category, and Grant and MacLeod (2018) seem to refer here to the specific resources offered by the type of interaction in terms of its genre or register, and draw from Gumperz's (1964) ideas regarding grammatical and social constraints on different contexts. The final resource type accounts for other individual interactants and audiences, and draws from earlier work in accommodation theory (Giles, Coupland & Coupland, 1991) and audience design (Bell, 1984), which demonstrates the effects of our interlocutors on our linguistic production. Also included in this category are the communities of practice (CsoP) inhabited by individuals, which are thought to be particularly rich resources because they contribute to an individual not just domain knowledge and experience of particular practices but also a sense of community identity (Grant & MacLeod, 2018, *in preparation*).

Grant and MacLeod (2018) demonstrate the utility of the resource-constraint model in forensic authorship analysis but also in OCSA contexts such as sociolinguistic profiling and online identity assumption, observing how online identities are performed by offenders, children, and undercover police officers (UCs). One example of a situational constraint on identity performance from Grant and MacLeod's data is that UCs attempting to assume the identity of an OCSA offender are hampered by the limits of their own sociohistorical resource, and must spend at least some time learning about the targeted individual in order to acquire the necessary resource for the successful assumption of that target's identity. The authors note that their list of resource types is not exhaustive, but that full accounts of online identity must include at least these four. Most importantly, each resource type has the potential to both enable and constrain identity performances.

A final point regarding the resource-constraint model is that it does not on its own account for the persistence of identity across interactional moments, i.e. it does not explain how an individual fluidly constructs different identity positions from moment to moment while retaining some more continuous personal identity (Grant & MacLeod, 2018). Of gender specifically, Butler (1990) and Cameron (1997) hold that it is through repeated performances of a set of acts in accordance with particular cultural and historical norms that gender becomes reified and eventually congeals "to produce the appearance of substance" (Butler, 1990, p. 33). Similarly, Gumperz and Cook-Gumperz (2007) propose that it is our production of "internally consistent narratives about ourselves and our actions" through which we present coherent and stable social selves across diverse social contexts." (p. 478). Grant and MacLeod's (2018) response to the problem of identity persistence is to distinguish between *dynamic* resources, identified as contextual resources subject to change between moments of interaction, and *stable* resources, which are less changeable, such as an individual's sociolinguistic history and physicality of the brain. These more stable resources are not considered entirely static, however; sociolinguistic histories are thought to develop over time, but can also be reshaped more rapidly through new experiences and explicit learning. Physicality of the brain is also changeable, for example cognitive ability is affected as children's brains grow, and in extreme cases we can consider the effects of traumatic brain injuries on individuals' linguistic capabilities and subsequent available identities (Grant & MacLeod, 2018). But ultimately our physicality and sociolinguistic histories provide our most stable resources, as knowledge and past experiences remain available to us as we move across different interactional moments and communicative modes, enabling us to construct "a set of habitual identities" (Grant & MacLeod, 2018, p. 90) which we may perform repeatedly over time. Indeed, the authors demonstrate that habitual identities may be difficult to shed, leaving individuals vulnerable to "identity leakage" (p. 92). This can be a particular

problem for UCs tasked with assuming others' identities online; MacLeod and Grant (2017) noticed, for example, that some UCs attempting to pose as victims found it difficult to suppress certain aspects of their institutional identities, using features like "extended runs of interrogatives" which were "characteristic of investigative interviews" (p. 168) .

In recognising the equal capacity of various resource types to enable and constrain individuals' language, the resource-constraint model explicitly accounts for both agency and structure in identity performance, and for persistence of identity across interactional moments. This model arguably brings us a long way from purely essentialist or constructionist approaches in explaining how identity is linguistically performed.

The hierarchy of identities model

The second framework useful to the current research is Omoniyi's (2006; 2011) hierarchy of identities (Hol) model which has two broad aims. First, it seeks to explain the process of identity construction as the management and negotiation of a multitude of identities. Second, it presents the concept of *moments* as a useful analytical focus for identity research (Omoniyi, 2006). The basis for this concept is that "all social actions are separable into moments which make up the stretch of time it takes to accomplish them." (Omoniyi, 2006, p. 12). The concept draws on groundwork like Dickerson's (1996), which suggested identity can be utterance-based, and Pennycook's (2003), which discussed identities as performed in the use of single words. Moments are defined by Omoniyi (2006) as "points in time in performance and perception at which verbal and non-verbal communicative codes [...] are deployed to flag up an image of self or perspectives of it." (p. 21).

The Hol model poses that in each moment, individuals have multiple competing and/or complementary identities, where identities are understood as the various roles that people take on every day (as in Gumperz 1964; Joseph, 2004; Moreno & Sierra, 2017). As the author puts it, "An individual's various identity options are co-present at all times but each of those options is allocated a position on a hierarchy based on the degree of salience it claims in a moment of identification." (Omoniyi, 2006, p.19). The degree of salience, he argues, varies from moment to moment as interactions unfold, and as such our multiple identities too are forever shifting on the hierarchy. The most salient at any moment sits atop the hierarchy and is "foregrounded through talk" (p. 20). Interlocutors choose which identities are most salient based on what seems most appropriate at that moment in relation to the interactional context, relationships with other participants, and their own dispositions (Omoniyi, 2006).

In its emphasis on the appropriateness of available identity options, the Hol model seems to focus more on the constraints on individuals' identity performance rather than their agency in interactions and is less balanced than the resource-constraint model in this way. Additionally, it is unclear whether the available identity options constitute a finite set, or how changeable they might be; these issues are addressed explicitly and more satisfactorily by the resource-constraint model. Although the Hol model is perhaps less well equipped to describe *how* identities are performed, there is a more "materialistic" (Omoniyi, 2006, p. 20) version of the model, which brings into focus the *motivations* behind an individual's identity performance and choice of identity positions. Where the original model explains individuals' co-present identity choices as based on decisions of appropriateness in terms of context and relationship with others in the interaction, the materialistic version sees identities as selected on the basis of "the most appropriate or lucrative" in terms of pursuing communicative goals of the interactants (Omoniyi, 2006, p. 20). In this version, the most salient identity option that sits atop the hierarchy is that deemed best suited to achieving the individual's interactional goals in any given moment, and other, less relevant or useful identity options fall behind until they become useful once more. This goal-driven perspective is not uncommon; Gumperz (1964) recognised that personal aims are an influencing factor on the interactional roles individuals assume, and Moreno and Sierra (2017) purport that our various identities "alternate or fluctuate very quickly depending on the demands of the moment" (p. 150).

While certain parts of the Hol model do not fit the stance taken in the current work, three elements are of particular use in the current research. Firstly, the concept of moments arguably allows the analyst some flexibility in determining where and for how long particular identities are performed in a given interaction, rather than assigning them to strict bounded units like words and utterances. Secondly, it provides a structure for conceiving of repertoires of identities, which is not addressed by the interactional model or the resource-constraint model. Finally, it takes us further towards understanding the potential motivations behind identity performance; its privileging of interactants' communicative goals makes the framework particularly useful in a project which seeks to explore how identity can be performed through rhetorical moves.

Conclusion

This chapter has provided an overview of some of the ongoing issues in identity research, most of which stem from the tensions between essentialist and constructionist approaches. Bucholtz and Hall's (2005) interactional model was found useful in explaining some aspects of identity but it also seems almost exclusively constructionist and thus falls short of

accounting for the possible constraints on identity performance, the persistence of identity over time, or motivations for the performance of particular roles over others. In relation to the current research, then, it seems beneficial to take the interactional model as a starting point for understanding identity as constructed and performed and supplement it with elements from Grant and MacLeod's (2018) resource-constraint model and Omoniyi's (2006) Hol model. These three models, then, collectively underpin the theoretical stance of the current work; in their combination, the thesis seeks to take a balanced approach to exploring identity performance which draws on both essentialist and constructionist perspectives.

It is oft-noted that one contextual factor influencing identity performance is the communicative goals of interactants (e.g. Gumperz, 1964; Omoniyi, 2006; Duff, 2012; Moreno & Sierra, 2017), but the relationship and indexical links between the two remain to be explored in detail. Swales' (1981, 1990) move analysis therefore seems an interesting exploratory tool for investigating the performance of identity as done through the expression of communicative goals across moments of interaction and across interaction types, and exploring how individuals might strategically perform various facets of identity in the pursuit of specific interactional goals. This seems especially important in OCSA contexts where interactional goals can be unlawful and/or abusive. The following chapter outlines Swales' (1981, 1990) move analysis framework and discusses its application to identity investigation.

Chapter 4: Move analysis

Move analysis is not traditionally applied in investigations of identity. This chapter demonstrates the rationale for selecting this framework, beginning with an overview of move analysis including some theoretical and practical difficulties associated with the framework both in general and in relation to the current research. Following this is a brief examination of some of its applications, and finally the chapter presents a short theoretical discussion on the application of move analysis as a tool for identity investigation in the immediate research context.

Move analysis

Swales' move analysis (1981, 1990) framework was developed to determine the conventional discourse structures of genres. This is done by defining and describing the rhetorical moves that typically constitute the texts in a given genre, as well as individual steps which realise those moves (Upton & Cohen, 2009). Moves, according to Swales (2004, p. 228-229), are "discoursal or rhetorical units performing coherent communicative functions in texts", whereas steps are lower-level discoursal units, which work, often in combination, to achieve the overall purpose of the move(s) (Biber, Connor & Upton, 2007). Moves and steps represent text producers' rhetorical goals, and there may be great variation in their length, order, and linguistic realisations (Swales, 2004; Biber, Connor & Upton, 2007; Tardy, 2011; Solin, 2011; Moreno & Swales, 2018). Variations of these types are thought to reflect specific intentions of the text producer, and to account for this flexibility and choice, some (e.g. Bhatia, 1993; Chiang & Grant, 2017; the current work) prefer the term *strategy* to *step* (Biber, Connor & Upton, 2007). Moves commonly identified across a group of texts are considered *obligatory* to the genre in question, while those less frequent are considered *optional* (Biber, Connor & Upton, 2007; Tardy, 2011; Solin, 2011).

Move analysis was originally developed in the interest of describing academic genres for pedagogical purposes (Moreno & Swales, 2018), and is most commonly used to examine research articles. The earliest example is Swales' Create A Research Space (CARS) model depicting the moves and steps of research article introductions (1990, p. 141).

Moves	Steps
1. Establishing research field	1. asserting centrality of the topic, or 2. stating current knowledge, or 3. ascribing key characteristics
2. Summarising previous research	1. using strong author-orientation and/or 2. using weak author-orientation and/or 3. using subject orientation
3. Preparing for present research	1. indicating research gap(s), or 2. raising questions about previous research, or 3. extending finding(s)
4. Introducing present research	1. stating purpose of present research, or 2. outlining present research

Table 4.1. Swales' (1981) move structure of research article introductions (adapted from Bhatia, 1993).

It is easy to see how this method of defining and describing the typical structure of research article introductions may be helpful for anyone learning to use the genre. The framework has also been used to explore other academic genres, such as student laboratory reports (Parkinson, 2017) and conference abstracts (Povolná, 2016). One issue which has received particular interest is cross-cultural differences in academic genre use (see e.g. Loi *et al.*, 2016; Wannaruk & Amnuai, 2016; Cavalieri & Preite, 2017). But since its early inception, move analysis has proved useful in describing a huge range of other discourse types, for example in business and marketing (e.g. Nathan, 2016; Campbell & Naidoo, 2017; Ngai & Singh, 2017) and web-based genres such as online product reviews (Skalicky, 2013), LinkedIn profile summaries (Bremner & Phung, 2015), and crowdfunding texts (Liu & Deng, 2016).

While move analysis arose from genre theory (for an overview of various genre traditions see Hyon, 1996) it was selected for the current research due to its pragmatic nature. Its privileging of the actions and goals performed through language makes it well-suited to the task of investigating how communicative goals are approached by OCSA offenders and other interactional participants, and provides an interesting analytical unit with which to explore identity performance.

Difficulties with move analysis

Applying the framework, however, can be problematic, theoretically and methodologically. One theoretical problem relates to one of Sinclair and Coulthard's (1975) criteria for language description systems, which dictates that non-finite classification systems run the risk of

“creating the illusion of classification” (p. 15). This raises concerns for move analysis because, as Biber, Connor and Upton (2007) explain, “There is no a priori limit on the number of goals in a text or genre...” (p. 249). However, this aspect of move analysis is often hailed as an advantage, firstly as it enables rhetorical goals to be described in fine-grained detail, and secondly because it allows communicative goals to emerge from the data, reducing researcher bias (Biber, Connor & Upton, 2007). It may be, however, that certain genres indeed encompass a finite set of moves, while other genres might be more fluid and less stable. Internet genres, for example, are said to be more dynamic, and less bound by rigid conventions than more traditional, offline genres (Erickson, 2000; Giltrow & Stein, 2009). Regarding the current research, it seems unrealistic to expect a resultant move set that is capable of accounting for all linguistic strategies involved in the three OCSA contexts, given the limited data available, our insufficient understanding of the complexity of these processes, and the fact that OCSA behaviours have already been shown to change over time (Williams, Elliott, & Beech, 2013; Black *et al.*, 2015), and will likely continue evolving.

Another problem concerns the troublesome notion of *communicative function*, which lies at the heart of move and strategy identification. Other common terms for this include *rhetorical function*, *communicative purpose* and *communicative intention* (see e.g. Bhatia, 1993; Motta-Roth, 1998; Biber, Connor & Upton, 2007; Solin, 2011; Tardy, 2011), but these terms indicate (perhaps subtly) different meanings and yet they tend to be used interchangeably without discussion (Bhatia, 1996; Askehave & Swales, 2001). The current work seeks to approach moves from a linguistic rather than cognitive perspective in the sense that it privileges the functions of the language in question rather than the interactants’ communicative intentions, and therefore adopts the term *function* over *purpose* and *intent*. Although communicative function is generally thought to be a stable measure (Bhatia, 1993; Fairclough, 2003; Solin, 2011), exactly *how* analysts come to define them is rarely explicated (Moreno & Swales, 2018). This is not to say that individual moves themselves are not described in detail (see e.g. Kanoksilapatham, 2007; Upton & Cohen, 2009; Cotos, Huffman & Link, 2015). The problem of the vague notion of communicative function is generally articulated in relation to genre membership, which is not a focus of the immediate research (but see Askehave and Swales (2001) for a reconceptualisation of the move analysis procedure in relation to attributing texts to genres). Having said this, the determination and conveyance of communicative functions remains an important issue to any researcher seeking to determine rhetorical goals in a text. As yet there appear to be no clear solutions as to the appropriate criteria used to derive and define moves. In response to this, an approach based on speech act theory is described in Pilot Study 1 in the following chapter.

The problem of communicative function leads to other more practical problems with the application of move analysis. Probably the most in-depth treatment of the methodology to date comes from Moreno and Swales (2018) who conducted a large-scale move analysis of Discussion sections from 32 pairs of empirical research articles written in Castilian Spanish and English. A team of analysts coded the texts, and key aims were to pinpoint difficulties in developing move/step coding schemes and consider solutions for improving the reliability and validity of these schemes.

Some of the major challenges Moreno and Swales report concern the segmentation of texts, determination of move boundaries, and selection of the minimal functional units best suited for these tasks. Determining move boundaries is a widely noted issue in move analysis as distinctions between communicative functions are often nuanced and difficult to discriminate (Bhatia, 1993). In response to this problem, there is some debate as to whether discourse structures are best conducted using top-down or bottom up approaches (Moreno & Swales, 2018). The top-down approach involves identifying the overarching functional categories (i.e. moves) within a group of texts, before applying this framework to the analysis of the whole text corpus (Biber, Connor & Upton, 2007). The bottom-up approach conversely involves dispensing with moves and instead using linguistic criteria to determine discrete discursual units, and once defined, these linguistic categories are then described in terms of their communicative functions (Biber, Connor & Upton, 2007). This approach enables computational analysis (see Anthony, 2003), whereas top-down approaches invariably involve analyst decision-making and manual coding, which is highly time-consuming and often impractical for use with large corpora (Baker, 2006; Biber, Connor & Upton, 2007; Tardy, 2011; Moreno & Swales, 2018). However, in a comparative analysis of 400 biochemistry research articles using both methods, Biber, Connor & Upton (2007) found a bottom-up approach called Vocabulary-Based Discourse Units (VBDU) (which aims to segment the texts into groups of “topically coherent” words (Biber, Connor & Upton, 2007, p. 156)) resulted in six identified discourse types across the corpus, whereas the top-down approach led to the identification of 15 moves broken down into 29 steps and seven moves which incorporated no steps, totalling 36 discourse types of discrete function. They reasonably concluded that the functional top-down method resulted in a far more detailed analysis and allowed for a finer-grained description of the discourse than the bottom-up approach.

Moreno and Swales (2018) point out that many studies involve “a combination of bottom-up search for lexical or syntactic signals and a top-down close reading of the text for topic breaks or shifts in content.” (p. 41). The authors emphasise their own preference for

functional over formal criteria for determining moves, noting that some studies rely too heavily on arbitrary grammatical units like sentences or paragraphs to determine move and step boundaries. However, they also found that the analysts in their study seemed “naturally driven” (p. 57) to start with a bottom-up approach by closely examining the lexis in text fragments in order to identify specific topics. Because of this, the authors argue for the step (or strategy) as the primary unit of analysis, suggesting these then group together to form higher-level moves. A step is defined in their work as “a text fragment containing ‘new propositional meaning’ from which a specific communicative function can be inferred...” (p. 49, original emphasis). Similar to this approach, Chiang and Grant’s (2017) move analysis of chatroom grooming transcripts involved an initial identification of communicative functions, which were only identified as either broad-purpose moves or lower-level strategies once a significant amount of data had been coded.

Because move analysis relies on analysts’ interpretations of communicative functions, it is inherently subjective, so another problem concerns the reliable labelling and categorisation of moves and strategies (Moreno & Swales, 2018). This is often combated with inter-rater reliability testing by percentage agreement between two or more coders. While important for improving the robustness and reliability of move analyses, these methods tend to involve degrees of consistency in analysts’ coding where coders work from a pre-determined move set, negating the issue of whether similar moves would be identified in texts independently by separate coders (a response to this is presented in Pilot Study 2 in the following chapter). Moreno and Swales’ (2018) approach to testing and improving validity involved interviewing text producers regarding the coding scheme created by the analysts, and they found that generally the text producers agreed with analysts’ labels and functional descriptions, although these discussions did lead to some fine-tuning of their coding scheme.

The problems noted thus far are fairly common in move analysis work, but each individual application is likely to present its own set of difficulties. CMC data in particular is thought to pose methodological problems due to the diversity of language online (Bolander & Locher, 2014). Regarding the current research, two particular issues arise, the first concerning the sensitive and often clandestine nature of forensic texts, and the second concerning the dialogicity of the texts in question.

One forensic text type that has been explored from a genre-perspective is the suicide note (Shapero, 2011; Samraj & Gawron, 2015). One of the key aspects of suicide notes is that they can be considered what Swales (1996, p. 46) termed an *occluded* genre, in that they are “written for specific individual or small-group audiences” and “typically hidden [...] from

the public gaze” (Shapero, 2011; Samraj & Gawron, 2015). Samraj and Gawron (2015) explain that this aspect of suicide notes, along with other properties such as the absence of a discernible discourse community, variation in note length, and a lack of obligatory or fixed moves, makes the application of move analysis particularly problematic. In an attempt to establish suicide notes as a genre, the authors offer a reconceptualisation of genre membership criteria by discounting the notion of obligatory and optional moves, and instead suggest that genre membership may be recognised by the textual presence of one or more of a set of “core” moves, while other, less frequent moves are considered “minor” (Samraj & Gawron, 2015, p. 95). In doing this, Samraj and Gawron make a good case for extending the concept of genre to account for discourse types which appear to have no obligatory or fixed moves, and no obvious community of users.

While the current research is primarily interested in issues of identity rather than genre, the occluded genre is a useful concept in relation to the texts in question, which are created privately, and in many cases, the subjects of which have gone to great lengths to ensure they are obscured from public view. As such, obligatory and optional moves are not considered useful constructions in relation to the current work, and following Samraj and Gawron (2015) to some degree, moves are considered instead in terms of their typicality regarding an individual or interaction type (as in Studies 1 and 2) or their ‘coreness’ to the communicative purpose of an interaction type (as in Study 3). Determining how conventional particular moves are across individuals and texts can importantly support the identification of individual variation within and across the three datasets in question (Chiang & Grant, 2017), enabling the exploration of potentially habitual move choices, or perhaps move repertoires, and how these interact with identity performance.

The second issue raised by the current research context concerns the re-application of move analysis, which was developed to examine monologic texts, to texts of varying dialogicity. This issue becomes most pertinent regarding Studies 1 and 2 in their depiction of one-to-one IM interactions. The forum posts in Study 3, however, are largely written to active, responsive audiences and serve to contribute to and facilitate group discussion, which makes them interactional, and to some degree, dialogic, despite their not necessarily exhibiting the same turn-taking structures observed in IM conversations. Indeed, as Gumperz and Cook-Gumperz (2007) note, a central assumption in interactional sociolinguistics is that “all communication is dialogically grounded in that it involves active collaboration among two or more individuals.” (p. 483).

A small number of studies have shown that move analysis can be usefully applied to dialogic text (e.g. Boon, 2013, 2015; Chiang & Grant, 2017; Macagno & Bigi, 2017) including spoken genres (see Lee, 2016). Macagno and Bigi (2017), for example, argue for the ‘dialogue move’ as a basic unit for dialogue analysis. Moving away from genre analysis, the authors’ concept instead comes from argumentation theory on “Types of dialogue” (p.149). The dialogue move is defined in this context as a “discourse segment” that “fulfill[s] certain functions with respect to the overall discourse” and whose utterances “serve particular roles with respect to that segment” (Grosz & Sidner, 1986, p.177), much similar to the rhetorical moves and steps/strategies described by Swales (1981, 1990). Macagno and Bigi extend this idea though to account also for the joint goals which are collaboratively achieved by interlocutors, which they term ‘global goals’. Dialogues, then, for Macagno and Bigi are conceptualised as representations of both individual and global goals of participants. The authors analyse transcripts from a range of contexts such as doctor-patient consultations, classroom debates and a courtroom cross-examination, demonstrating that dialogues are usefully described in terms of pragmatic structure, which for them reflects the “complex net of dialogical goals” of participants (Macagno & Bigi 2017, p. 148). Ultimately, they provide a compelling case for the dialogue move as providing an important middle-ground for interpreting linguistic interaction, falling somewhere between general contextual descriptions and very detailed syntactical analyses (Macagno & Bigi, 2017). Boon (2013, 2015) also demonstrated the value of moves in interpreting dialogue, showing through a move analysis of IM interactions between post-graduate students and their tutor the benefits of online collaborative spaces for students and researchers. Chiang and Grant’s (2017) work too supports the use of moves and strategies as analytical units for examining dialogue, particularly in the context of OCSA interactions. They demonstrated that identifying moves can help to determine structural patterns and variation between individuals’ grooming processes. The authors also point out that dialogic texts necessarily involve a respondent, which monologic texts do not, meaning that the researcher has extra contextual information regarding how an utterance is functioning as a part of the broader interaction, in the form of the other interactants’ responses. However, Chiang and Grant (2017) also note a related issue; that single utterances may perform multiple communicative functions at the same time, and identical utterances may serve contrasting functions in different contexts, and they assert, therefore, that move analysis necessarily involves a certain degree of linguistic intuition.

This small body of work has shown not only that move analysis can be applied to dialogue, but that doing so can lead to useful and important findings regarding how particular interaction types and participants’ communicative goals might be conceptualised and

described. The problems of communicative function and subjectivity remain common to move analysis, however, and in response, experimental approaches are presented in the next chapter.

Moves and identity

This research posits that moves are a useful functional unit of language with which to explore identity performance. We have already seen in Chapter 3 that identities can be expressed on a range of levels of linguistic production, through micro-level phonological features, to syntactical and lexical features, up to discourse-level features (see, e.g. Bucholtz, 1999; Pennycook, 2003; Benwell & Stokoe, 2006; Mendoza-Denton, 2011; Newon, 2011). Benwell and Stokoe (2006) in fact provide comparative accounts of identity in institutional talk from either end of the spectrum, contrasting ethnomethodological and conversation analysis (CA) approaches which foreground micro-features of linguistic identity performance, with a critical discourse analysis (CDA) approach which focuses on the “macro-social forces” reflected in social interaction (p. 87). Little research, however, focuses on identity as performed around the middle levels of linguistic production, and that which does, tends to focus on academic authorial identity positions (e.g. Matsuda & Tardy, 2007; Fazilatfar & Naseri, 2014). Table 4.2 illustrates the proposed position of moves and strategies on Bucholtz’s (1999) hierarchy of linguistic levels of identity production.


	Linguistic level
Macro	Discourse
	Move
	Strategy/step
<div style="text-align: center;">  </div>	Lexicon
	Syntax
	Phonology
Micro	

Table 4.2. Moves and strategies as ranked on scale of linguistic levels of identity production (adapted from Bucholtz, 1999, p. 212).

One study exploring the relationship between moves and identity comes from Fazilatfar and Naseri (2014), who conducted a move analysis of 30 research articles and explored the identified moves in relation to Hyland’s (2002) framework of five authorial identity categories.

The authors found that the performance of various types of authorial identity were necessary for the effectiveness of particular rhetorical moves. While interesting, this study is narrowly concerned with the singular identity position of the author, and deductively presumes the presence of pre-defined identity categories instead of allowing these to emerge from the articles. But as Gumperz (1964) wrote: "In the course of any one encounter mutual relationships are constantly defined and redefined in accordance with the speaker's ultimate aim" (p. 140), and Fazilatfar and Naseri's (2014) work shows how we can start to think about identity performance as assisting the successful pursuit of communicative goals, and how communicative goals might drive identity construction. This is also an aim of the current work, although here the relationship between rhetorical moves and identity is explored more inductively, in the hope of identifying links between specific communicative goals and identity positions. This is where Swales' rhetorical moves, in their representation of communicative goals, become a useful unit for analytical focus in relation to identity performance. The observation that moves and strategies vary in length, order and linguistic realisations, even within tightly constrained genres like academic research papers, supports the use of move analysis as a tool for identity investigation, because arguably, where there is the potential for variation, there exists potential for identity performance. The current work therefore examines how move frequency and structures observed across the three datasets might be used to index different identity positions of the individuals involved in each interaction type.

Conclusion

This chapter has demonstrated some of the more relevant applications of move analysis and discussed some of the advantages of the framework, as well as outlining its potential application to identity investigation. However, some key difficulties were also noted, both generally, and in relation to the immediate research contexts. But even with useful recent developments from Samraj and Gawron (2015), Boon (2015) and Moreno and Swales (2018) among others, two important and seemingly unresolved issues include the vagueness of the concept of communicative function, and the question of whether two coders would derive the same moves from a text independently. The following chapter explores these issues through two experimental analyses and describes the general methods employed in the three studies.

Chapter 5: Methods

Introduction

This thesis aims to explore identity performance in three different OCSA interaction types and consider how this performance relates to participants' interactional goals using Swales' (1981,1990) move analysis. This chapter outlines the general methods used in the three studies (each individual study chapter presents a more detailed methods section specific to the respective research contexts, including data selection decisions, dataset and participants descriptions, reliability tests and study limitations).

The chapter begins with a general description of the data used in each study, including the collection process and participants. Following this, two pilot studies are presented in an effort to address the problems of communicative function and subjectivity in move analysis as discussed in Chapter 4. The analytical procedure carried out across the data for the three studies is then described, and an example move-map (i.e. a visual representation of the rhetorical structure of an interaction (see Chiang & Grant, 2017) is presented. Ethical considerations and concluding remarks are given.

Data

The data for the three studies (as well as the two pilot studies) was obtained through a UK police force under a data sharing agreement (see appendix B, volume 1 or appendix 1, volume 2 for a de-anonymised version). Table 5.1 displays the dataset characteristics for each study.

	Interaction medium	Participant structure	Data amount/type
Study 1	Instant messaging	Offender - victims	20 transcripts
Study 2	Instant messaging	(Suspected) offenders - UCs	25 transcripts
Study 3	Forum posts	(Suspected) offenders - (suspected) offenders	71 forum posts

Table 5.1. Data characteristics for Studies 1, 2 and 3.

Study 1 concerns 20 transcripts of IM interactions between one convicted OCSA offender and 20 victims (one offender-victim interaction per transcript). Study 2 looks at 25 transcripts depicting IM interactions between three UCs and 25 suspected OCSA offenders, in which the

UCs are themselves posing as OCSA offenders. Both of these datasets were provided directly by the police force in question. The third and final dataset comprises 71 forum posts written by individuals seeking to join existing online CSA-focused communities. These posts come from various Tor fora and were accessed using a web-scraping tool known as Avatar, for which access was arranged with the developer through the same UK police force. For detailed descriptions of data and selection processes, see the individual studies presented in Chapters 6-8.

The final analytical procedure applied to these datasets was influenced by findings from two pilot studies conducted to address some of the previously noted difficulties with move analysis, so these studies are presented before the procedure is described. In all studies, illustrative example utterances are taken verbatim from the texts and where clarifications or extra information has been added, this is indicated by square brackets [].

Pilot study 1: moves, speech acts and communicative function

Chiang and Grant (2017) showed that coding OCSA transcripts for rhetorical moves can be extremely fruitful, allowing us to examine in depth the linguistic strategies used by OCSA offenders, as well as the broader rhetorical structures that grooming conversations take. But as demonstrated in the previous chapter, applying move analysis to OCSA texts can be problematic, partly due to the troublesome notion of communicative function. It seems clear that the process of identifying and defining moves could benefit from some kind of formalisation in order to improve the robustness and reliability of moves-sets and structures. As genre theory seems to offer little in this sense, this pilot study turns to the pragmatic approach of speech act theory (Austin, 1962; Searle, 1969), which centralises issues of meaning, context and communicative function, to see how this might aid the process of move derivation.

Similar to moves, speech acts enable us to describe the actions performed by language (Austin, 1962; Searle, 1969), but beyond this, the relationship between the two is unclear. According to Searle (1965), speech acts (e.g. offers, promises, demands, etc.) are the basic minimal unit of communication. Moves, conversely, are typically described as higher-level rhetorical units “whose linguistic realisations may be variable in length and in other ways” (Moreno & Swales, 2018, p.40) and may consist of multiple smaller units (*strategies* or *steps*) which, combined, realise the move. It follows then that while the two unit types share the goal of describing the actions or functions of language, speech acts may do this at a more fine-grained level than moves. Moreno and Swales (2018) point out that in move

analysis, the main difference between moves and steps is that the former are described in more general terms, and the latter more specific. In this sense, it may be that speech acts sit at the same analytical level as strategies (or steps). Establishing this, however, is likely to be difficult; there is little guidance in the literature regarding methods of sorting identified communicative functions into higher level moves and lower level strategies, and so differentiating between moves and speech acts may also be problematic. This part of the process likely relies on the analyst's subjective interpretation and these choices will probably vary depending on a range of factors like the size and genre of the dataset in question, the specific research goals of the study and the desired level of analytical detail. The primary purpose of this pilot study is therefore to explore the potential relationship between moves and speech acts, and whether moves might be usefully pinpointed to particular sets of speech acts, and thus particular sets of verbs which realise those speech acts. If this is the case, it may be possible to employ speech act theory to bolster the process of move identification and description. The data used in this study concerns a single randomly selected transcript (see appendix 2 in Volume 2) from the large portion of those discounted from Study 1.

The study begins by considering various approaches to speech act classification, firstly from Searle's (1975a) and Bach and Harnish's (1979) speaker-oriented perspectives, and then from Allan's (1998) hearer-oriented view, which are then evaluated in terms of their usefulness as applied in an OCSA context. Following this, the study explores the relationship between speech acts and rhetorical moves, and finally it considers how the incorporation of speech act theory might contribute towards a more formalised system for move analysis. These research aims can be summarised as follows:

1. To establish a taxonomy of speech acts for the analysis of OCSA interactions.
2. To examine the relationship between rhetorical moves and speech acts in the context of offender-victim IM interactions.
3. To evaluate the usefulness of speech act theory in contributing to a more formalised process for identifying and describing moves.

To begin addressing these aims, the next section provides a brief overview of speech act theory and some proposed systems for speech act classification.

Speech act theory

Pioneered by John Austin in the early 1960s, speech act theory describes language not in terms of the things we say, but the actions we perform through language use. Central to Austin's (1962) proposition is that speakers' utterances comprise three components:

1. Locutionary act: the actual words uttered.
2. Illocutionary act: the intention, or force of the utterance.
3. Perlocutionary act: the effect induced in the hearer by the utterance.

It is the illocutionary act which has received most attention, having been subject to debate, development and refinement since speech act theory was conceived (see e.g. Searle, 1969, 1975a, 1975b, 1976; Vendler, 1972; Sadock, 1974; Bach, 1975; Bach & Harnish, 1979; Clark & Carlson, 1982; Allan, 1998). Indeed, the term *speech act* today is used synonymously with *illocutionary act*, *illocutionary force* and *pragmatic force* (Thomas, 1995). Searle (1975a, p. 344) usefully proposed the $F(p)$ structure for expressing speech acts, where F represents the illocutionary force of the act (e.g. request, promise, command) and p represents the propositional content, i.e. that which is being requested, promised, etc. For example, *offering* (F) *to buy dinner* (p).

Various methods have been employed to classify speech acts; for example Austin (1962) and Vendler (1972) use lexical criteria, whereas Searle (1969, 1976) and Bach and Harnish (1979) derive their taxonomies from the perspective of speaker intention (Allan, 1998). Allan's (1998) taxonomy is unusual in that it privileges the perspective of the hearer, which is rare in pragmatics despite the importance of listeners' communicative roles (Clark & Carlson, 1982). It should be noted that the terms *speaker* and *hearer* in this context broadly refer to any communicator and addressee, regardless of communicative mode (but see Clark & Carlson (1982) for a discussion on hearer types). Because this study aims to explore the issues of communicative function (which might also be interpreted as communicative purpose or intent) the current discussion focuses on the speech acts identified by Searle (1969), Bach and Harnish (1979), and Allan (1998) (see table 5.2).

Searle	Bach and Harnish	Allan
Assertives	Assertives	Statements
Commissives	Commissives	
Expressives	Acknowledgements	Expressives
Directives	Directives	Invitationals Authoritatives
Declarations	Verdictives Effectives	

Table 5.2. Speech act taxonomies of Searle (1976), Bach and Harnish (1979) and Allan (1998) (adapted from Allan, 1998).

As can be seen, the taxonomies proposed by Searle, Bach and Harnish are fairly similar. Both include assertives, which express the speaker's belief about some aspect of the world (Searle, 1976), for example, statements. A crucial property of assertives regarding OCSA contexts involving identity deception is that they have the potential to be true or false, i.e. using assertives it is possible to lie (MacLeod & Grant, 2017). Commissives in both taxonomies are utterances that commit the speaker to some future action, for example, promises or threats. Directives are utterances which aim to prompt some kind of action from the hearer, such as demands or requests. The only differences between the two classifications are that Searle's expressives are referred to by Bach and Harnish as *acknowledgments* and (following Austin, 1962) Searle's declarations are divided by Bach and Harnish into effectives and verdictives. This is to distinguish between those acts which actually effect change in institutional states of affairs (effectives), and those which make judgments on what should be the case in an institution (verdictives) (Bach & Harnish, 1979).

One of the reasons that Searle's (1969) and Bach and Harnish's (1979) models are so similar is likely because they both privilege speaker intent. But taking this view alone could be problematic; especially when analysing dialogue it seems important to take into account the potential perlocutionary effects on the hearer. This becomes even more significant in the context of OCSA interactions like grooming which, as Lorenzo-Dus and Izura (2017, p. 74) note, constitute "a performative context of communication in the truest sense of Austin's (1962) "doing things with words" dictum...". Allan's (1998) taxonomy instead approaches the classification of speech acts on the basis of hearers' evaluations of utterances. In this system, expressives are similar to those in Searle's and Bach and Harnish's taxonomies, but Allan's statements encompass both assertive and commissive speech act types. Furthermore, instead of directives, Allan's invitationals invite the hearer's participation, and a

final group, authoritatives, involve the speaker “laying down the law” often through the use of imperatives (Allan, 1998, n.p.).

Methods

A single transcript of 100 lines was selected at random for analysis, featuring an OCSA interaction between a convicted male offender (O1) and a female victim (V1) (specific ages of participants are unknown). The use of a single transcript seemed sufficient and appropriate for this pilot because it enabled a clear comparative analysis of multiple speech act taxonomies and a focused exploration of the role that speech acts might play in move analysis.

To examine the suitability of various speech act types in analysing OCSA interactions, this transcript was analysed according to the three taxonomies proposed above. Only the offender’s utterances were coded, while the victim’s were noted informally to aid the process of determining the communicative functions of the offender’s utterances. To explore the relationship between rhetorical moves and speech acts, the same transcript was coded for moves, based on the analyst’s interpretation of the most likely communicative function(s) of each offender utterance. The transcript was then re-coded according to those speech act types identified from the three taxonomies as the most suitable in the specific OCSA context. The resultant sets of moves, strategies and speech acts were then examined in order to examine any possible relationships.

Limitations

Other than the small data sample, one problem is that as with moves and strategies, there can be considerable overlap between speech act types (Searle, 1969; Thomas, 1995; Sadock, 2006), and single utterances may perform multiple speech acts at once. However, the finer-grained unit of speech acts arguably leaves less room for variation in their interpretation than moves. While IM transcripts can provide much useful contextual information which can indicate the primary illocutionary force of an utterance, it is acknowledged that secondary and tertiary coders would improve the reliability of this study.

Additionally, speech act analysis cannot always neatly account for the disorganised nature of everyday spoken language (Cutting, 2002). Although chatroom discourse is written (or typed), it is generally thought to lie somewhere between spoken and written communicative modes (Georgakopoulou, 2011). As such, it shares some features more typical of speech,

such as disfluency and the use of non-standard forms (Herring, 2012), which can lead to ambiguity when interpreting the speech acts performed. A common example is the ellipsis of question verbs, for instance in the utterance “you ask her” (Study 2, T2 L4). The respondent’s following turn (“yeh”) and the next few lines make clear that this utterance functions as an interrogative, but the negation of the auxiliary verb ‘did’ means it could plausibly act as a command if considered in isolation. This is also an example of the sort of human decision making necessary for the accurate interpretation of language functionality.

Analysis

Categorising OCSA speech acts

The three-fold speech act analysis of the transcript suggested that O1s utterances are most appropriately accounted for by a combination of Searle’s (1976), Bach and Harnish’s (1979) and Allan’s (1998) categories. This section discusses the process of determining those considered most suitable before introducing a proposed combinatory taxonomy. It is important to note that example utterances may not be limited to the particular speech act type that they have been selected to illustrate.

Directives, invitationals and authoritatives

The analysis revealed that some speech act types can be immediately discounted in this particular OCSA context. These are Searle’s (1976) declarations and Bach and Harnish’s (1979) corresponding verdictives and effectives. This is because both the abusive event and the relationship between offender and victim are not recognised as institutional, therefore these speech act types are unavailable to the offender. Allan’s (1998) authoritatives on the other hand, while encompassing institutional acts like legal judgments and baptisms, also include commands and permissions, which were identified in the transcript.

- L61: O1: go onn [accept my request for video chat] (command)
- L52: O1: dnt worry ill let u see summet 2 (permission)

The command in line 61 would, in Searle’s and Bach and Harnish’s taxonomies, be labelled a directive, along with requests and suggestions for example, but the level of coercive force behind the utterance is arguably much higher than a request. Consider the above command in contrast with the following directives:

L12: O1: know any1 from there?
L37: O1: no cam?

Adult offenders naturally have authority over child victims, and in general possess superior linguistic skill. Additionally, OCSA processes like grooming involve gaining a victim's compliance and trust (Craven, Brown & Gilchrist, 2007), which necessarily involves the victim becoming emotionally committed to the offender in some way, further bolstering the offender's power. Therefore, it seems particularly important in this context to make clear the distinction between utterances with lower and higher coercive force, in order to better capture the power asymmetry between offender and victim. For these reasons, it is suggested that an OCSA-focused taxonomy of speech acts ought to discount directives as being too broad a category, and retain Allan's invitationals to account for those acts which prompt action from the hearer with no or low-level coercive force, and authoritatives to account for those which prompt action by way of authority, as in the examples above. Another approach might be to re-interpret invitationals as requests for information and contrast these with directives as requests for actions, which Grant and Woodhams (2007) found to be a useful distinction in categorising rapists' utterances.

Expressives

Searle's and Allan's expressives and Bach and Harnish's acknowledgements are retained under the label 'expressives'. As in the previous classifications, this category accounts for speech acts like thanking, greeting, apologising etc. but the current proposed taxonomy extends this to include emoticons and emoji. Emoticons are typographical representations of facial expressions (Hern, 2015), for example a smiley face as represented by a colon and bracket:

:)

Conversely, emoji are actual pictures inserted into a text, commonly representing facial expressions but also a wide range of animals, foods, activities, etc. (see Emojipedia, 2018). For example:



Both types feature in IM interactions and can work to make up for the lack of paralinguistic information (gestures, facial expressions, etc.) that interlocutors draw upon to infer meaning in face-to-face conversation (Dresner & Herring, 2012; Park *et al.*, 2013; Yus, 2014). In the

transcript, emoticons and emoji were often seen to indicate a preferred interpretation of an utterance. For example:

L82: O1: just point cam at summet gud ;)

This utterance does not specify what O1 would like V1 to display on camera, but the accompanying ‘winking face’ at the end seems to convey a somewhat cheeky tone. Given the sexual context of the interaction generally, the most likely interpretation is that ‘summet good’ refers to a sexual body part of the victim.

Emoticons were also used found in isolation and seemed to perform full speech acts by themselves. For example, the following:

L94: V1: im goinn now x

L95: O1: :(

The ‘sad face’ clearly expresses O1’s feelings about V1’s leaving the conversation, and plausibly correlates directly to the expressive: *‘I am unhappy that you have said you are about to leave’*. Emoticons therefore seem to sit comfortably in the expressives category of speech acts. This can also be said of some minimal responses which carry an evaluation of the previous utterance (‘kl’ = ‘cool’):

L10: O1: kl im from *place*

L27: O1: kl last year?

Also commonly noted was the use of the acronym ‘lol’. This is a well-recognised feature of CMC which stands for ‘laughing out loud’ (Tagliamonte & Denis, 2008; O’Neill, 2010). It can serve as a form of punctuation with no semantic content (Provine, Spencer & Mandell, 2007; O’Neill, 2010), and this was observed on occasion in the transcript. However, there were instances in which ‘lol’ also had a modifying function similar to emoticons. For example:

L32: O1: i dnt even get a ty? lol

‘Lol’ in this example apparently acts to signify that the hearer should not interpret the preceding (invitational) utterance too seriously (see Chiang & Grant (2017) for a discussion on the ‘mitigating lol’). This can be taken as evidence of the speaker’s attitude and therefore be considered an expressive. Another example can be seen in line 87:

L87: O1: y not lol and dnt say cba. u just hav to sit there lol

Interestingly, in this example 'lol' is used twice in what is seemingly O1's most forceful effort to prompt action from V1. The second instance appears to perform the same function as in line 32 above in attempting to mitigate the seriousness of the authoritative command 'u just hav to sit there'. In the first instance, however, the strong imperative command 'dnt say cba [can't be arsed]' uttered after 'lol' seems to negate any diminishing effect it might have had. In this case it seems that while the expressive 'lol' is used in attempt to temper the seriousness of O1's authoritatives, the need to do so is somewhat overridden by a stronger motivation to coerce V1 into action.

Assertives, commissives and statements

Allan (1998) argues that the distinction between assertives and commissives is irrelevant to the hearer because the pragmatic effect of these speech acts is essentially the same (Grant & Woodhams, 2007). Allan instead groups speech acts like reports, predictions, offers and promises among others as statements. Following Grant and Woodhams (2007), who developed a speech act taxonomy for the categorisation of rapists' utterances, it seems that in OCSA contexts it is useful to retain the distinction between assertives and commissives. Consider the following utterances:

- L72: O1: ill give u £300 for a bj :p
L83: O1: £20 to let me stare at ur tits for 5 mins :p

Under Allan's taxonomy, these utterances would both count as types of statement. While they are both reasonably interpreted as offers, they also commit the speaker to a future action (paying money to the victim). Capturing these utterances as commissives explicitly might aid the identification of evidence of offender accountability and possible future intentions regarding victims better than if they were categorised as statements.

Proposed taxonomy for the classification of speech acts in offender-victim interactions

This analysis has considered the suitability of the various speech act types as proposed by Searle (1969), Bach and Harnish (1979), and Allan (1998). The following combinatory taxonomy for the classification of OCSA offender-victim speech acts (table 5.3) is thus tentatively proposed. It is recognised that particular speech acts may fall under more than one category; note, for example, that threatening appears under both commissives and authoritatives.

Speech act type	Function	Example speech acts
Assertives (Searle, 1976; Bach & Harnish, 1979)	Express speaker's beliefs about some aspect of the world	stating, reporting, concluding
Commissives (Searle, 1976; Bach & Harnish, 1979)	Commit speaker to some future action	promising, threatening, volunteering, offering
Expressives (Searle, 1976; Allan, 1998)	Express speaker's feelings and attitudes	thanking, apologising, condoling, praising (emoticons, lols)
Invitationals (Allan, 1998)	Invite hearer's participation in some way	inquiring, offering, requesting, warning
Authoritatives (Allan, 1998)	Prompt action from hearer by way of authority or power (non-institutional)	commanding, demanding, permitting, threatening

Table 5.3. Proposed taxonomy for the classification of grooming utterances.

It is important to remember that this classification is derived from a single transcript for the purpose of exploring the relationship between speech acts and rhetorical moves; it is not an attempt to classify the speech acts of OCSA generally, a task which would of course require a far larger corpus of transcripts of diverse interaction types.

Moves and speech acts

The move analysis identified 11 rhetorical moves and 19 strategies used by the offender. Due to the similar contexts, there is some overlap with moves identified in Chiang and Grant's (2017) move analysis of grooming interactions. The moves and strategies are presented comprehensively with descriptions and example utterances in appendix D, but due to project scope, only the four most commonly observed moves are explored here in terms of the speech acts used to realise them. It is recognised that the move identified as *Maintaining/escalating sexual content* was observed more frequently than some of the moves selected, but because of its apparent secondary status (it appeared to act mostly as a sort of 'background' move) it was discounted for the purposes of the following discussion. The moves discussed here, then, are *Rapport*, *Assessing likelihood and extent of engagement*, *Sexual rapport* and *Material offers for sexual activity*. Table 5.4 presents a comparison of the frequency of speech act types identified within each of the four moves:

	Total utterances	Assertives	Commissives	Expressives	Invitationals	Authoritatives
Rapport	21	6	0	6	13	0
Assessing likelihood and extent of engagement	10	1	0	1	10	0
Sexual rapport	7	2	3	3	4	3
Material offers for sexual activity	7	1	4	2	4	1

Table 5.4. Frequency of speech acts as identified in four rhetorical moves.

Rapport

The *Rapport* move is identified as attempts to establish and maintain a friendship or relationship. As Table 5.4 illustrates, over half of the utterances used in *Rapport* can be classed as invitationals, for example:

- L1: O1: whos this?
L6: O1: where you from?

Additionally, assertives and expressives each account for over a quarter of *Rapport* utterances. This is unsurprising, as the main strategies identified in *Rapport* involved asking personal questions and supplying personal information, and conveying feelings and attitudes is also an important part of establishing friendships and relationships. The absence of authoritatives is also unsurprising in a move with the primary function of building relationships.

Assessing likelihood and extent of engagement

The *Assessing likelihood and extent of engagement* move is identified as attempts to gauge the likelihood and possible extent of the victim's sexual or non-sexual engagement with the offender. An overwhelming majority of the utterances used in this move were identified as invitationals, for example:

- L46: O1: ever dun it?
L48: O1: wot u dun?

Of 10 total utterances, there were no commissives or authoritatives, and only one assertive and one expressive. This again is unsurprising; the move is inherently inquisitive above all else.

Sexual rapport

Sexual rapport is defined as attempts to establish a positive sexually-oriented relationship. This move exhibited a more even distribution of speech act types, perhaps because the main identified function of the move is more general. Essentially this move is about presenting sexual activity as something positive, pleasurable or beneficial to the victim, and the analysis shows that this is linguistically attempted in a variety of ways, for example:

L52: O1: dont worry ill let u see summet 2
L59: O1: im fresh out da showerrr

Material offers for sexual activity

This move is self-explanatory and also exhibited a variety of speech acts. It is unsurprising that the most commonly identified are commissives and invitationals, as the speech acts of offering and promising are central to the purpose of the move. Interestingly though, two instances of expressives were noted in the form of the ':P' emoticon, or 'face with stuck-out tongue' (Emojipedia, n.d.) at the ends of offers:

L72: O1: and ill give u £300 for a bj :P
L83: O1: £20 to let me stare at ur tits for 5 mins :P

These expressives arguably perform a mitigating function similar to that observed in the use of 'lol'. O1 does not do this in all cases, however; sometimes an authoritative is used in attempt to achieve the same goal of gaining the victim's compliance:

L79: O1: go on cam and ill put some money in it right nw for u

So while commissives and invitationals seem to be O1's preferred method for offering money in exchange for sexual interaction, we can see that a variety of acts are used, including an element of authority as in the command in line 79.

Discussion

The analysis shows that certain moves share stronger correlations with particular speech act types than others. For example *Rapport* and *Assessing likelihood and extent of engagement* tend to involve a relatively large proportion of invitationals, whereas *Sexual rapport* and *Material offers for sexual activity* could not be linked to any specific speech act type. For those moves that do appear to have some connection to individual speech acts, it is tempting to consider the plausibility of particular verbs signifying these speech acts, and in turn indicating which move an utterance or part-utterance might belong to. From the results of this analysis, however, this does not seem viable, and it seems that the disfluent and non-standard nature of IM discourse is partly responsible. For example, take the strongest correlation found in the analysis - the link between *Assessing likelihood and extent of engagement* and the use of invitationals. Most of the speech acts used in invitationals can be classed as inquiries, so we might expect a high number of wh- and other question words (or non-standard versions thereof), but these are frequently omitted:

- L46: O1: ever dun it?
L50: O1: nt gonna let me hav a lil peek?

While lines 46 and 50 clearly present inquiries, they demonstrate that this can be done without complete clauses, and most importantly, without the signifying question verbs ('have' in line 46 and 'are' in line 50). Of course, the question marks clearly indicate that these utterances were intended as questions, but this is arguably a stylistic choice adopted by O1 and likely to vary between writers. Indeed, he sometimes poses questions without it:

- L55: O1: you there

It seems then that the relationship between rhetorical moves and speech acts is not straightforward, and that uses of certain verbs and speech acts do not necessarily lead to the identification of particular moves. But dual coding transcripts in this way might reveal the *preferred* speech act types used by individual offenders to achieve the communicative functions associated with each move. This may be useful in areas of authorship analysis or online identity assumption (see MacLeod & Grant, 2017) but would need to be explored with a much larger dataset. But another, unanticipated benefit of incorporating speech act analysis into the early stages of move identification is that it provides an efficient and formal way of describing the lower-level strategies used to realise moves.

From table 5.5 we can see the strategies of the four moves as identified before the speech act analysis, and then reformulated following Searle's *F(p)* structure as a result.

Moves	Strategies	Strategies reformulated post-speech act analysis	Preferred speech act types
Rapport	asking personal questions about victim including name, age, location, friends	<i>inquiring</i> about victim's personal details	Invitationals
	giving positive feedback/praise	<i>expressing approval</i> of victim's conversational contribution	Expressives
	giving personal information including name, location	<i>stating</i> personal information	Assertives
Assessing Likelihood and Extent of Engagement	asking about age	<i>inquiring</i> about victim's age	Invitationals
	asking about victim's access to and willingness to interact via webcam	<i>inquiring</i> about victim's access to and willingness to interact via webcam	Invitationals
	asking about victim's previous sexual experience	<i>inquiring</i> about victim's previous sexual experience	Invitationals
	asking about likelihood and nature of future sexual activity	<i>inquiring</i> about likelihood and nature of future sexual activity	Invitationals
Sexual Rapport	giving sexual compliments	<i>complimenting</i> in a sexual context	Assertives, expressives
	offering sexual 'favours'	<i>offering</i> sexual 'favours'	Commissives
	attempts to sexually attract/entice	<i>describing</i> self as attractive/enticing	Assertives
	attempts to comfort/reassure victim about sexual activity	<i>comforting/reassuring</i> victim about sexual topics	Expressives
	using positive emoticons in sexual context	<i>expressing</i> positive attitudes in sexual context (linguistically and with emoticons)	Expressives
Material Offers for Sexual Activity	offering money for sexual activity	<i>offering</i> money for sexual activity	Commissives, Invitationals

Table 5.5. Comparison of rhetorical strategies as described pre- and post- speech act analysis.

While the new strategy descriptions are only subtly different, formulating them in this way in the earlier stages of move analysis, while the analyst is still reworking and refining the move coding system has a few advantages. First, it can help the analyst to clarify the communicative functions captured by particular moves and strategies. Second, this slightly more formal descriptive method can help secondary coders to more effectively acquaint themselves with the primary analyst's initial coding system. This could improve the efficiency of reliability tests later on in the process and make for a more robust coding system overall. It should be noted though that (as predicted) differentiating between moves and speech acts is not always easy, as essentially these units are seeking to describe the same thing (communicative function). For example, the communicative functions of the move and strategy for *Material Offers for Sexual Activity* are basically the same. In light of this, it seems that one defining criterion of strategies/speech acts in move analysis could be their capacity to be comfortably grouped with others in order to achieve a more general communicative goal. If this is not the case, as with the *Material Offers* move, it makes sense that it should sit alone with the status of a move (as with a move termed *Introducing Sexual Content* in Chiang & Grant (2017)).

Conclusion

This pilot study has attempted to address a fundamental problem with move analysis and coding texts for communicative function. In drawing from both speaker and hearer perspectives of speech act theory from Searle (1976), Bach and Harnish (1979) and Allan (1998), it has presented a taxonomy of speech acts specifically targeted at the analysis of an OCSA interaction between an offender and victim. In doing this, it has explored the relationship between rhetorical moves and speech acts, and offered a tentative suggestion for the reformulation of rhetorical strategies as speech acts, in order to best capture the communicative functions of an OCSA offender and illustrate a more formal and robust method for expressing moves and strategies. It seems clear that speech act theory has the potential to usefully contribute to the process of describing, if not determining moves. But while the pilot does not necessarily show a one-to-one correlation between rhetorical strategies and speech acts, there is arguably some benefit to formulating strategies as speech acts, as this more formal method of expression helps the analyst to clarify and foreground the communicative functions of utterances over their semantic themes (in most cases). Clearly, however, further research is needed to continue exploring the value of speech act theory in relation to communicative function. Hopefully this study has provided a useful basis for future research regarding the relationship between speech acts and

rhetorical moves. Specific attention might be paid to the speech acts of victims in order to more fully examine the ideas presented here.

Pilot study 2: Demonstrating reliability and consistency in move analysis

While there is no solid consensus regarding acceptable levels of inter-rater reliability, it is generally considered sufficient if raters reach between 75% and 90% agreement (Stemler, 2004). Chiang and Grant (2017) demonstrated a high level of agreement (82%) when identifying moves deductively in online grooming transcripts where a second coder is provided with a pre-determined move set devised by the first coder. But a more fundamental methodological problem concerns the validity of identified moves, their reliable identification and consistent coding. This second pilot study was conducted to address the question of whether two analysts would independently identify similar moves from the same transcript.

Methods

The test involved a subset of the data for Study 2; a set of interactions between suspected offenders and UCs posing as offenders. Due to time and space limitations, having a second coder analyse a number of full interactions a priori was impractical. Instead, from a sample of ten randomly selected transcripts, a list of 15 moves was derived by Coder 1 (the author), many encompassing a number of lower-level strategies working towards those moves. Coder 2 (also a trained linguist) was then provided with a selection of those transcripts across which two example utterances illustrating each of the 15 moves were highlighted (30 utterances in total). Coder 2 was asked to describe what she perceived to be the primary communicative function captured in each highlighted utterance using a maximum of three words. The word restriction was imposed so that Coder 2's identified communicative functions would be presented as succinctly as possible, enabling a straightforward comparison with Coder 1's move terms. The transcripts were provided in full so that the functions of the highlighted utterances could be considered in the context of the whole conversations rather than in isolation.

Analysis and discussion

Overall, the test yielded positive results. These are grouped in terms of the utterances for which the coders reached total, high, and low agreement.

Total agreement

For just over half of the utterances (17/30 or 56.7%) the coders used the same or very similar terms to describe the primary communicative functions, and discussions revealed that where terminological differences arose, the coders had in fact fully agreed on the purpose or function of the utterance. These are displayed in table 5.6.

Utterance	Coder 1 move labels	Coder 2 move descriptions
"hi"	Greeting	Greeting
"what are u into"	Identifying Interests/ Experiences	Discovering sexual preferences
"i like porn pics and video"	Reporting Interests/ Experiences	Stating sexual preferences
"good ty. i'm *name* 45 m uk"	Rapport-building	Rapport-building through sharing personal and location details
"a man of experience?"	Identifying Interests/ Experiences	Inviting sexual history
"she sucked me off [...]"	Reporting Events	Recounting sexual event
"sweet....how far did u get?"	Eliciting Narrative	Inviting sexual history
"cool"	Facilitating Communication	Conversation maintenance
"nice. i hope u sampled a few"	Supporting Narrative	Topic maintenance
"*link*"	Giving Illicit Media	Link sharing Sharing sexual access information
"hey"	Greeting	Greeting
"sorry had to answer phone brb"	Facilitating Communication	Conversation repair
"*link*"	Offering/Providing Illicit Media	Link Sharing
"ok cheers you got any good pics?"	Requesting Illicit Media	Requesting material
"not saying"	Risk Assessment and Management	Shutting conversation down for security
"you got any good pics"	Requesting Illicit Media	Requesting material
"damn bet her little mouth looked incredible [...]"	Supporting Narrative	Topic maintenance/support

Table 5.6. Coders' terms for communicative functions performed by utterances on which total agreement was reached in the first instance.

High agreement

For just over a quarter of the utterances (8/30 or 26.7%) the terms used to describe the moves differed more significantly between the coders. In most cases this is explained by the hierarchical nature of move analysis. Moves denote specific communicative functions which are said to support the overarching purposes of the text (Swales, 1981, 1990), and might be grouped into higher-level categories which denote the global goals of interactants (Macagno & Bigi, 2017, p. 150), as well as encompass lower-level strategies which work towards achieving the move. Table 5.7 demonstrates the utterances that the coders described at different levels on the move hierarchy but agreed upon regarding their primary communicative functions. After discussions about Coder 1's move labels and the nature of the strategies they encompass, Coder 2's terms were agreed to amount to a lower-level strategy used to achieve the move in each case.

Utterance	Coder 1 move labels	Coder 2 move descriptions
"[...] and he loves it"	Legitimising CSA	Referencing victim engagement – boasting?
"you get my id from *social network name*?"	Risk Assessment and Management	Requesting social/security context
"how u make her agree?"	Seeking Support	Requesting attack strategy
"are u uk?"	Intelligence Gathering	Determining location (overly specific)
"if u like boys then it's a must have"	Giving Support	Advice
"nothing life threatening"	Legitimising CSA	Mitigating sexual history
"yep anywhere you could recommend I only started using tor recently"	Seeking Support	Request for link sharing
"u on torchat its very secure"	Giving Support	Security recommendations/advice

Table 5.7. Coders' terms for communicative functions performed by utterances on which high agreement was reached in the first instance.

Some of the examples above seemed immediately logical and did not warrant much deliberation, for example that 'Determining location' would be a reasonable strategy involved in a move termed *Intelligence Gathering*, or that 'Mitigating sexual history' might be a strategy of *Legitimising CSA*. For others, a simple clarification of terms led to agreement, for example that the support element in Coder 1's *Giving/Receiving Support* moves accounted for practical help and advice as well as personal or emotional support. These discussions led

ultimately to both coders agreeing that in the above cases Coder 2's terms describe reasonable strategies of the higher-level moves labelled by Coder 1.

Low agreement

Table 5.8 displays the remaining five utterances (16.7%) which resulted in low agreement between coders. These terminological discrepancies exemplify some of the previously identified difficulties with move analysis.

Utterance	Coder 1 move labels	Coder 2 move descriptions
"how it happened the last times ,"	Eliciting Narrative	Requesting attack strategy
"it was *place name* i used to go to"	Rapport-building	Giving attack strategy
"[...] i'm always open to opportunities should they come along ;-)"	Reporting Interests/ Experiences	Inviting interaction
"you on any other sites or just this"	Intelligence Gathering	Determining online social context
"i threatened the little shit [...]"	Reporting Events	Attack strategy

Table 5.8. Coders' terms for communicative functions performed by utterances on which low agreement was reached in the first instance.

There are arguably two main reasons for the disagreement seen here. Firstly (as previously discussed) single utterances may perform multiple moves simultaneously, and where this is the case, the main question then becomes which move is considered to represent the *primary* communicative function. For each of the five utterances above, the coders agreed that the other's move was plausible, if not their perceived primary function.

A second reason for the disparity is that the coders had adopted slightly different approaches regarding whether moves should be functionally or semantically defined. Table 5.8 shows that for some utterances, Coder 2 has specified the semantic content involved in the moves ('attack strategy', 'online social context'), whereas Coder 1 largely opted for less content-based and more functional labels like *Eliciting narrative* and *Reporting events*. There seem to be no definitive rules where this is concerned, and Biber, Connor and Upton (2007), who provide the basic methodological principles for this analysis (outlined in the *Analytical procedure* section of this chapter), simply advise that both options are possible when devising move categories.

Conclusion

With 83% of utterances achieving high or total agreement between coders, the test suggests that overall, two linguists can reliably and consistently identify valid rhetorical moves in a dialogic text. Where differences occurred this was most often due to the hierarchical nature of move analysis, whereby coders differed regarding the level of specificity of their move labels. This seems an acceptable difference because the fundamental communicative functions are agreed on. The more significant disagreements are found where one coder has drawn upon functional distinctions whereas the other has used more semantic criteria to define the moves, although this was seen in only a small number of cases. Interpreting communicative function remains a subjective process, and total agreement will always be unlikely. On the basis of this test, Coder 1 was considered competent in move identification and subsequently coded the remaining data for the three main studies, which led to move definitions and boundaries identified in this pilot being adjusted and refined. The most significant change to the original move set was the removal of the *Intelligence gathering* move, as the wider dataset showed this function to generally underlie all UC utterances and therefore was not usefully discriminating.

The two pilot studies have to some degree addressed the problems of communicative function and subjectivity in move analysis. While the first pilot did not show moves to be reliably identified by certain speech acts and verbs as hoped, it did show that formulating rhetorical strategies as speech acts can helpfully formalise their expression and improve the efficiency of early coding and reliability test processes. The second pilot study suggested that two linguists can derive similar moves independently from a text to a reasonable degree. So while the two noted problems were not fully overcome, the findings of these studies have arguably shown the processes involved in move analysis may be improved, if not 'fixed'.

Analytical procedure

Conducting move analysis

In light of findings from the two pilot studies, this section provides a general description of the analytical process involved across the three main studies. Details of individual deviation(s) from this process are provided in the individual studies' Methods sections.

Following Chiang and Grant (2017), the move analysis carried out across the three datasets took procedural guidance from Biber, Connor and Upton's (2007) ten steps for conducting move analysis:

- Step 1: Determine rhetorical purposes of the genre.
- Step 2: Determine rhetorical function of each text segment in its local context; identify the possible move types of the genre.
- Step 3: Group functional and/or semantic themes that are either in relative proximity to each other or often occur in similar locations in representative texts. These reflect the specific *steps* that can be used to realize a broader *move*.
- Step 4: Conduct pilot-coding to test and fine-tune definitions of move purposes.
- Step 5: Develop coding protocol with clear definitions and examples of *move types* and *steps*.
- Step 6: Code full set of texts, with inter-rater reliability check to confirm that there is clear understanding of move definitions and how *moves/steps* are realized in texts.
- Step 7: Add any additional steps and/or moves that are revealed in the full analysis.
- Step 8: Revise coding protocol to resolve any discrepancies revealed by the inter-rater reliability check or by newly 'discovered' *moves/steps*, and re-code problematic areas.
- Step 9: Conduct linguistic analysis of move features and/or other corpus-facilitated analyses.
- Step 10: Describe corpus of texts in terms of typical and alternate move structures and linguistic characteristics.

(From Biber, Connor & Upton, 2007, p. 34, original emphasis).

Procedurally, the move analyses for the three studies were largely similar. Regarding the IM transcripts in Studies 1 and 2, transcripts were read several times each, and each utterance (of all participants) was examined in order to determine its most likely/reasonable communicative function(s). These functions were then grouped according to functional and semantic themes, and identified as either broad-function moves, or lower-level strategies which worked towards achieving a move (or multiple moves). Regarding the forum posts in Study 3, each post was read several times and as far as possible the communicative functions of particular text segments were determined. These functions were also grouped using functional and semantic criteria, and then organised into higher-level moves and lower-level strategies. Any responses received to original posts were read for contextual information but not coded for moves. Labels and descriptions of moves and strategies were

continually revised and refined throughout the coding processes. As a result of Pilot Study 1, as far as possible, strategies are expressed using Searle's $F(p)$ structure. Similar to Moreno and Swales (2018), this resulted in moves and strategies generally being articulated with -ing verb forms.

Two main deviations from Biber, Connor and Upton's (2007) protocol were made. Firstly, Step 1 was disregarded as the studies do not seek to investigate the datasets as genres. Secondly, close linguistic analysis of moves and strategies, as in Step 9, was only carried out at certain points where this seemed most interesting and relevant to the research context. The studies largely focused instead on the frequency and structure of rhetorical moves in the texts.

Move-maps

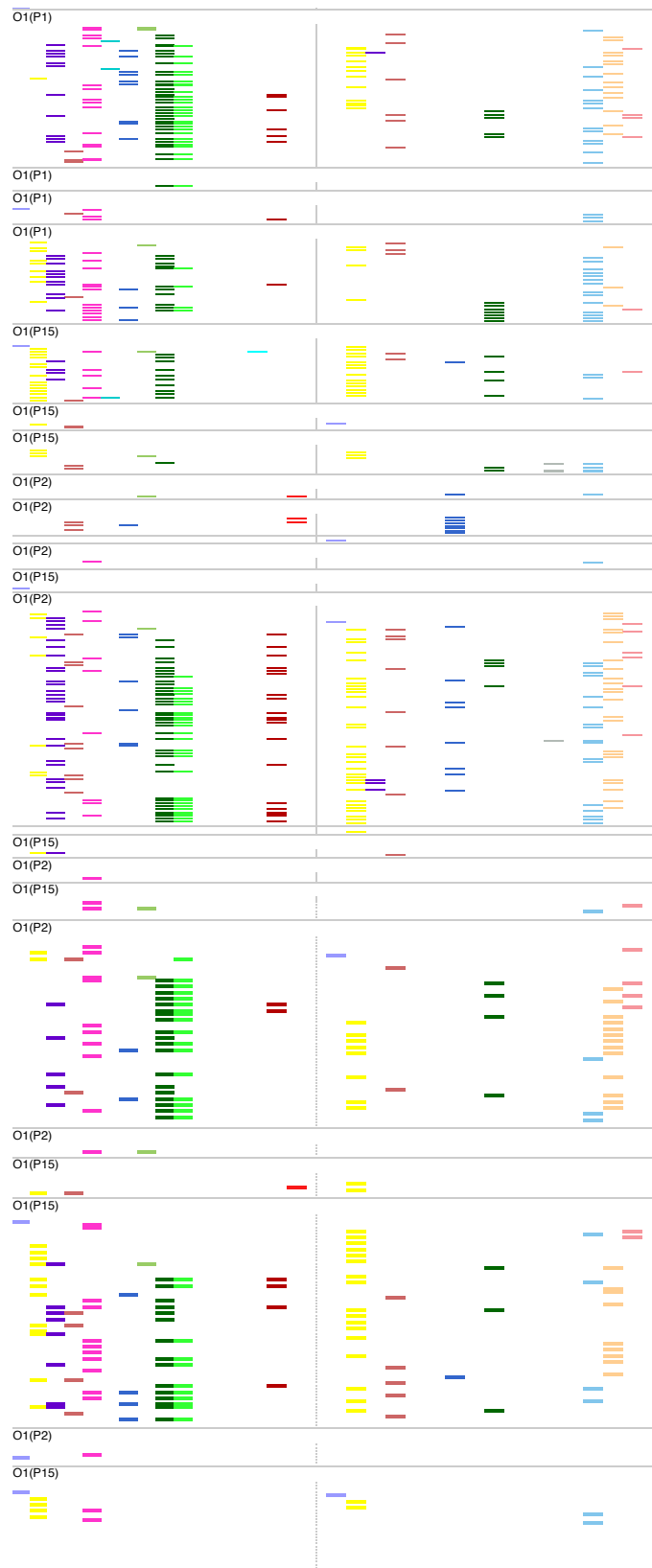
In order to facilitate the structural analysis of the IM conversations in Studies 1 and 2, move-maps (Chiang & Grant, 2017), which are colour-coded visualisations of the interactions, were produced. This was not deemed useful regarding the forum posts in Study 3, however, because their relatively short length and block text structure made it difficult to segment visually and colour-code in a way which could illustrate overlapping moves in the texts.

The process of creating move-maps begins by labelling each utterance with the colour-coded move (or moves) it was observed to perform. As figure 5.1 shows, this may involve assigning several moves to a single utterance (line 140) (this example is taken from Chiang and Grant's (2017) work and thus depicts a snippet of a PJ transcript, so as to avoid displaying sensitive data).



Figure 5.1. Example of transcript coding procedure from Chiang and Grant (2017).

Once fully coded, transcripts are then converted using a series of Javascript scripts, to display just the move structures of the texts (scripts are provided in appendix A and available on Github at <https://github.com/emilychiang/move-map-builder>). Figure 5.2 displays an illustrative example of a move-map produced from a transcript analysed in Study 1.



Transcript 1

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response

Figure 5.2. Move-map representing Transcript 1.

As in Chiang and Grant (2017), move-maps represent the interactions in terms of their move structures by presenting each move as a different colour and occupying a single column. The maps are read from top to bottom, following the timeline of the interactions. Each horizontal line represents a single utterance, so where several colours appear in-line, this demonstrates an utterance which has performed multiple moves simultaneously. Horizontal grey lines separate individual conversations within the overall interaction. These conversation boundaries were mostly determined by in-chat 'Session start' notifications, but this was checked manually to identify where conversation breaks were artificial, i.e. where conversations did not really end, despite the notification, or where conversations had ended but the notification did not appear due to participants remaining logged into their IM clients. The offender's contributions are seen to the left of the vertical grey line, and to the right are those of the victim. The labels at the start of each conversation (e.g. O1(P1)) indicate the particular online persona that the offender is adopting in that conversation. So as well as the move structure of the interaction between the offender and victim, we can see from this move-map that the offender switches between three different personas (P1, P2 and P15).

As a final step in all studies, the identified move sets and structures were considered in terms of their potential relation to the performance of particular aspects of identity regarding the individual participants.

Ethics

The sensitive nature of this work raises some ethical issues which warrant careful consideration. These issues are discussed here but those relevant specifically to the policing context are also detailed in the data sharing agreement between the researcher and the police force providing the data (see appendix B). This agreement and the overall research was approved by Aston University Ethics Committee (see ethics form in appendix C).

Ethical guidelines issued in relation to social science research (by, e.g. Aston University Research Ethics Committee, 2015, the British Association for Applied Linguistics (BAAL), 2016; the British Psychological Society (BPS), 2017; the Economic and Social Research Council (ESRC), 2018) typically cover a range of core concepts around the central themes of participant welfare and individual/societal benefit and harm. Beyond this, the online context presents its own set of ethical questions (Mackenzie, 2017a). Mackenzie (2017a) points out that ethics discussions at one time focused on whether data gathered from online sources could be considered public or private. She notes, however, that more recently, thinking has shifted back towards the general core principle "do no harm" (p. 293), and that the

interpretation of this maxim should be done on a case-by-case basis and driven by the specific context of the research. In relation to the current project, there is no debate regarding the public/private dichotomy; none of the three research contexts are reasonably considered public. Studies 1 and 2 involve private, one-to-one IM interactions, and Study 3 involves forum posts only accessible on Tor sites and while this means the posts are accessible to anyone with a Tor browser, interactants on these sites have gone to great lengths to ensure their online anonymity. The most appropriate guiding principles for this work, then, are concerned with participant welfare and the balance of benefits and harm.

Principles to do with participant welfare generally state that researchers should, as far as possible, ensure participants' informed consent, and that appropriate measures are taken to ensure confidentiality and anonymity. The issue of consent is problematic in this case. While the police force that provided the data have consented to its use for research purposes on behalf of the UCs involved, the offenders are of course entirely anonymous, but even if they were not, any attempt to contact them would jeopardise not just the aims of this research but also vital police work. Regarding the victims, it was thought that any attempt at contact would risk causing unnecessary distress, particularly as the case in question is historical, and the outcomes of this research are unlikely to impact them in any direct way. Additionally, comments on victims' language constitute a relatively minimal portion of the thesis, the far heavier focus being placed on the offender (see Study 1). It was decided therefore that victims would not be contacted for consent but that rigorous precautions would be taken to ensure anonymity (as was done for all participants involved). This involved all identifying information such as names (including screen names, barring Study 3), locations and contact details being removed and replaced with descriptive terms, e.g. 'I'm from *place*'. It was deemed necessary to retain the screen names of the individuals in Study 3 to ensure clarity where forum users refer to each other in their posts and post responses (but because the screen names are already anonymous pseudonyms there is no concern regarding anonymity here). Additionally, all data presented in the final thesis has been considerably selected so as to be untraceable to the subjects in question, and the same is true for all present and future publications resulting from this work.

Another important issue, and one central to the data sharing agreement between the researcher and police force, is data security and storage. The data was accessed under the provision that the researcher was vetted by police, and that data was stored securely on an encrypted device which remained in secure storage when not in use. The use of the Avatar web-scraping tool was done with express permission from the same police force, with the agreement of the developer, as it is a commercial product. Importantly, Avatar strips all

content of any illegal media, so the user is never at risk of downloading illicit material. However, the tool does not remove links to other webpages containing illicit media so all links found in the data were removed and replaced with “*link*” by the author (while links to clear web pages were retained). The three datasets analysed in this work as well as the data used in the two pilot studies are stored in private appendices in Volume 2 of this thesis. Volume 2 exists in digital form only and was provided to external examiners on encrypted storage devices as the data is not available for public consumption. No hard copies of data were made.

One issue arises particularly from Studies 2 and 3, which concern unresolved cases of potential OCSA, unlike Study 1 which involves a convicted offender. As all data was provided by the police, and as the interactions in Study 2 involve officers in undercover roles, it was agreed that the force providing the data were already aware of the activity depicted in the texts, and therefore the researcher was not bound to report any identifying information regarding potential offending individuals to the police.

Finally, researcher well-being was also taken into account, and as another provision of data access, the researcher was required to have regular appointments with an approved psychologist from the Regional Crime Unit, who works with police personnel exposed to similar data.

Generally speaking, all efforts have been made to ensure that this research has been conducted within the guidelines set by Aston University Research Ethics Committee (2015), BAAL (2016) and BPS (2017). Having said this, there is clear room for further discussion on ethical research practices in forensic contexts such as this, in which issues like consent are complex. While the victims involved here may receive no direct benefit from this research, it is intended that findings will both increase our general understanding of online child sexual abuse interactions of various types as well as informing police practice regarding the identification of online offenders and prevention of abuse. Therefore it is hoped that the possible benefits for potential future victims, police practice and wider society outweigh the lack of direct advantages for the victims involved here and work to justify the research more generally.

Conclusion

This chapter has in a general way described the data and methods used in the three studies, and presented two pilot studies which aimed to address some of the noted difficulties with

move analysis. The first showed that speech act theory can be employed in the early stages of move analysis to formalise the expression of rhetorical strategies, and the second exhibited a method for testing whether two linguists can independently derive similar moves from a text, and showed positive results. The analytical procedure employed across the three datasets was then presented, along with an example move-map, illustrating the rhetorical structure of one interaction. Ethical issues raised by this research were then considered. The following Chapters (4-6) present the three main studies in full, including more detailed accounts of the methods used in each context.

Chapter 6: Study 1: Deceptive identity performance in offender-victim interactions²

Introduction: context and aims

This study concerns the case of a man convicted of child sex offences after pleading guilty to 45 charges related to grooming and blackmailing young girls online, and distributing indecent imagery over a 14-month period between 2009 and 2011 (BBC News, 2011). The man was in his early 20s and reportedly befriended both male and female victims before coercing them into providing indecent images of themselves and/or engaging in other sexual activities via webcam (BBC News, 2011), in practices widely recognised as sexual grooming and extortion (O'Connell, 2003; Whittle, Hamilton-Giachritsis & Beech, 2013; Açar, 2016; Kopecký, 2016; 2017; Wolak *et al.*, 2018).

The reason this case is interesting from an identity perspective is that the offender used several created online personas when communicating with his victims via instant messaging (IM) platforms, each with a different alias and varying characteristics. These adopted personas enabled him to play with various aspects of identity such as gender and ethnicity when engaging with victims, and he would cycle through them throughout interactions in an apparent attempt to find those most likely to achieve victim compliance in various forms (e.g. he might switch to a bisexual female persona after an unsuccessful attempt to engage female victims into sexual activity using a straight male persona (see e.g. T15 and T19 in appendix 3). The term 'persona' is deliberately selected in this case over 'identity' in order to avoid confusion in later discussions on identity more generally. Taking an element of Bucholtz and Hall's (2005) partialness principle - that identity construction may be deliberate and self-aware, or unconscious, or anywhere in between - then this case demonstrates identity performance at the extreme end of the spectrum; highly self-aware and deliberately deceptive.

This case therefore presents an interesting opportunity to explore the relationship between rhetorical moves and a highly conscious form of identity performance. From transcripts of 20 sexually abusive interactions between the offender and 20 victims (each transcript details an interaction with one victim in which the offender might switch between multiple personas) this

² This study has been reported as a journal article (see Chiang & Grant, 2018). Both this chapter and the article were developed from the same original text but in their parallel development, Grant contributed editing and some text to the article only. This chapter is the author's own work but in producing this final version comments made by reviewers of the journal article were taken into consideration.

study broadly aims to explore the various personas assumed by the offender and how moves are used as a resource in this performance. The specific research questions are as follows:

1. How do the offender's adopted personas compare in terms of moves, move frequencies and move structures throughout the 20 interactions?
2. To what degree does variation in move use index different identity positions of the personas?

The remainder of this chapter explains the methods used, including the data selection process and analytical procedure, before results are presented and discussed.

Methods

Data selection

The initial dataset for this study comprised around 2,500 chat-log transcripts between the offender and numerous target victims, in HTML format. Using a Python script, all transcripts were collated by target victim username, revealing a total of 935 targeted IM accounts over the 14-month period. It is important to note that the number of target victim usernames is at best considered an approximate indicator of the total number of target victims as it is possible that some may have operated more than one of these accounts.

For the purposes of the current study it was necessary to select a small portion of the data for analysis. Text length was the primary criterion guiding transcript selection, and this was measured by the total number of lines of participant dialogue in each transcript. In-chat commands such as video requests and user status changes (see below) are also included in the line count (one command per line), for example:

Starting a Video Call with *username*
username has changed his/her status to Online

Figure 6.1 summarises the distribution of texts at intervals of 50 lines.

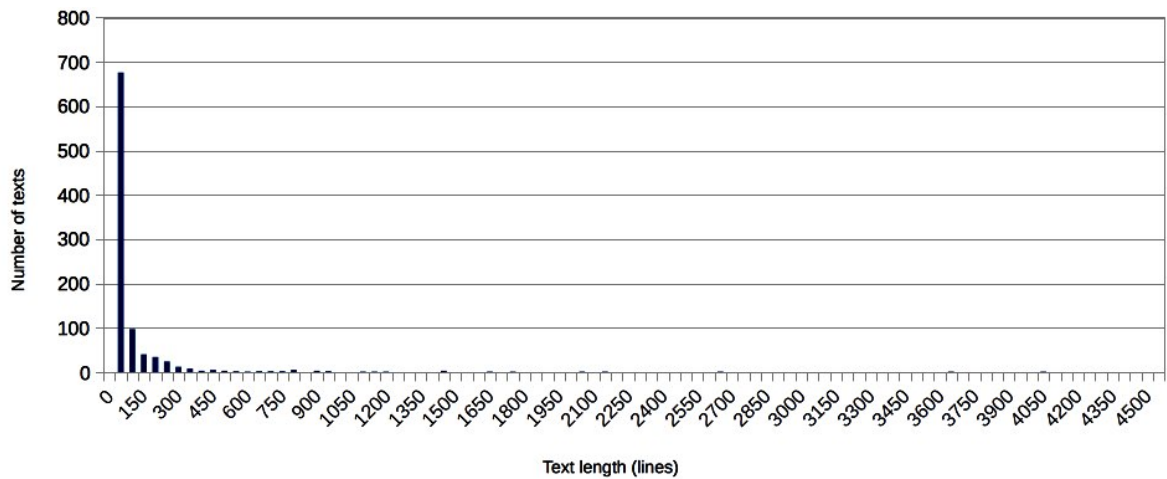


Figure 6.1. Distribution of offender-victim texts by length in lines.

Figure 6.1 demonstrates that the large majority of the transcripts (771 of 935) are fewer than 100 lines long, and in fact, the majority of these are under ten lines long. These extremely short transcripts largely document failed attempts at interaction by the offender, and in many of these cases the target victim does not respond at all. While these might be useful in illustrating the offender's less 'successful' approach methods, the current study is interested in longer stretches of dialogue in order to capture a range of rhetorical strategies used by the offender in the adoption of a number of personas. Because of this, the large group of texts under 100 lines (82.5% of the dataset) was discounted from the analysis. Conversely, the longest interactions (over 1,500 lines), provide so much content that selecting many of these would make it impossible to consider a reasonable cross-section of interactions with different victims. Therefore texts above 1,500 lines were also discounted (although these constitute only 0.7% of the dataset and might be considered outliers regardless). The 1,500 line cut-off point was chosen to ensure a reasonable selection of texts of varying lengths. To strike a balance, then, a sample of 20 transcripts between 100 and 1,500 lines was selected. Figure 6.2 presents the remaining 16.8% of the data (157 transcripts) from which the 20 transcripts were chosen. These are presented in full in appendix 3 (volume 2).

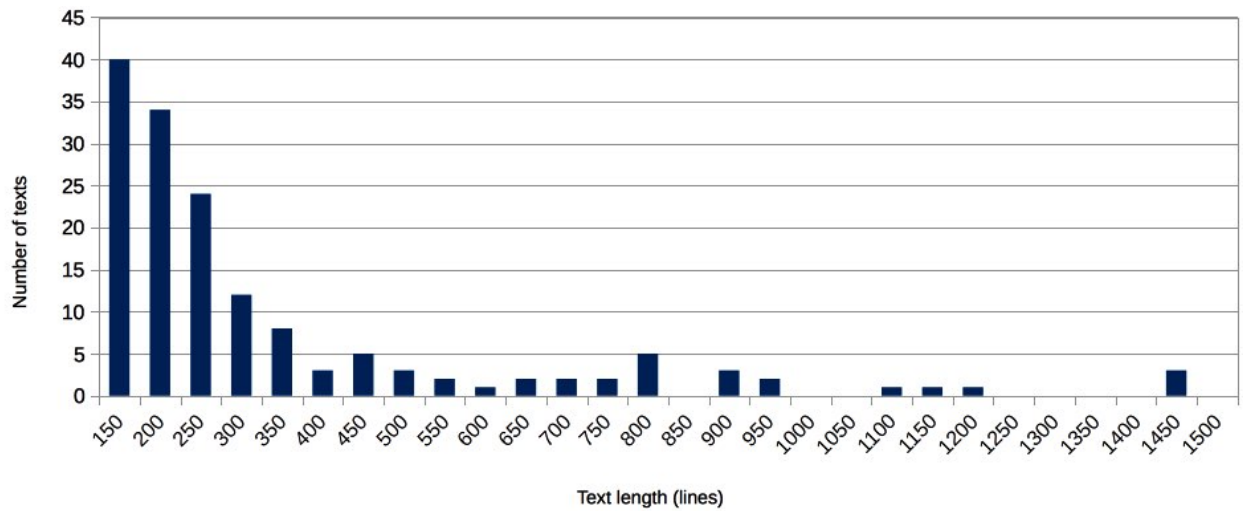


Figure 6.2. Distribution of offender-victim texts between 100-1500 lines.

Even within this reduced range, it was deemed important that the selected texts varied in length. The deliberate selection of transcripts of very similar lengths might have limited the range of abuse strategies (and responses) captured. It was also ensured, therefore, that at least one text came from the upper end of the spectrum. Figure 6.3 illustrates the distribution of the final 20 transcripts, selected at random from the reduced dataset (selected texts are marked in red).

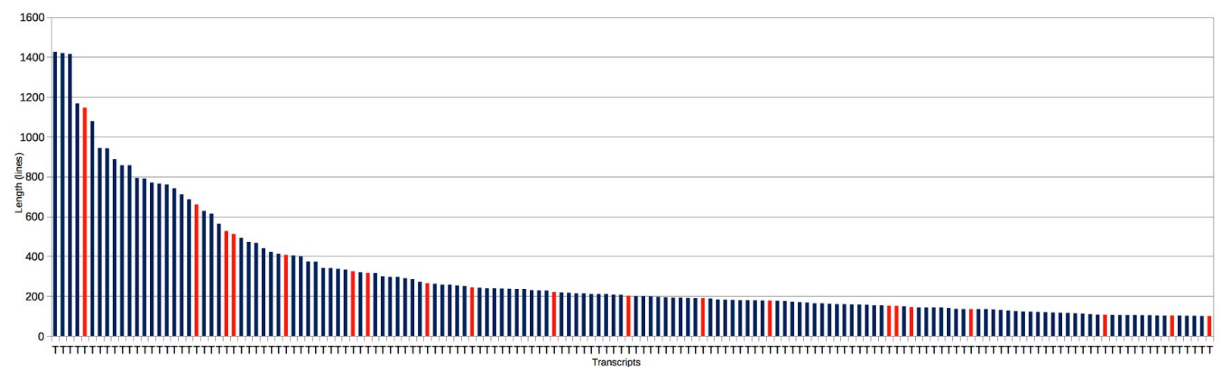


Figure 6.3. Distribution of 20 selected texts by length in lines.

Data description

Transcript characteristics

All transcripts were cleaned and converted to .xls files using a collection of Python scripts. Table 6.1 details the characteristics of the 20 transcripts, which are numbered arbitrarily.

Transcript	Length (lines)	Number of sessions	Contact duration (days)	Number of personas assumed
T1	526	25	5	3
T2	659	30	72	4
T3	511	19	33	4
T4	406	23	79	5
T5	243	4	1	2
T6	177	7	16	3
T7	264	29	34	5
T8	312	28	299	9
T9	323	21	52	4
T10	1188	26	45	3
T11	151	5	2	1
T12	220	119	87	1
T13	133	13	74	2
T14	106	15	119	3
T15	201	9	98	2
T16	144	30	107	4
T17	100	9	10	2
T18	209	22	344	3
T19	148	20	26	3
T20	101	10	19	1

Table 6.1. Offender-victim transcript characteristics.

The interactions range between 100 and 1,188 lines in length and last between 1 and 344 days. It is important to note that the duration accounts for the time between the first and last contact by the offender to the victim's IM account, so this time can include ignored contact attempts. The session count indicates the number of times a new IM session was started and does not necessarily reflect the number of conversations the participants had within each overall interaction.

All victims in the sample purported to be female and living in the UK, and 16 out of 20 stated their ages as between 12 and 15. Four victims did not state their age. Given the opportunities

that IM environments present for manipulating self-presentation (Seargeant & Tagg, 2014; Tagg, 2015) it must be acknowledged that the potential for deliberate misrepresentation extends to the victim group as well as the offender. Indeed, one victim states both that she is 15 and 12 years old at different points (see T9 in appendix). However, given that the offender was convicted of crimes against females of this same age group, and that webcams are commonly used in these interactions, it is cautiously accepted that the victims are all females under the legal age of sexual consent in the UK, or at least perceived to be by the offender. But even if some were not underage at the time of interaction, they were still subjects of sexually exploitative behaviour which remains worthy of investigation.

Transcripts across this dataset are numbered 1-20 and referred to as T1, T2, T3 etc. Each transcript represents an overall interaction between the offender and a different victim, which might comprise several individual conversations which are individuated by 'session starts' or long breaks and topic shifts. Similarly, victims are referred to as V1, V2, V3 etc. The single offender is referred to as O1, the persona assumed at any point (as distinguished by email addresses and screen names visible at each 'Session start' point) is indicated in brackets. For example, the offender assuming persona 1 is written as "O1(P1)". Personas are numbered arbitrarily.

Offender persona characteristics

Table 6.2 illustrates the 17 individual personas (referred to as P1, P2, P3, etc.) created and used by the offender across the 20 transcripts, and the associated essentialist identity characteristics portrayed by the offender.

Persona	Stated identity positions (gender, age, ethnicity)	No. of victims approached	Total utterances (lines)
P1	Male, 17	12	642
P2	Male, 16/17, white	6	214
P3	Male, 17, white	5	37
P4	Male, 19/20, white, model agency representative	4	155
P5	Male	3	14
P6	Male, 15	4	360
P7	Male	2	29
P8	Male	2	19
P8	Male	1	36
P10	Male	1	2
P11	Male, 17, mixed-race	6	307
P12	Male, 19, mixed-race	4	703
P13	Male, 18, black	1	22
P14	Male, black	1	20
P15	Female, mixed-race, bisexual	6	128
P16	Female, lesbian, bisexual	5	274
P17	Female	1	6

Table 6.2. Characteristics of offender personas.

It can be seen that the offender mostly uses personas of males between 15 and 20 years old, and occasionally also personas of black and mixed-race males and females, as well as lesbian and bisexual females. It is important to note that the stated identity positions were not consistent across all interactions had by any one persona, for example, P11 and P12 identify as mixed-race with some victims and not others. The number of victims approached by each persona varies from one to 12, and the number of linguistic contributions from each persona ranges from two to 703.

Procedure

Moves were identified and described, and revised throughout the coding process (see Chapter 5). Refinements to the final move set included the removal of two moves -

Assessing accessibility and *Creating/sustaining fictional scenarios*. The former featured in Chiang and Grant's (2017) move set to describe occasions where the offender attempted to gauge the level of a target victims' accessibility both on and offline, but it was decided here that this was adequately accounted for by the *Assessing likelihood and extent of engagement* move. The latter move - *Creating and sustaining false scenarios* - was introduced at the start of the coding process to account for the various ways the offender would build the fictional worlds he sometimes used, for example, posing as a modelling agency representative. This move, however, proved extremely difficult to code for as the line between what was clearly fabricated and what was not, was often difficult to establish. It was decided that the act of creating/sustaining false scenarios did not function well as a rhetorical move in this case.

An initial reliability test found 72% agreement between the author and a second coder (also a trained linguist) regarding identified moves when independently coding a test sample (10%) of the dataset. Being just within the acceptable range (Stemler, 2004), the author and second coder followed up with discussions around the moves and coding criteria to see where discrepancies arose. The first significant issue was that Coder 1 (the author) had coded for non-linguistic in-chat commands (e.g. 'O1 just sent you a nudge'), whereas Coder 2 analysed linguistic contributions only. Once these were removed from the analysis, the level of agreement rose to 76.1%. Beyond this, four main discrepancies were found, three of which were due to definitional issues. First, there was confusion around the *Initiation* and *Maintenance* of sexual topics; Coder 1 would identify *Initiating sexual topics* only at the first introduction, and afterwards consider any sexualised input as maintenance or escalation of sexual topics generally (as long as this occurred within the same conversation), whereas Coder 2 had marked this move where each new sexually-themed topic arose. The second issue was that where Coder 1 used the *Greetings* move only when typical greeting terms were observed, e.g. 'hey', Coder 2 interpreted all opening utterances as *Greetings*. Thirdly, coders were seen to disagree regarding *Assessing and managing risk*, in that Coder 1 would identify this move in cases where the offender/victims would make excuses for not engaging in webcam interaction (as a strategy of risk management), whereas Coder 2 would (not unreasonably) mark instances such as this as *Maintaining conversation*. It is of course possible for both to function simultaneously in a single utterance. A final issue concerned an apparent overlap between the moves *Rapport* and *Maintaining conversation* and unlike the previous three, this involved a genuine difference in judgement between the two coders. While it was agreed that overlap between the moves was inevitable in that *Maintaining conversation* can function as a way of building rapport, Coder 1 tended towards selecting the latter where Coder 2 would opt for the former. From the entire sample dataset, Coder 1

identified nearly a third more *Rapport* utterances than Coder 2 (66% and 47% respectively), and nearly half as many *Maintaining conversation* utterances (17% compared with 35%). This issue was not considered resolvable at this point but it is recognised that it would be beneficial to investigate the relationship between the two moves more closely in future work. Following discussions around the three definitional discrepancies and clarifications regarding move criteria, Coder 2 re-coded the data and the level of agreement between coders rose to 80.1% overall.

Unsurprisingly, there is considerable overlap between the moves found in the current study and those observed in Chiang and Grant (2017), but the data for the two studies varies in some important ways (i.e. Chiang and Grant's featuring adult decoys and the current study featuring genuine victims) and as such some different moves begin to surface. The current move set then is best seen as an extension of Chiang and Grant's work.

As this study focuses on the moves and move patterns across the different personas, and is not dealing with matters of genre, it is not particularly useful to consider the moves as being obligatory or optional. Instead, moves were determined to be typical or atypical for each persona and the offender overall (where 'typical' is roughly defined as appearing in over half of the interactions had by any one persona). Some offender personas were discounted from this portion of the analysis because their linguistic contributions were too few to indicate any tendencies. Another move category is borrowed from Boon (2015), who introduced the notion of 'desired' moves. This is particularly useful regarding the victims' responses to the offender's advances and claims in terms of what would likely be considered desired (or otherwise) by the offender. Boon's (2015) move category was extended and, where appropriate, victim responses were classified as 'Desired', 'Mixed', and 'Undesired'. These categories sit alongside a range of other moves used by victims.

Once move frequencies were determined, the opening move structures (or the "approach phase[s]" (Grant & Woodhams, 2007, p.5)) of each interaction were considered in order to explore some of the structural differences and similarities between the interactions of each persona. The approach moves are a particularly interesting area of investigation because they demonstrate how the offender presents the various personas to the victims in the very first instance. These early moves are arguably less influenced by the offender's interlocutor than later parts of the interaction in which participants have a greater shared linguistic history (Grant & MacLeod, 2018), or where where their language might be more likely to converge. Narrowing the focus to the opening move structures also enables a clear area for comparison between the personas, and allows for consideration of those personas which

make only a small number of contributions. Move-maps were created to aid the structural analysis and a multidimensional scaling (MDS) scatter plot was created using statistical programming language R, as another way to measure the distance between personas.

A final step which became necessary towards the end of the analysis was to consider the veracity of the statements the offender used to describe himself. To do this, all self-describing assertives used by the offender (e.g. ostensibly factual information such as “I’m 19”) were extracted and formulated into questions about the offender. These questions were passed onto the police force providing the data, who were asked to verify or falsify each claim. This step enabled a further comparison between the personas, in terms of the frequency of self-describing assertives that are used as well as their veracity.

Limitations

This study does not explicitly discuss the victims’ contributions beyond descriptions of their moves. This is because the research is primarily interested in the offender and his use of different online personas in the process of online sexual abuse. Arguably each interaction is an exercise in power and is in itself abusive while potentially facilitating further abuse. As mentioned in the introductory chapter, one of the primary rationales for this project is that its findings might positively contribute to policing strategy, and while a deeper exploration of the victims’ language would certainly yield useful and important findings, it seems logical to begin online abuse research with a focus on the offender as the subject of police investigation and perpetrator of abuse. Importantly though, both participants’ contributions were subjected to the move analysis, in order to ensure the offender’s utterances could be understood with the context of the victim’s in each case.

A further constraint on this study is the small dataset, which potentially limits the range of moves and strategies observed. The dataset, however, is considered sufficient for this preliminary exploration of how moves and move constellations might index identity positions and demonstrate the closeness and contrast between the offender’s various personas.

Analysis

Rhetorical moves in offender-victim interactions

A total of 19 moves was observed across the dataset, together encompassing 150 individual strategies. Of these, 13 moves are at some point used by both the offender and at least one

victim, and are therefore considered ‘shared’ moves, although some of the strategies involved in these moves are not (shared moves are not to be confused with Macagno and Bigi’s (2017) *global moves*, which represent collaborative goals between participants). Three additional moves are used only by the offender, and another three (related to Boon’s (2015) ‘desired’ move types) are only used to categorise the victims’ contributions. This section describes the move functions and gives examples of pertinent strategies working to achieve each move, starting with the shared group, followed by offender-only and then victim-only moves (see appendix E for the full list of moves and strategies). It will become clear that there is a certain amount of overlap in the strategies, as the same strategy may work to achieve different moves, depending on the conversational context. Transcript and line numbers are provided for each textual example.

Shared moves

The first move shared by both offender and victims is *Greetings*, which are used to initiate conversation. Strategies include regular greeting terms, e.g. “hey” (T1 L94), as well as checking interlocutor presence, e.g. “u there?” (T1 L97) and using the IM ‘nudge’ function, e.g. “You have just sent a nudge.” (T1 L88).

Rapport is used to establish and maintain friendships and relationships. A major strategy of rapport-building involves inquiring about and sharing personal information about interests, relationships and daily life, e.g. “asl?” [age, sex, location] (T2 L1), “wuu2” [what you up to?] (T2 L22). Other strategies include giving (and positively responding to) compliments, e.g. “u luk nice” (T8 L63), webcam or image requests and compliance (often made through a specific IM client function), expressing emotions (verbally or with emojis), phatic expressions, e.g. “you ok” (T8 L3), politeness strategies like apologising, thanking and laughter terms, and ‘banter’. Offender-only strategies of rapport-building include denying sexual motivations and retracting sexual questions or requests, e.g. “lol im joking” (T10 L324). A victim-only strategy is justifying or mitigating negative responses, e.g. “im busy atm [at the moment] lol im always busy soz [sorry] x” (T8 L167).

Sexual rapport is used to establish and maintain a positive, sexually-oriented relationship. A prominent strategy of this move is inquiring about and sharing sexual history, preference and practices, e.g. “ever been with a girl?” (T10 L652), “[do you prefer] personality or looks?” (T10 L212), “i wear like really skimpy outfits haha” (T5 L79). Other strategies include sexual compliments, e.g. “nice tits” (T19 L124), and webcam or image requests and compliance. Offender-only strategies include checking age-gap approval, e.g. “18tht 2

old” [18, is that too old?] (T7 L215) and retracting sexual questions or requests. No victim-only strategies were observed.

Maintaining conversation functions simply to sustain the immediate interaction. Strategies include fillers and backchannelling (Yule, 1996), e.g. “erm” (T10 L624), “huh” (T10 L188), and “lol” (T7 L68), checking interlocutor presence, attempting to regain attention, e.g. “talk to meee” (T12 L110), indicating temporary absences, e.g. “brb” [be right back] (T15, L139), and reporting or inquiring about technological communication difficulties, e.g. “my cam aint working” (T15 L125).

Assessing likelihood and extent of engagement is used to gauge the likelihood and extent of the interlocutor’s engagement in terms of general communication, sexual engagement or offline meetings. Strategies include inquiring about and sharing sexual history, preferences and practices, and sexual requests, e.g. “show me ur tmmy [tummy] then?” (T1 L70), as well as webcam or image requests, and proposing hypothetical scenarios, e.g. “ok so if we met and i tried it on with ya you would say bye..??” (T10 L509).

Assessing criteria fulfilment is used to gauge how far an interlocutor meets particular preferred criteria. Strategies include inquiries about age, physical appearance, clothing and ethnicity, e.g. “u mixed race?” (T18 L5), “[do you] have nice legs?” (T2 L536) as well as webcam or image requests.

Assessing and managing risk is used to gauge and manage the types and level of risks associated with the current interaction. Common strategies include webcam or image requests (where used for identity verification) and explicitly referencing the potential for identity deception, e.g. “who ever your picture is, is cute but i know your like 75...” (T10 L118).

This move is particularly complex. The strategies involved reflect the fact that the types of risks faced by offender and victims are varied and specific to the participant types. The offender’s main risk is being caught and apprehended for child sex offences. His primary strategies for *Assessing and managing risk*, correspondingly, involve identity concealment, such as refusing webcam or image requests and giving excuses for this, e.g. “dont work on this laptop” (T10 L362). As well as this, he sometimes appears to try and mitigate the seriousness of sexual questions or comments, either in an effort to avoid scaring away the victim, or possibly to support later claims that his assertions were not genuine (Chiang &

Grant, 2017). Other risks to the offender become apparent too; at one point he inquires about a victim's birth control methods, suggesting this may also be an area of caution for him.

The victim group is exposed to a slightly different set of risks, although it is likely there is some overlap where identity concealment is concerned. Some prominent victim-only strategies for assessing and managing risk include inquiring about the offender's identity, e.g. "who is this" (T15 L50), the offender's relation to the victim, e.g. "do i know you.." (T1 L211), the offender's acquisition of the victim's contact details, e.g. "were you get ma addy from" (T1 L167), and the offender's interactional motives, e.g. "whyy did uu add me?" (T4 L53). These strategies indicate the victims' awareness of the general risks involved in speaking to strangers online. This offender, however, sometimes poses a more specific risk, whereby he attempts to extort imagery or further contact from victims by threatening to disseminate previously obtained pictures or videos of the victim. This risk invokes strategies such as denying the offender's claims of possessing illicit material, justifying negative responses to requests, and, in the worst case scenario, complying with the offender's requests. Other strategies include counter-offers, e.g. "[webcam] wnt work. Ill meet you instead and do whatever" (T9 L264), warnings of police involvement, begging, and expressing fear or vulnerability, e.g. "im scared for my life here..." (T9 L238), "im fuking 12 ffs [for fuck's sake] :(" (T9 L241).

Initiating sexual topics is used to introduce (or re-introduce) sexual topics to the conversation. This move accounts for any first mention of sexual themes, or a revisit to sexual themes after a period of non-sexual conversation.

Maintaining/escalating sexual content is used to maintain or escalate the level of sexual content in the conversation. This move incorporates all previously mentioned strategies of a sexual nature, as well as webcam or image requests, extending interest to a victim's friend or family, e.g. "... u and ya mom shud let me come take sum photos? (T3 L112)" and normalising sexual topics and requested acts, e.g. "girly friends do it alot" (T12 L211).

Immediate sexual gratification is used to achieve or satiate immediate sexual arousal. As well as some previously mentioned sexual strategies and webcam/imagery requests, this move largely involves direct sexual suggestions, requests and commands, e.g. "u shud snog each other ;)" (T12 L208), "lift ya top ..." (T12 L207).

Meeting planning is used to arrange and organise offline meetings. This involves suggesting or requesting meetings, discussing practical details associated with meetings, e.g. “what about wednesday” (T10 L990), and requesting and sharing contact details.

Reprimanding is used to denounce, scold or criticise. This involves complaints and criticisms regarding behaviour, e.g. “...yr jst ganna hav excuse afta excuse...” [you’re just going to have excuse after excuse] (T5 L216), and challenging an interlocutor’s question or action, e.g. “wft [what the fuck] was u playing at” (T4 L78). Other strategies include direct insults, e.g. “you some sick pedo” (T8 L235), and accusations, e.g. “fuckin fake” (T5 L239).

Sign offs are used to indicate imminent departure from the conversation, and are realised by typical sign off terms, e.g. “g2g [got to go] byeee.” (T11 L108).

Offender-only moves

The first offender-only move is termed *Assessing role*, and is used to gauge the sort of persona most likely to be ‘successful’ in pursuing the victim. The main strategy involved is inquiring about various preferences of the victim, including ethnic origin, e.g. “u like black boys?” (T7 L208) and sexual orientation, e.g. “... u bi, str8?” (T8 L100). Other strategies include directly inquiring about victim’s sexual practices, e.g. “u a lil cam tease?” (T18 L209), and inquiring about possible financial motivations, e.g. “wanna earn some money?” (T8 L26).

Overt persuasion is used to explicitly influence a victim’s decision-making or actions. It has already been noted that each of these interactions is an exercise in power and persuasion for the offender, as he attempts to convince each victim to present indecent material or engage in illicit acts on camera. This move, then, accounts for the more obvious instances of encouragement and the stronger attempts to push victims into some sort of compliance, rather than the more subtly persuasive techniques like rapport-building. Strategies include direct commands, e.g. “accept [the webcam request]” (T12 L26) and threatening to leave the conversation e.g. “get ur cam workin... or im goinn” (T5 L224), as well as seeking sympathy and material offers. Other strategies include diminishing the significance or intensity of a sexual request, e.g. “lol its only girly fun” (T12 L210), and presenting opportunities to interact with the offender as scarce, e.g. “im moving to america in 3 weeks :(” (T14 L65).

Extortion is used to coerce victims into providing illicit material or engaging in sexual acts by means of force. The main strategy in this move is threats, which can be direct, e.g. “...ill just send the pics/vid to all ya contacts” (T15 L169), indirect, e.g. “got the video” (T15 L167), and

non-specific, e.g. “ill fuck u around” (T9 L245). Other strategies include stating ‘contractual’ terms, e.g. “u got 30seconds [to start your webcam]” (T9 L247) and victim-blaming, e.g. “just remember u caused this...” (T9 L261).

Victim-only moves

As previously mentioned, this study is mostly interested in the offender; being the perpetrator of the abuse, he seems to have a clearer, more focused agenda than the victims, who might be interested in more casual chat. It must be remembered, though, that the victims share many moves with the offender, including on rare occasions the *Introducing sexual topics* move (see figure 6.7), and cannot be considered to have no agency in these interactions. However, the victims are of course the receivers of the abuse - they are the ones being manipulated, persuaded, or threatened, and as such, many of their utterances are usefully captured as types of *response* to the abuse. Therefore, in addition to the thirteen shared moves, the victim group make use of three broad response moves: *Undesired*, *Mixed* and *Desired*. These are largely based on Boon’s (2015) move category and include strategies of topic control (see Shuy, 1996; Grant & MacLeod, 2018).

Undesired responses express rejection or avoidance of sexual topics and advances, as well as disbelief regarding the offender’s purported identity, claims and threats. They also include attempts to cease either the immediate conversation or overall engagement. They are responses that we can reasonably assume would be undesired by the offender. The main strategies include dismissing and rejecting advances, suggestions and offers (sexual or non-sexual), explaining rejections, e.g. “because i dont [want to go on webcam]” (T1 L102), and doubting the offender’s claims, e.g. “tbqh [to be quite honest] i dont believe u” (T3 L292). Other strategies include declining or avoiding webcam requests (often as an IM client function), refusing information, mentioning a boyfriend or partner, threatening police action and ridiculing the offender. Understandably there is some overlap seen in this move with strategies of the *Reprimanding* move.

Mixed responses convey attitudes which are neither strongly positive or negative, or both simultaneously, as well as to convey uncertainty. The main strategies seen here are non-committal, ambiguous or evasive responses to sexual advances e.g. “laterr probss” (T1 L487), or challenging the offender’s offers or motivations, e.g. “why would u do that :s” (T3 L314) (in response to an offer of payment in exchange for a meeting). Some of the strategies involved are also used in the *Undesired* response category.

Desired responses convey acceptance, development or approval of sexual topics, requests or demands, as well as showing acceptance of the offender's claims and threats as authentic. They are considered desired in the eyes of the offender. The main strategies involved in conveying acceptance include webcam/image compliance (or less frequently, requests), returning sexual questions or compliments, e.g. "xxand wat will u wear :L xx" (T2 L148), accepting offers, friendly 'banter' and sending sexual material (through an IM client function). Strategies relating to the offender's threats involve complying with demands, e.g. "...ima see if i can find my cam" (T9 L240) (in response to "ill fuck u around"), expressing shock or fear, e.g. "...what do u want ??where did u get them?" (T8 L225), and begging and counter-offers, e.g. "it wnt work. Ill meet you instead and do whatever" (T9 L264). There is evidently some overlap here with the victim-only strategies seen in the *Assessing and managing risk* move, as it sometimes appears that the best or only course of risk management available to the victim is thought to be complying with the offender's demands.

Move frequency

Figure 6.4 illustrates the frequency of each move (presented loosely by order of first occurrence) used by the offender across all 20 transcripts, revealing that the most heavily used are *Rapport*, *Maintaining/escalating sexual content*, *Assessing likelihood and extent of engagement* and *Sexual rapport*.

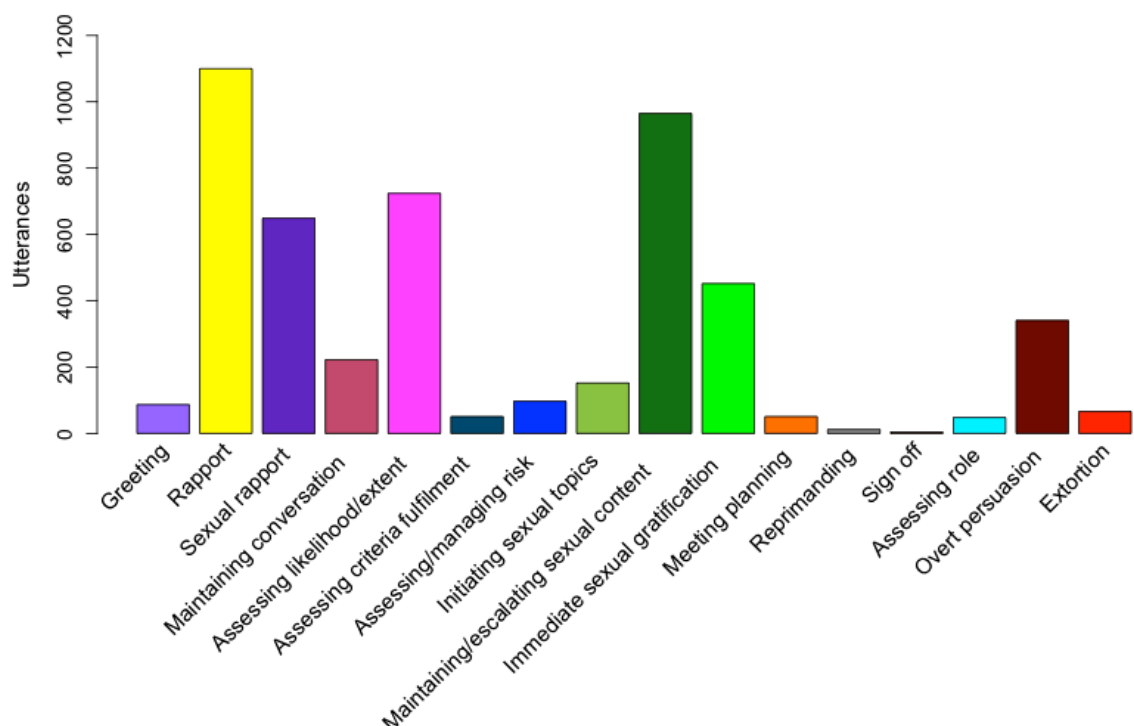


Figure 6.4. Frequency of offender moves across 20 transcripts.

These high-frequency moves are found in all 20 transcripts and are therefore considered typical for the offender, and might represent the interactional goals most significant for him. *Initiating sexual topics* is also considered typical as it features in all transcripts, along with *Greetings*, *Maintaining conversation*, *Assessing criteria fulfilment*, *Assessing and managing risk*, *Immediate sexual gratification*, and *Overt persuasion*, all of which appear in over half the interactions (although it seems likely that *Greetings* and *Maintaining conversation* are typical features of IM chat generally). Atypical moves (found in fewer than half of the interactions) include *Meeting planning*, *Reprimanding*, *Sign offs*, *Assessing role* and *Extorting*.

Move frequency by persona

Figure 6.5 shows the frequency of moves as used by each of the 17 personas adopted by the offender.

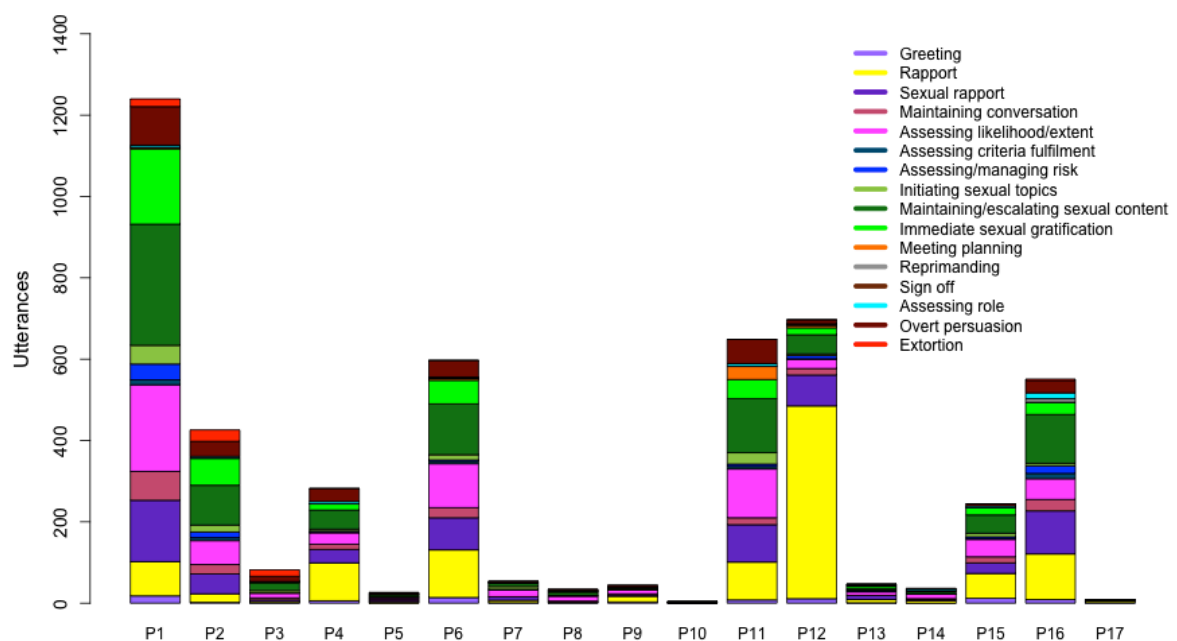


Figure 6.5. Frequency of offender moves by persona.

This clearly illustrates that some personas are used to contribute far less than others across the 20 interactions, and it may be that these less-used personas were somehow less 'successful'. The low utterance count means that these personas are difficult to comment on in terms of what might be typical or otherwise, so those contributing fewer than 50 utterances, (P3, P5, P7, P8, P9, P10, P13, P14, P17) are discounted from this portion of the

analysis. Figure 6.6 shows the move frequencies for the remaining eight personas (normalised to 100% of the total utterances from each persona).

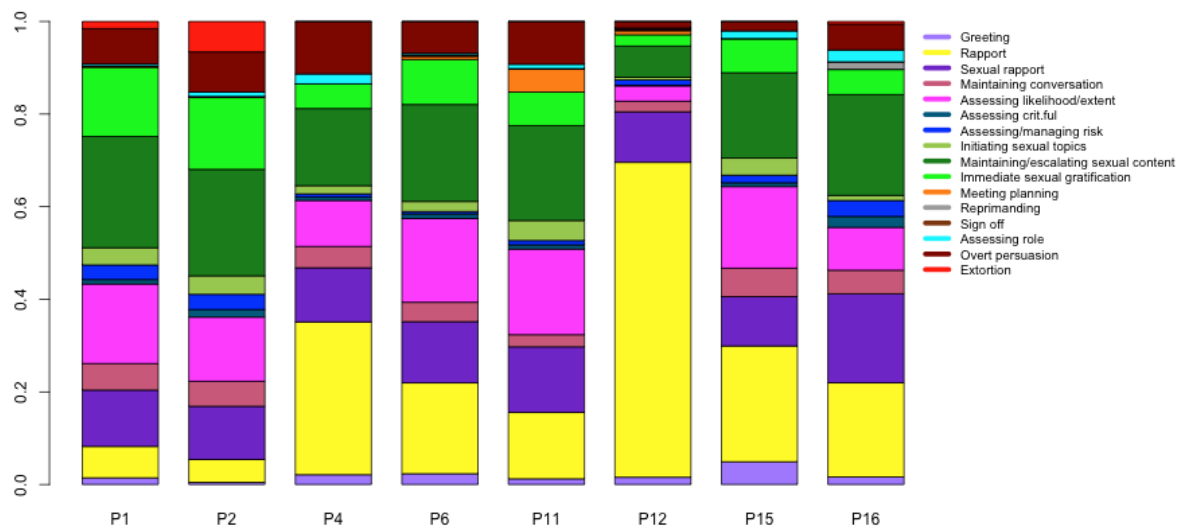


Figure 6.6. Frequency of moves of eight high-use personas.

Comparing the move frequencies across the eight most commonly used personas, then, figure 6.6 shows a number of similarities. Each persona exhibits roughly the same proportion of *Greetings*, and *Sexual rapport*, for example, and *Assessing likelihood and extent of engagement*, *Maintaining/escalating sexual content* and *Immediate sexual gratification* are also fairly stable (with the exception of P12). We can also observe where certain personas are closer to each other than to others, for example, P1 and P2 look more similar to each other than the rest of the group. We can also see stark differences; for example, *Extortion* is used most by P2, but is generally scarce; the only other personas to use this move are P1 and P16. It is also observed that only P6, P11 and P12 use the *Meeting planning move*, and P1 and P2 use considerably less *Rapport* than the others.

Comparing the personas, it is useful to remember the main essentialist identity categories of each as asserted by the offender. P1, P2, P6, P11 and P12 all purport, for the most part, to be white males in their mid- to late-teens (P11 and P12 both state at some point that they are mixed-race but these interactions are brief). P4 also purports to be a white male and also a professional modelling agency representative whose job it is to recruit talent online (no other personas operate within this sort of professional frame). P15 and P16 are both female guises of 15 years old, and both profess to be either lesbian or bisexual. Due to the stark differences in representation, and that the offender is known to be male, it was expected that, in terms of

move frequency, the model agency representative persona (P4) and the female personas (P15 and P16) would look the most different from the group, or at least substantially different from the young male group of personas; these three personas seem to represent the offender's strongest attempts to perform as something 'different' or 'other'. Figure 6.6 shows, however, that this is not really the case.

The analysis shows that the personas do vary in terms of moves and the frequencies at which they are employed; no two are identical in this sense. On the whole, though, the differences are subtle. This is with the exception of P12, which arguably looks the most distant from the rest of the group, in using twice the proportion of *Rapport* than the next highest (P4), and considerably smaller proportions of *Assessing likelihood and extent of engagement* and *Maintaining/escalating sexual content*. P12 also uses the lowest proportion of *Initiating sexual topics*, *Immediate sexual gratification* and *Overt persuasion* in the group. This suggests that P12 is, more than any other persona, used to build friendships and relationships, and while sexual moves do occur, their low proportion could mean that sexual goals are more minor to the offender in these particular interactions.

Move structure

Approach moves

Examination of the early move structures reveals many similarities between the 17 personas, but also some differences. One of the most striking features of these interactions generally is the speed at which sexual topics are introduced by the offender (echoing the *direct approach* noted in Kloess *et al.*, 2017). Figure 6.7 demonstrates the number of transcript lines before the *Initiating sexual topics* move is observed in all conversations with each persona.

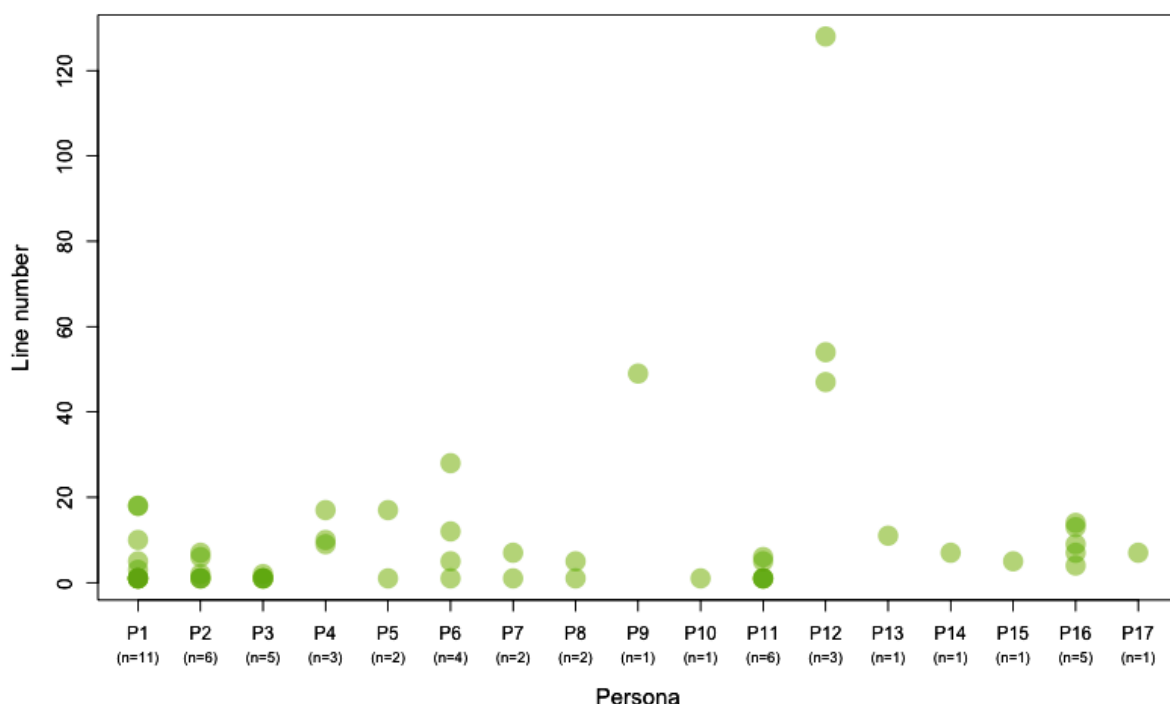


Figure 6.7. Number of lines before *Initiating sexual topics* move is observed in conversations with each persona.

Each point represents an individual conversation, and darker points indicate overlap, for example, P1 uses *Initiating sexual topics* in 11 conversations, and in six of these within the first line, hence the darkest point is at line 1 on the y axis.

As the graph shows, sexual topics are initiated very quickly with P1, P2, P3, P4, P5, P7, P8, P10, P11, P13, P14, P15, P16 and P17 all of whom do this within the first 20 lines of their conversations. The move is used particularly quickly with P1, P2, P3 and P11, often in the very first utterance with a new victim:

T1 L1:	P1: u a cam tease?
T2 L572:	P2: please tell me u like 2 turn lads on?
T9 L174:	P3: u up for sum cam fun? No faces if u dnt want
T4 L139:	P11: u giv hed?

Cases like this, in their lack of any preparatory work on the part of the offender do not reflect the process of grooming, but are closer to what O'Connell (2003) describes as the 'hit and run' approach. These examples also demonstrate that often the sexual element is implied, and frequently in the form of requests for webcam interaction. All 20 victims' responses to

such requests demonstrate understanding of the implicit sexual element in phrases like these.

Other personas are slightly more varied in the time taken to introduce sexual topics, for example with P6 this is done between the first and 28th line, and with P9, not until the 49th line. It is clear from figure 6.7, however, that P12 is again the most distinct; using this persona, the offender only introduces sexual topics at the earliest in line 47, and latest in line 128.

The early use of *Initiating sexual topics* (pale green) is often accompanied by *Assessing likelihood and extent of engagement* (bright pink) as well as *Sexual rapport* (dark purple) but it may come before or after a *Rapport* (yellow) move. This typical opening move structure used by the offender is illustrated in the left hand portions of the move-map snippets in figures 6.8-6.11 below (see Chapter 5 for directions for interpreting move-maps). Full move-maps of each transcript can be found in appendix F.

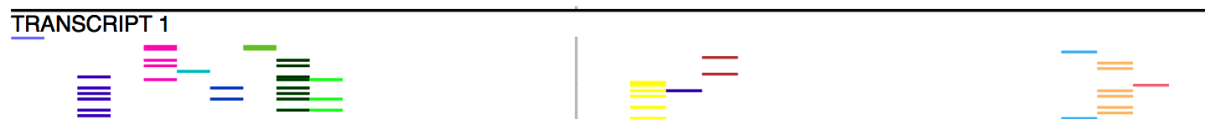


Figure 6.8. P1 approach moves (T1/V1).

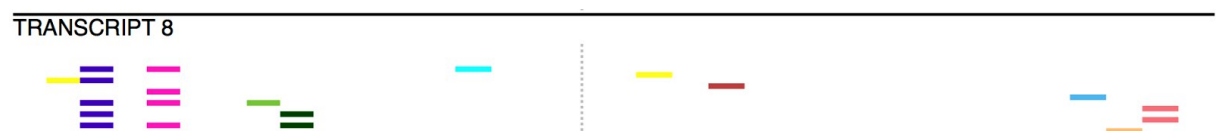


Figure 6.9. P2 approach moves (T8/V8).



Figure 6.10. P6 approach moves (T7/V7).

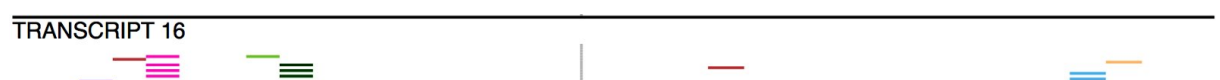


Figure 6.11. P11 approach moves (T16/V16).

Again, P12 appears to deviate from this opening move pattern more than any other persona. Figures 6.12-6.15 below represent the four interactions the offender engaged in using P12 across the dataset up to the point where the *Initiating sexual topics* move is observed.



Figure 6.12. P12 approach moves (T9/V9).

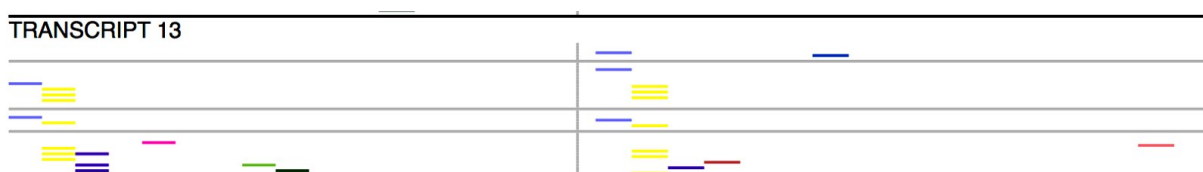


Figure 6.13. P12 approach moves (T10/V10).

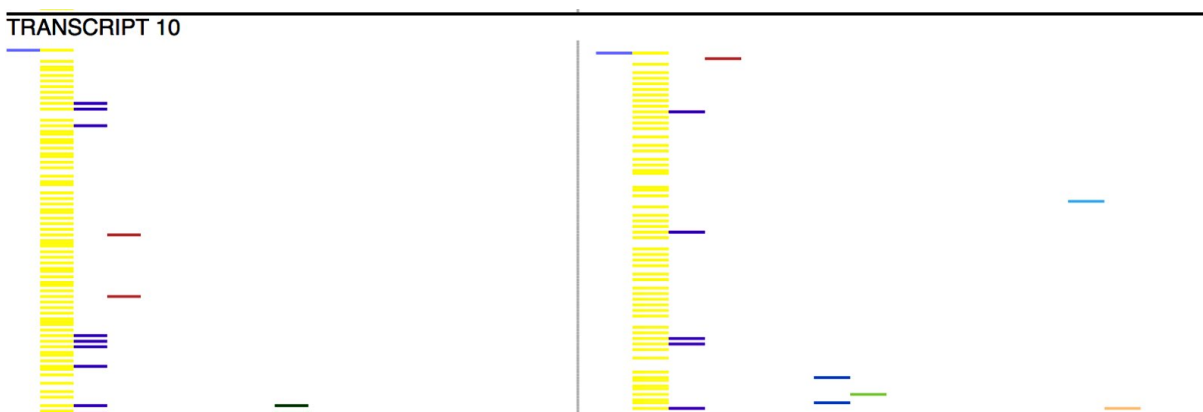


Figure 6.14. P12 approach moves (T13/V13).

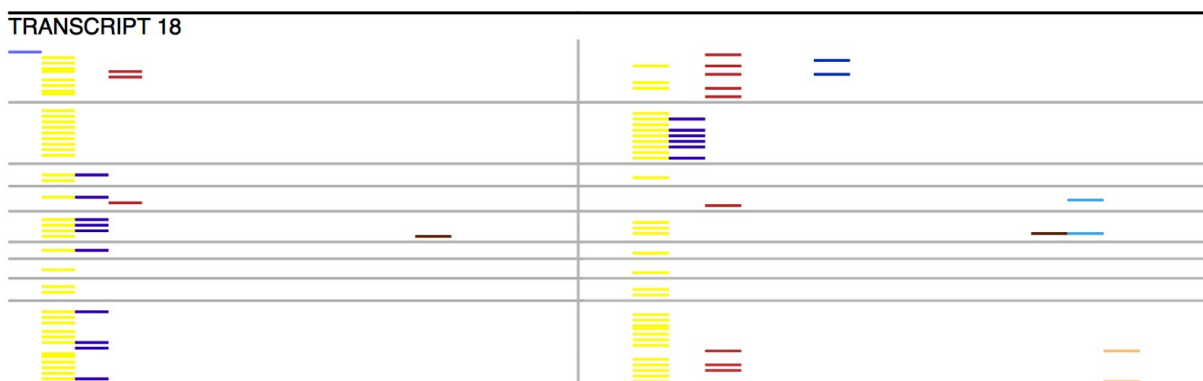


Figure 6.15. P12 approach moves (T18/V18).

We can see from these move structures that P12's approach moves look quite different from the pattern described above. Using P12, the offender generally uses the *Initiating sexual topics* only after a fairly long period of *Rapport*. In fact in T10, it is the victim who introduces the sexual content, which is then picked up and continued by the offender. Furthermore, figure 6.15 illustrates the entire interaction between P12 and V18, and exhibits no sexual content at all. These visualisations also show a very limited use of the *Assessing likelihood and extent of engagement* move in these approach moves compared with other personas. These findings support the move frequency analysis in suggesting that P12 appears more concerned with building friendships or relationship than with immediate sexual engagement.

Investigating Persona 12

The move analysis has shown P12 to be the most distant from the rest of the personas in terms of move frequencies and move structures in the approach phase. This was tested further with the use of a multi-dimensional scaling (MDS) scatter plot. MDS is a technique enabling multivariate data to be compressed into a smaller number of dimensions, allowing the visualisation of proximity between cases in a distance matrix (Cox & Cox, 2001). In this case, it allows the 16 dimensions (offender moves) to be compressed into just two dimensions, enabling the visualisation of the distance between each of the eight high-use personas based on move frequency (see figure 6.16).

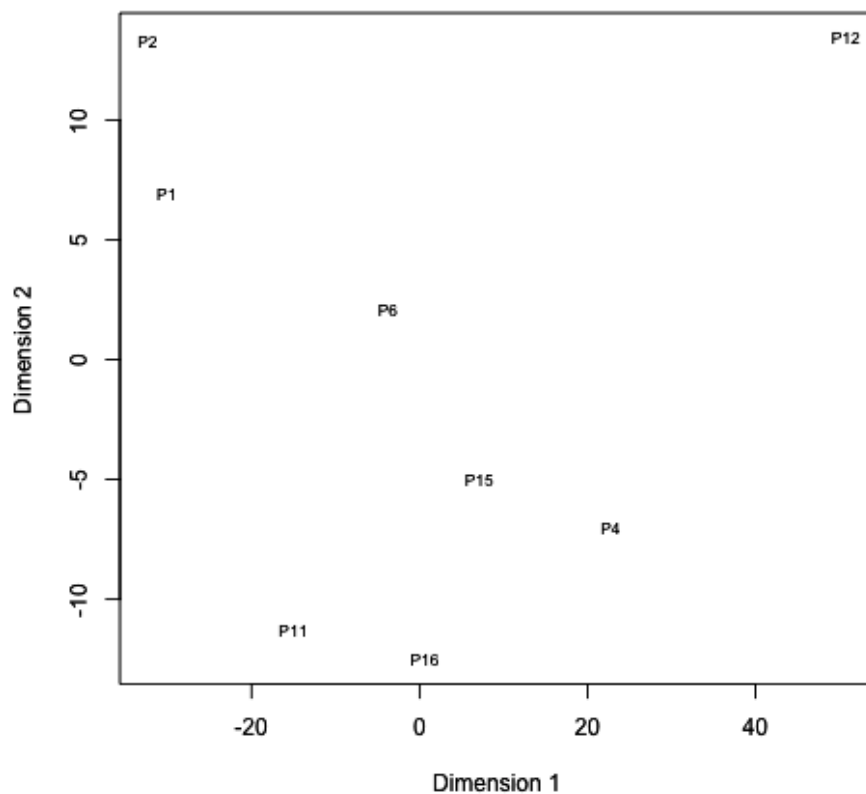


Figure 6.16. Distance matrix of high-use offender personas based on move frequency.

The scatter plot roughly indicates two groupings. Firstly, P1 and P2 are fairly close together in the top left of the plot, and another grouping of P4, P6, P11, P15 and P16 sits together in the bottom-centre (or we might consider P6 to lie somewhere between the two groups). Once, again, P12 appears to be the outlier, being most distant from any other persona. These groupings reflect the move frequencies seen in figure 6.6.

Closer inspection of the interactions featuring P12 made apparent that the offender was sometimes volunteering seemingly identifying information about himself using this persona, including details about his vocation, workplace and immediate living area. The username for P12 is also the closest to the offender's name as reported in news media. These sorts of claims are verifiable and link to verifiable identity positions, i.e. those which are 'public' and externally imposed. In this case the assertions were verified from relevant news reports, but interestingly such details were not observed in interactions with other personas. They raise the question as to whether P12 was in fact created to deliberately deceive by presenting a fictitious persona, or whether this persona might be considered the offender's 'own'; the one through which he would communicate as 'himself' (the implications of this for a constructionist view of identity are discussed in the following section). This issue is beyond linguistic investigation, but to probe the hypothesis further, all self-describing assertive

statements (Searle, 1979) used by the offender across the dataset were extracted and presented to the police force providing the data for verification or falsification. This task allowed for further comparisons between the personas, in terms of both the number and the truth values of the self-describing statements used by each. The statements are not provided here due to anonymity concerns, but generally relate to issues of identity like gender, age, workplace, home address, ethnic background and family history.

This task revealed three interesting observations about the offender's use of self-describing assertives (see figure 6.17). Firstly, the number used differed fairly significantly between the personas, with P12 and P4 using the most (17 and 13 respectively). For P4 this is reasonably explained by the persona's false professional and institutional guise; much of P4's time is spent giving details about the modelling agency and its practices, which inevitably amounts to a high number of self-describing assertives. The fact that P12 uses the most is interesting; it may be that that these sorts of statements come more naturally when the offender is presenting 'himself', than when assuming false personas. This becomes even more interesting when considering the veracity of the statements.

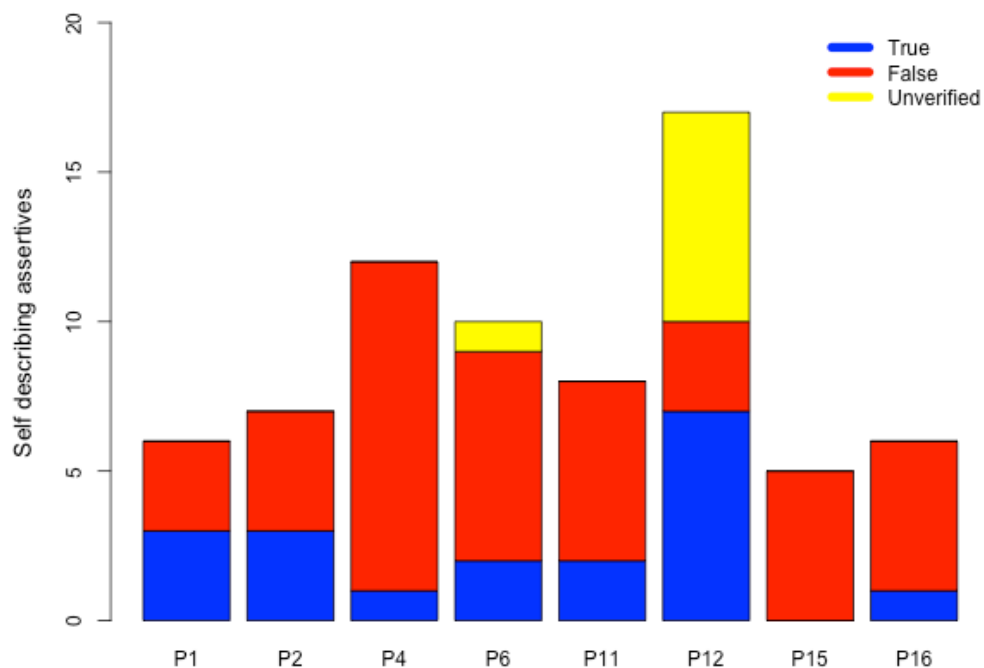


Figure 6.17. Veracity of self-describing assertives used by high-use personas.

Secondly, we can see that P12 also used the highest number of assertives verified as true. For all other personas, the false statements outweigh the true, except for P1 who gave an

equal number of both. Finally, figure 6.17 shows that P12 used the most unverified statements, which are those the police were unable to confirm. Often these unverified statements pertained to personal details regarding the offender's family members and mental health status. The higher proportions of true and unverified statements of a personal nature arguably further support the proposition that P12 is the persona which seems closest to representing the offender's physical world identity.

Discussion

The first aim of this study was to compare the offender's 17 online personas in terms of moves, move frequencies, and move structures. The analysis revealed some interesting similarities and differences between the personas in these regards, which are discussed in the following section in relation to the second research question: how far the differences observed between the personas might index different identities associated with each persona.

The initial expectation was that the offender, in his deliberate performance of multiple and varying identity positions, would index these positions in part by the moves he used, and the order and frequency by which he used them. Specifically, it was thought that those personas presenting identity positions seemingly furthest away from the offender's physical world identity positions would look the most different from the rest of the group, i.e., that the personas representing straight white males in their mid- to late teens would look similar to each other, and those representing black males, female bisexuals and lesbians, and the modelling agency representative would look different from these in terms of moves. Unfortunately there was too little content generated from the black male personas to comment on these, but in the cases of the other identity positions, both the move frequencies and the early move structures suggest this is not so.

Moves and identities

The moves observed generally seem to index micro-level situationally specific roles, rather than broad, essentialist social categories. For instance, the use of moves like *Greetings*, *Rapport* and *Maintaining conversation* arguably work towards the offender's performance of identity positions like 'friend' and 'engaged listener'. Moves are also used in different combinations to achieve different roles, for example where sexual moves are introduced alongside *Rapport*, the offender moves from 'friend' to 'flirt', or somewhere in between, and the use of sexual moves without *Rapport* or *Sexual rapport* sees the offender abandoning

any pretence of friendship and blatantly assuming the position of ‘sexual pursuer’. In terms of comparing the identities of the different personas, though, the most discriminating move seems to be *Extortion*, firstly in its extreme threatening nature, and secondly because it is used by only three of the eight most used personas (P1, P2, P16). The use of *Extortion* alongside sexual moves, arguably indexes a hostile identity position which we might call ‘sexual aggressor’. P1, P2 and P16 are all seen to assume this role at some point, however briefly, demonstrating that even when using the same persona, the offender quickly slips in and out of these temporary roles. But because most of the moves are seen at some point from all personas, they in themselves do not go very far to differentiate the personas in terms of their identity positions. This suggests that the offender’s communicative purpose is the overriding influence on his identity performances.

Move frequency and structure as identity indicators

Examining the move frequencies takes us a bit further, although this too showed more similarities than differences across the eight most used personas. P12 stood out most from the rest of the group, being conspicuous because of the preponderance of *Rapport* moves observed and the small proportion of *Assessing likelihood and extent of engagement* and moves denoting sexual content. The structural analysis further supported this by demonstrating that P12 was used to approach victims quite differently compared to other personas, using the *Initiating sexual topics* move far later, and generally after a long period of *Rapport*. The frequency and structural analyses together illustrate P12’s tendency to spend more time assuming the ‘friend’ role, and less time as the ‘sexual pursuer’. This is not to say the offender does not seek some sexual interaction using P12; this is shown in the comparatively small amounts of sexual content as well as the use of the *Sexual rapport* move. Perhaps, then, the offender is aiming for a role closer to ‘boyfriend’. It is worth noting that the early introduction of sexual topics seen with the other personas is a commonly observed trait in grooming conversations (Williams, Elliott, & Beech, 2013; Black et al., 2015; Chiang & Grant, 2017; Winters, Kaylor & Jeglic, 2017), so as well as standing out from the other personas, P12’s approach may stand apart from that of other online sex abusers more generally. It may be that P12 is reserved for more gentle, friendship and relationship-focused interactions (not ruling out the possibility of sexual engagement), while other personas are used for more direct and aggressive approaches.

Persona 12

What is most surprising about P12 is that this persona represents a straight, white male in his mid- to late-teens, along with most other personas adopted by the offender, rather than one considered to be more distant (e.g. female, black, etc.). While the performance of ethnicity is impossible to comment on due to insufficient data, it was noted that the female personas look much the same as the male ones in terms of move frequency and structure. Of course, though, we know that communication from all 17 personas is authored by a male, and this analysis suggests that he has not expended significant time or effort acquiring the resources necessary to convincingly assume a more stereotypically female linguistic identity (Grant & MacLeod, 2018), so this is not entirely surprising.

Broadly speaking, we have seen that through differences in move frequency and structure, the offender performs at least two quite different identity positions. One is performed through P12, which, compared to the other personas comes across as more gentle and spends more time in the role of 'friend', 'relationship-seeker' or even 'boyfriend'. This is in contrast to the other, more direct, sexually-oriented and sometimes aggressive 'sexual pursuer', the dominant identity performed through the remaining personas.

One possible explanation for P12 being most different is that this could be the persona used by the offender as his 'own'; the one which presents his 'real' identity and is used to meet friends and converse as 'himself', rather than one created for the deliberate and self-aware performance of deceptive identity positions for illicit gain. This is supported by the number of true self-describing (and often identifying) statements used by P12 which have been verified by the police and news reports, compared with the other personas. This is not to say that P12 might not be used to manipulate or that it would not seek the same sorts of indecent material the offender looks for so obviously using the other personas; figure 6.17 illustrates that false statements are indeed used, but the move analysis suggests that such illicit goals are secondary to P12.

This notion, however, poses a problem for the purely constructionist view of identity; this research holds that identity is not usefully conceptualised as a static, core self, but that identities are multiple, fluid and performed, and yet, there is a temptation to explain the divergent linguistic behaviours of P12 as the offender 'being himself'. One response might be to borrow from Goffman (1956) and consider P12's interactions as being performed on the 'backstage' where the offender can be his 'uninhibited self', and the deliberately deceptive personas as being performed on the 'frontstage'. Another response is offered by Grant and

MacLeod's (2018) resource-constraint model. It is arguably the relative stability of the offender's sociolinguistic history resources (compared with other resource types) that enables us to identify aspects of the offender which we might consider to be more fixed, within the offender's otherwise fluid and constructed performance. So we might consider P12 to be a performance of some kind of physical world identity, or perhaps 'home identity', which is identified by details regarding the offender's real socio-economic status, vocation, workplace and geographical area, all of which constitute elements of his sociolinguistic history. In a sense, the remaining personas lack the bank of experiential resources available to P12. Because they are to some degree consciously created, their available resources are also imagined, and perhaps therefore not as fully formed and readily accessible to the offender. This might explain why we see fewer self-describing assertives generally as well as fewer statements of a personal nature.

Offender-victim interactions

While not an intended focus of this study, there are a few points worth noting about what has been observed about interactions between offenders and victims.

It might be suggested that the 20 interactions observed broadly fall into the categories of online grooming and sexual extortion, although as we have seen, in many of these the offender exhibits sexually aggressive behaviour without any form of preparatory rapport-building or desensitisation and so the term 'grooming' is arguably inaccurate here. Even so, many of the moves observed overlap with those seen in Chiang and Grant (2017), who specifically examined grooming, and echo findings from O'Connell (2003), Williams, Elliott, and Beech (2013), Kloess, Beech and Harkins (2014), Black et al. (2015) and Winters, Kaylor and Jeglic (2017), among others. An interesting difference between the current study and Chiang and Grant's (2017) move analysis is that the latter reported no *Overt persuasion* or *Extortion* moves, in seven offenders' online grooming interactions. Of course, the current study involves just a single offender, and these moves may distinguish him from other offenders with less direct abuse 'styles'.

But another possible explanation is offered by the fact that the offender's interlocutors in the current study are (as far as it is possible to tell) genuine victims (being under the legal age of consent in the UK and genuinely targeted for the purposes of online sexual abuse), whereas those in Chiang and Grant's study were adult decoys posing as children. Williams, Elliott, and Beech (2013) note that undercover researchers in this area are likely to endure distressing conversation in a way that genuine victims may not. This is likely also true of adult decoys,

for whom sustaining sexualised conversation is a fundamental interactional goal. Because the offender in the current study is talking to real victims, he is tasked with managing real distrust and real rejection, in ways that offenders conversing with PJ decoys may not be, which could explain a motivation for more extreme and forceful moves like *Overt persuasion* and *Extortion*. While Chiang and Grant (2017) considered only seven offenders, several other studies featuring PJ data (some using far larger datasets) also fail to observe themes relating to forceful persuasion or extortion (Marcum, 2007; Gupta, Kumaraguru & Sureka, 2012; Inches & Crestani, 2012; Williams, Elliott, & Beech, 2013; Cano, Fernandez & Alani, 2014; Black et al., 2015; Lorenzo-Dus, Izura & Pérez-Tattam, 2016; van Gijn-Grosvenor & Lamb, 2016; Winters, Kaylor & Jeglic, 2017; Aitken, Gaskell and Hodkinson, 2018), further suggesting that this might reflect the presence of decoys as opposed to actual victims. In light of this finding a separate follow-up investigation of PJ data was carried out as reported in Schneevogt, Chiang and Grant (2018), in which corpus techniques were used to explicitly search for *Overt persuasion* and *Extortion* moves, and none could be found.

A related issue is that victims were observed to use sexual moves, and most interestingly they were seen to initiate sexual topics on occasion (including V5, V8, V10, V12, V14, V19). This is not observed in studies using PJ data as laws around entrapment prevent this, and so may too be a discriminating factor between young people and adult decoys. Grant and MacLeod (2016) found that engaging in sexualised conversation was a particularly difficult task for UCs in undercover operations. But the fact that victims were seen to do this and that they displayed more resistance (and resilience) than is generally observed with adult decoys are important points, because playing the ‘perfect victim’, who is compliant and always waits for the offender to introduce sexual topics, may alert offenders to the possibility that they are not interacting with real children/adolescents.

Conclusion

In analysing interactions between one offender and 20 victims, this study has shown that offender-victim OCSA interactions may exhibit offending behaviour which cannot reasonably be described as grooming. It has also shown that choices in the use of moves, as well as their frequency and structure, can be used as a resource to index various micro identity positions. The offender in this case did not seem to index the deliberately performed macro-identity categories in any meaningful way, i.e. there were no real discernible differences in moves between male and female personas, or with the professional modelling agent persona.

Most significantly, this study has raised the question of whether move analysis could help to identify, from a group of online personas known to be operated by a single user, that (or those) closest to what we might consider one's 'home identity'. This of course needs further testing but if move analysis can be shown to work in this way, this could have significant implications for policing online sexual abuse, particularly with regards to aiding the identification of online offenders. Another important point in this regard is that this study indicates some real differences in the ways in which genuine victims and adults posing as young people communicate in OCSA interactions. Victims were overall found to be more resistant to the offender's advances and more willing to introduce sexual topics compared to adult decoys' behaviour reported elsewhere. This, too, might be of benefit to law-enforcement, particularly regarding the task of online identity assumption; for example, it may be that UCs are able to perform an identity position closer to that of a genuine victim by eliciting those more forceful, coercive moves from an offender. More generally, the study has demonstrated relationships between particular communicative functions and identity positions, showing that move analysis can be a valuable tool for investigating issues of identity, in particular from a goal-centred perspective. The following chapter presents a study looking more closely at the issue of online identity assumption by examining how undercover police officers perform the offender identity in interactions with suspected OCSA offenders.

Chapter 7: Study 2: Performing the offender identity in covert policing operations

Introduction: context and aims

It is fairly well documented now that the encrypted Tor network facilitates networking among CSA offenders and the secure exchange and trade of indecent images of children (IIOC) (Quayle & Taylor, 2003; Davidson & Gottschalk, 2011; McGuire & Dowling, 2013), as well as the live streaming of abuse (Açar, 2016). It seems inevitable that as technology continues to develop, online abuse practices will also evolve. Naturally, the anonymity afforded by such environments makes policing these sorts of crimes significantly problematic. This chapter presents Study 2 of 3 and mostly draws on literature associated with offenders who convene online (e.g. Davidson & Gottschalk, 2011; Cohen-Amalgor, 2013) and online identity assumption in the policing context (e.g. Grant & MacLeod, 2016; MacLeod & Grant, 2017; Grant & MacLeod, *in preparation*).

One current policing strategy in addressing the problem of offender anonymity is the use of undercover police officers (UCs) who are tasked with entering Tor chatrooms and fora posing as CSA offenders in order to gather intelligence regarding the sorts of offences and suspected offenders operating therein (Grant & MacLeod, 2016).

This operational task presents some important issues around identity performance; in what is a naturally high-risk, low-trust communicative environment for online offenders, it is paramount that UCs are able to convincingly assume certain aspects of identity that real offenders see as similar to their own (Grant & MacLeod, 2016). The current study therefore seeks to explore how the 'offender identity' is performed by both genuine offenders and UCs in CSA-focused IM conversations. Within this overarching goal, two main research questions were initially explored:

1. What are the rhetorical moves used by both UCs and offenders in CSA-related conversations, and what identity positions are performed by their use?
2. What are the differences and similarities in moves and identity performances between the UCs and offenders?

These questions are explored through a move analysis of 25 transcripts from conversations between UCs and offenders which took place on Tor. It became apparent from the move

analysis that the exchange of support was an important element of the IM interactions examined for many suspected offenders, and it is an oft-cited motivation for offenders convening online (see e.g. Durkin, 1997; Quayle & Taylor, 2003; Davidson & Gottschalk, 2011; Westlake & Bouchard, 2016). This aspect of the interactions therefore became another focus of the study and informed a third research question:

3. How are the reciprocal moves of *Seeking* and *Giving support* realised linguistically and what identity positions do they contribute to for both UCs and suspected offenders?

By considering these issues, this study aims to explore the extent to which the UCs are able to convincingly assume offender identities, and explore the role of reciprocal support in these sorts of interactions. It is hoped that doing this will provide useful insights regarding undercover policing practices and identity assumption in cases of online sexual abuse and other contexts.

The remainder of this chapter outlines the methods undertaken including data description, analytical procedure and reliability measures. Results are then presented and discussed.

Methods

Data description

The original dataset for this study comprised 27 transcripts of IM conversations between three UCs and 27 suspected offenders, which took place on the Tor network. In all conversations, the UCs were posing as adults with a sexual interest in children. The term '*suspected* offender(s)' is used in this context because while the non-UC participants' presence in online CSA-focused environments and demonstrated knowledge around CSA practices (evidenced by the transcripts) indicates their involvement with either contact or image-related child sex offences, it is unknown whether they have criminal convictions.

As the overarching research aim is to investigate the performance of offender identities and compare this between genuine offenders and UCs, it was important that the participants perceived each other to be offenders in all cases. Two interactions were therefore discounted; one in which a suspected offender, for unknown reasons, appears to perceive the UC to be a potential child victim rather than a fellow offender, and another in which a UC's interlocutor is another law enforcement official. Each of the remaining transcripts details

an individual suspected offender's conversation(s) with one or more UC. UCs' usernames clearly delineate conversations between one suspected offender and multiple UCs, but it is unclear how much time might have elapsed between these conversations. The final dataset, then, comprises 25 transcripts, featuring a total of 33 individual CSA-focused conversations between 25 offenders and three UCs.

Transcript characteristics are summarised in table 7.1. As in Study 1, the transcripts are numbered arbitrarily and referred to as T1, T2, T3, etc. Each transcript involves a single suspected offender, referred to as O1, O2, O3, etc., and UCs are referred to as UC1, UC2 and UC3.

Transcript	Length (lines)	Participant structure	Suspected offender stated identity positions (gender, age, country of residence)	UC stated identity positions (gender, age, country of residence)
T1	52	O1 - UC1	Male, France	Male, UK
T2	63	O2 - UC1	Male	Male
T3	31	O3 - UC1	Male, 45, UK	Male, UK
T4	223	O4 - UC1 O4 - UC2	Male, 37, Africa Male, 37, Africa	Male, UK Male, 40, UK
T5	49	O5 - UC1	Female, UK	Male, UK
T6	266	O6 - UC1 O6 - UC2	Male, UK Male, UK	Male, UK Male, UK
T7	50	O7 - UC1	Male	Male
T8	145	O8 - UC1 O8 - UC3	Male, 50, UK Male, 50, UK	Male, UK Male, UK
T9	27	O9 - UC1	Not stated	Not stated
T10	42	O10 - UC1	Male, UK	Male, UK
T11	62	O11 - UC1	Male, UK	Male, UK
T12	46	O12 - UC1	Male, 50, USA	Male
T13	171	O13 - UC1 O13 - UC2	Male, 50, UK Male, 50, UK	Male, UK Male, 43, UK
T14	89	O14 - UC1	Male, 55, UK	Male, 38, UK
T15	56	O15 - UC1	Male, UK	Male, UK
T16	74	O16 - UC1	Male, 65, UK	Male, UK
T17	230	O17 - UC1 O17 - UC3	Male, 28, UK Male, 28, UK	Male, 38, UK Male, UK
T18	69	O18 - UC1	Male, 52, UK	Male, 38, UK
T19	68	O19 - UC1 O19 - UC3	Female Female	Not stated Male, UK
T20	129	O20 - UC1	Male, 50, UK	Not stated
T21	111	O21 - UC1 O21 - UC3	Male, 60, UK Male, 60, UK	UK Male, UK
T22	39	O22 - UC1	Male, 48, UK	Male, 38
T23	85	O23 - UC1	Male, 38, UK	38, UK
T24	45	O24 - UC1	Female, 17, UK	Male, 38, UK
T25	91	O25 - UC1	Male, UK	Male, UK

Table 7.1. Suspected offender-UC transcript characteristics.

The transcripts range in length between 27 and 266 lines, and in the cases of T4, T6, T8, T13, T17, T19 and T21, this line count spans separate conversations with two different UCs. Across the dataset, UC1 interacts with all 25 suspected offenders, whereas UC2 and UC3 interact with only three and four suspected offenders respectively. Where a transcript details separate conversations with more than one UC, these individual conversations are referred to as, for example, T4C1 (Transcript 4, Conversation 1). Full transcripts are presented in appendix 4 (volume 2).

Of the suspected offenders, 21 purport to be male, three purport to be female, and one does not state their 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 three UCs are male and operating in the UK, and this is stated explicitly in the majority of their interactions. Where a UC's gender or location is not stated, it is assumed that he is performing as a UK-based male in the interaction as there is no evidence to the contrary.

Procedure

The initial move analysis was conducted as per the procedure detailed in Chapter 5. An extra step was taken, however, which involved the established moves being further grouped into a smaller number of broader categories, termed 'global moves', which reflect the overarching interactional goals which appear (at least on the surface) to be shared by both participants. This idea follows Macagno and Bigi (2017), whose work on dialogic structure promotes the move as a useful basic unit for dialogue analysis, particularly in the interpretation of joint or "global goals" (p. 149) of interaction participants. Global moves here are different to the 'shared' moves referred to in Study 1, which are merely moves found to be used by both participant groups and do not represent common goals that participants strive for collaboratively. The suspected offender-UC conversations in question seem to lend themselves to the analysis of global goals more clearly than the offender-victim interactions in Study 1 because the exchanges here are not exercises in power exertion of one participant over the other, but appear, outwardly at least, to occur between 'equals', i.e. two adults with a shared sexual interest in children, who each have similar general purposes and possibly something to gain from the interaction, whether this be some form of support, or illicit material, for example. A reliability test showed that two coders (including the author) reached 83% agreement of moves when independently coding a test sample (10%) of the dataset.

Following this, the move frequencies were established and structural patterns observed, with the use of move-maps. The final procedural step involved a speech act analysis, whereby all utterances deemed to pertain to the *Seeking* and *Giving support* moves were analysed for speech acts, following the same procedure and combined speech act taxonomy as described in Pilot Study 1 (see Chapter 5). The fact that the combined taxonomy was proposed from an analysis of an offender-victim interaction is of little importance to the current study as it was found more useful in this case to focus on the speech acts themselves (e.g. inquiries, reports) rather than their general categories (e.g. invitationals, assertives). This part of the analysis enabled an exploration of identity performance specifically at the level of the strategy/speech act in addition to the more general moves. Speech act patterns were observed and considered in terms of the identity positions to which they appeared to contribute.

Limitations

The most significant constraint on the study is the comparatively small number of UCs to suspected offenders; across the 25 transcripts, we can gather information about the moves and identity positions of 25 offenders but only three UCs. Furthermore, only one of these UCs interacts with all 25 suspected offenders, the other two featuring in only a few conversations, making it difficult to compare the UCs with each other. However, that the suspected offenders form the larger group is advantageous; it is arguably more important at this initial stage to gain a good understanding of the moves and identity positions of genuine suspected offenders before we can begin to consider whether and how the UCs might achieve something similar. A group of 25 suspected offenders' conversations provides a reasonable preliminary linguistic dataset with which to compare the UCs in this case. What we can learn from looking at the UCs' linguistic practices at this point is of course not generalisable, and cannot reveal any trends in the linguistic practices of UCs assuming online offender identities. Nonetheless, it can still provide useful feedback for the police unit in question and inform referential material for similar work conducted in other forces. It is important to remember that undercover policing practices such as this are still relatively novel, so even a narrow dataset such as this provides a rare opportunity to gain new and valuable insights.

Another (comparably minor) drawback is that many of the transcripts provided do not contain timestamp information, which limits some of the contextual information available to aid the interpretation of communicative functions of the utterances. Again, though, with naturally occurring language data, problems like these are sometimes unavoidable. In these cases,

transcripts were analysed as though the conversations ran ‘smoothly’, as no unusually long breaks were indicated.

Analysis

Rhetorical moves in suspected offender-UC interactions

The first research question this study seeks to address concerns the moves used by suspected offenders and UCs in CSA-focused IM interactions, and the identity positions performed by their use. This section firstly describes the moves observed (organised in terms of global moves, and the individual moves and most prominent strategies involved in each), before demonstrating some of the identity positions indexed by particular move combinations. Five global moves were observed, encompassing a total of 16 moves and 139 strategies (a full list of moves and strategies can be found in appendix G). As with Study 1, example utterances may work to simultaneously achieve moves other than those they have been selected to illustrate.

Global move 1: Establishing/maintaining relationship

One of the most important goals to both participant types in these conversations is the building and maintenance of a positive social relationship. For the offender, this relationship might enable access to illicit media, provide new offending opportunities, or offer a platform to express worries, receive support, or co-fantasise. For the UC, this relationship could lead to the provision of essential information regarding common offending practices and the suspects themselves. So while the participants’ motives are extremely different, the surface goal is identical. This global move encompasses four sub-moves, each of which has an independent function but works towards the same overall goal of encouraging a positive social engagement. The four sub-moves are *Greetings*, *Maintaining conversation*, *Rapport* and *Sign offs*.

These moves were also noted in the offender-victim interactions in Study 1, and largely involve the same strategies, especially in the case of *Greetings*, *Maintaining conversation* and *Sign offs*. Similar to McManus *et al.*’s (2016) observations of offender-offender forum communications, *Rapport* here includes some general strategies like sharing personal information, reporting hobbies and interests, pleasantries, and compliments. However, it also includes more context-specific strategies such as reporting practical CSA-related difficulties, e.g. “its difficult to get hands on in uk everyones really paranoid about their kids” (T4 L38).

Others include agreeing with or expressing similar stances to the interlocutor, e.g. “i would too” (T8 L50), expressing approval or praise of reported abuse, and expressing positive wishes for interlocutor, e.g. “hope you get in there!” (T11 L62). Another strategy is the othering of offenders and abuse practices perceived to be different or ‘worse’ to those involved in the immediate interaction. The clearest example in this dataset is the othering of those apparently considered ‘mere’ fantasists by ‘actual’ abusers, e.g. “...just fantasy role play rubbish it annoys me” (T14 L38). Othering is also used to distance non-offenders.

Global move 2: Character assessment

This global move, too, is crucial to both participants, who must appear to share similar interests in order to achieve their aims. Naturally, there is an assumption that an individual’s mere presence in CSA-focused interactions presumes their interest in CSA. This move, then, involves determining the nature of the interlocutor and their offending practices, i.e., it seeks to answer the question: ‘what sort of offender are you?’. The question of *whether* the interlocutor can be considered an offender is tested more subtly (this is discussed later in relation to the *Assessing and managing risk* move). *Character assessment* is done through two often reciprocal sub-moves.

The first, termed *Identifying interests/experience* is defined as attempts to determine the interlocutor’s sexual and abusive interests and desires, their current level of sexual and abuse experience and the likely extent of future abusive practices. Strategies involve inquiring about general sexual interests, e.g. “what sort of ages you into?” (T2 L19), historical abuse, e.g. “how young u had ?” (T1 L7) and future abuse, e.g. “whats your next dare” (T5 L25). Other strategies include enquiring about web use, e.g. “what other sites you use?” (T8 L63), possession of illicit media, e.g. “is your collection any good?” (T25 L28), contact with other offenders, e.g. “you chat to anyone in UK?...” (T4 L159), and home and family circumstances, e.g. “do you have any daughters ?” (T14 L12).

The second sub-move - *Reporting interests/experience* - is used to report sexual and abusive interests, details of previous sexual and abusive encounters, current levels of experience and likely future pursuits. Prominent strategies include reporting sexual interests and preferences, e.g. “iam bi” (T2 L28), details of victims, “son of a friend” (T1 L14), immediate or future desires, e.g. “... very horny, need some kiddie cunt or cock” (T6 L168) and home and family circumstances, e.g. “i dont live with her mother which makes is easier” (T14 L63).

Global move 3: Fantasy narrative

This global move is about sharing sexually abusive stories and fantasies, which may be real experiences or invented scenarios. There is some overlap with *Character assessment* strategies, but this move primarily functions to facilitate immediate or future sexual gratification (naturally this is a part of the deceptive identity performance of the UCs). It comprises three sub-moves, including the mostly reciprocal *Eliciting narrative* and *Reporting events* moves, and a *Supporting narrative* move.

Eliciting narrative is defined as attempts to elicit an interlocutor's previous, planned or invented sexual experiences or fantasies. Strategies include inquiring about sexual activities, e.g. "mmm did he sucked you good ?" (T1 L27) and access methods, e.g. "how it happened the last times" (T1 L25) as well as eliciting descriptions of the victim(s), e.g. "how old was he?" (T6 L8). Additionally, this move involves inquiring about the victim's perspective of the abuse, e.g. "he liked your sperm?" (T1 L34) as well as continuation prompting, e.g. "what happened then?" (T2 L41).

Reporting narrative involves describing previous, planned or invented sexual experiences or fantasies. Strategies include reporting sexual activities, e.g. "he sucked me off and let me do the same..." (T1 L18), circumstances of abuse, e.g. "his dad went out and i sat with him and got him real horny" (T1 L26) and descriptions of victim(s), e.g. "8 year old" (T1 L8). Other strategies include reporting immediate sexual behaviour, e.g. "...are you wanking like me?" (T6 L238), describing planned abusive activity, e.g. "shes calling here after school to get her present :)" (T15 L44) and reflecting on events, e.g. "it was good you're right though i was wary" (T13 L38).

The final sub-move is *Supporting narrative*, which functions to express engagement with the narrative and aid its continuation, and it is generally unsolicited. Strategies include expressing positive evaluations of the activity described, e.g. "wow hot" (T2 L43) and jealousy or desire for the narrator's experience "would love to do be able to do that..." (T1 L20). Additional strategies include contributing suggestions or new elements to the narrative e.g. "mmm hope than he cleaned it good after" (T1 L32), contributing personal experiences or preferences, e.g. " i love to spank lil boys...hard" (T4 L29), and conjecture, e.g. "damn bet her little mouth looked incredible..." (T3 L18).

Global move 4: Support

This global move involves the exchange of personal and practical support which ultimately facilitates continued offending. Like *Fantasy narrative*, it involves two often reciprocal moves - *Seeking support* and *Giving support*, along with a more generally supportive move termed *Legitimising CSA*.

Seeking support is defined as attempts to obtain help, advice or assistance regarding online or offline abuse practices. This support can be emotional or practical in nature and therefore encompasses a wide range of strategies. One of the most prominent is inquiring about victim access methods or circumstances of abuse, e.g. “how u make her agree?” (T2 L51), including implicit forms, e.g. “wish i had better access to some kids” (T1 L41). Other strategies include inquiring about technological practices, e.g. “...whats the score with this torchat im new to it” (T2 L7), inquiring about risks associated with online and offline offending, e.g. “its supposed to be pretty safe isnt it” (T2 L10) and inquiring about an interlocutor’s connections to other offenders, e.g. “...i’m looking for new friends” (T4 L158). As well as these, participants were observed reporting technological difficulties, e.g. “no instalation on that link u sent me” (T7 L41), expressing worries about CSA-related risks, e.g. “...as she gets older I fear i will have to stop...” (T17 L93), inquiring about potential co-offending, e.g. “easier with 2 of us” (T20 L102) and seeking moral guidance or reassurance, e.g. “so you don’t think they are too young for those things?” (T19 L46).

Giving support is defined as offering or providing help, advice or assistance regarding CSA, whether the support is solicited or not. Prominent strategies include suggesting victim access methods or opportunities, e.g. “...love forgotten publictoilets too” (T1 L45), recommending methods for accessing illicit material online, e.g. “... are you in the *channel name* channel on irc? worth looking at” (T13 L100-101), and advising/warning of CSA-related risks, e.g. “watch out for videos - get them to wave or hold up fingers or something” (T8 L80). Other strategies include inquiring about an interlocutor’s sexual interests, e.g. “what do you like watching?” (T6 L31), praising or approving of reported abuse methods, e.g. “best way” (T16 L39), assisting abuse planning, e.g. “have u got anywhere in mind?” (T20 L119) and expressing sympathy and empathy with the interlocutor in relation to CSA practices, e.g. “I know where your coming from...” (T8 L124).

The third move working towards the global goal of *Support* is *Legitimising CSA*. This move serves to frame CSA as something normal or at least acceptable in the context of the immediate conversation, and to validate the interlocutor’s sexual interests in children and

their abusive behaviours. Strategies include positive evaluations or encouragement of CSA, e.g. “sweet....how far did u get?” (T4 L25), inquiring if a victim’s perspective of abuse was positive, e.g. “was she willing and curious, or..?” (T3 L19), describing a victim’s perspective as positive, e.g. “... he’s fully into it” (T1 L15), minimising the victim’s perspective, e.g. “he didn’t like it but who cares” (T4 L67), and describing a victim as dependent on an abuser, e.g. “mmm make him addict to cum and orgasms” (T1 L19). Other strategies include framing victims as wanting or deserving of abuse, e.g. “..little whores” (T6 L12), reporting permission granted (either by victim or abuse facilitator), e.g. “he let me do what i wanted to hi so i did” (T10 L19), minimising severity of abuse, e.g. “just the normal stuff” (T17 L35) and praising victim compliance, e.g. “she behaves really nicely” (T17 L17). Additionally, participants presented CSA as normal or typical behaviour, e.g. “... just like looking at pics like most?” (T6 L5), deflecting/mitigating responsibility, e.g. “...its all stirred up by the media” (T14 L83), and euphemising abusive topics, e.g. “u having any fun with your 2?” (T17 L85).

Global move 5: Illicit media sharing

This global move is concerned with the exchange or trade of illicit and/or abusive media files or sources. This refers mostly to IIOC but occasionally also to media of which the suspected offender is the subject (e.g. T4 L173-177). The sub-moves serving it are *Requesting media*, which involves direct and indirect requests, e.g. “you got any good pics?” (T7 L24), and *Offering media*, which involves offers of illicit content as well as the actual provision of files and links to other sources, e.g. “but keep this link... *link*” (T4 L60). A third, supportive sub-move is *Negotiating media share*, which functions to negotiate the ‘deal’ terms between interlocutors, e.g. “u got anything i generally do like for like” (T25 L65).

Assessing and managing risk

The final move noted in the interactions - *Assessing and managing risk* - does not work towards a joint goal between participants, because it is primarily concerned with the risks, safety and self-preservation of the individual, and it is not logically grouped with any other moves. It is worth reiterating here that it is the UCs’ intention that on the surface, the risks to each conversation participant look similar; that they are both concerned with engaging in CSA practices without being detected by law-enforcement agencies. The UCs must, however, manage a separate set of dangers associated with being exposed, firstly as a non-offender, and secondly as law-enforcement personnel.

For all participants though, this move functions to gauge the types and levels of risks associated with the immediate interaction and to manage and minimise those risks. The main strategies are inquiring about online identities and access to these details, e.g. “who are you on giga ?” (T2 L9), “where did u find me?” (T4 L4), refusing information or giving evasive responses, e.g. “not saying” (T7 L49), and testing an interlocutor’s offending boundaries, e.g. “so you don’t think they are too young for those things?” (T19 L46). Media-related risk assessment strategies include requesting illicit material (as an indicator of willingness to offend), e.g. “send a pic pls you like” (T2 L6), justifying difficulties with image exchange, e.g. “pc is playing up njo doubt” (T25 L26), threatening to terminate media exchange, e.g. “sorry mate will have cancel your upload if your not playing by the rules” (T25 L79), and denying requested material, e.g. “yes but not share with u” (T7 L25). Two strategies used exclusively by the UC group were justifying questions asked previously, e.g. “i lived in zimbabwe for a while i just wandered if it was near” (T4 L126) (in response to the suspected offender’s polite refusal of information), and challenging the interlocutor’s claims of abuse, e.g. “sounds pretty far fetched?” (T16 L74). This latter example illustrates a UC attempting to manage and mitigate another potential risk; that he is spending time investigating fabricated stories rather than real-world abuse.

It is noteworthy that no explicitly sexual moves are identified in the current study as they were in Study 1; rather, sexual themes are found throughout most moves. This is because these interactions do not hang on the introduction and maintenance of sexual topics significantly as adult-child OCSA interactions do; the participants here operate under the implicit shared understanding that it is an interest in child sexual abuse that has brought them into the interactive context. This is illustrated in T23 L8, whereby O23 qualifies his question “lol what you into” with “(as if I need to ask)”.

The moves described here paint a distressing picture of the sorts of practices and interactions that occur between CSA offenders online, making absolutely clear the importance of the work undertaken by UCs to apprehend and convict CSA offenders, and of the linguistic research that informs UC training in this operational context.

Moves and identities

For each participant throughout all interactions, the performance of an offender identity is paramount. Both parties have the potential to gain substantially from the successful performance of ‘offenderness’, but also 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 other offenders ultimately enables continued offending. If this performance is unsuccessful, they could lose out on potential abuse opportunities, provision of illicit media, and various forms of support. The UCs, of course, intend to be perceived as having the same motivations, but even though we know this performance to be consciously deceptive, it is just as important. For them, failing to successfully perform as offenders could mean losing valuable intelligence and investigative leads, and alerting suspected offenders to police presence in communicative environments they might have believed to be 'safe' from law-enforcement.

Several of the moves observed pertain specifically to the performance of offenderness, most explicitly *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. Also important to the offender identity is *Legitimising CSA*, as it is this move more than any other that impresses that the immediate environment is a safe and appropriate place to discuss CSA offences and desires.

Within the general performance of offenderness, lower-level micro-identities also begin to emerge, for example when one participant becomes 'support seeker' which can be seen in the use of moves like *Requesting media* and *Seeking support*, the other might respond by assuming the role of 'expert' or at least 'experienced offender' using strategies of *Giving support* including offering technical support and advising or warning about particular abuse methods (e.g. T2 L7-13). Expertise can also be performed by *Reporting experience*, and *Reporting events* (see T4 L44-50) and by *Assessing and managing risk*, as this 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 can be used to assist the individual performing 'support seeker', or to assert dominance and establish a position as some sort of higher-status offender.

All participants seem naturally sympathetic and encouraging of each other, and the interactions rarely become hostile, suggesting that offender support is a norm in environments such as this. Unsurprisingly then, other prominent identity positions that emerge from these interactions are based in the sorts of relationships formed. The role of 'friend' is taken up largely by the use of *Rapport* and *Giving support* moves (see T11 L41-62), as well as through the sharing of past experiences and future desires seen in other moves. In the current dataset, the role of 'friend' on a few occasions develops into more of a 'sexual interest' role, and this is sometimes seen through an interplay of rapport-building (of a sexual nature) and *Illicit media sharing* (where the offender or UC are the subject of the media) (see

T4 L165-186). These moves can also work together where participants 'share' the goal of sexual arousal, but show no sexual interest in each other per se beyond their personal stories.

Occasionally, other types of relationships occur without any real friendship building. These are often more business-like, and see participants taking on roles such as 'trader', 'negotiator' or 'facilitator'. These roles are most commonly seen by the combinative use of *Character assessment*, *Giving support*, *Media sharing* and *Assessing and managing risk* moves (see T7 L24-28, T25 L72-85).

The fact that most of the moves observed can work towards joint global goals shared by participants supports the notion that identities are co-constructed in interaction (Jacoby & Ochs, 1995; Herring, 2004). As the interactions are co-constructed, so too are the interactional goals and identity positions (micro and macro) of the participants in this case.

Comparing suspected offenders and UCs

The second question this study posed concerns how similarly or differently the UCs perform their offender identities in comparison to genuine suspected offenders. This is addressed by considering the moves used by both groups in terms of frequency and structure.

Comparing move frequencies

Figure 7.1 shows the comparative frequencies of moves used by offenders and UCs across the 25 transcripts.

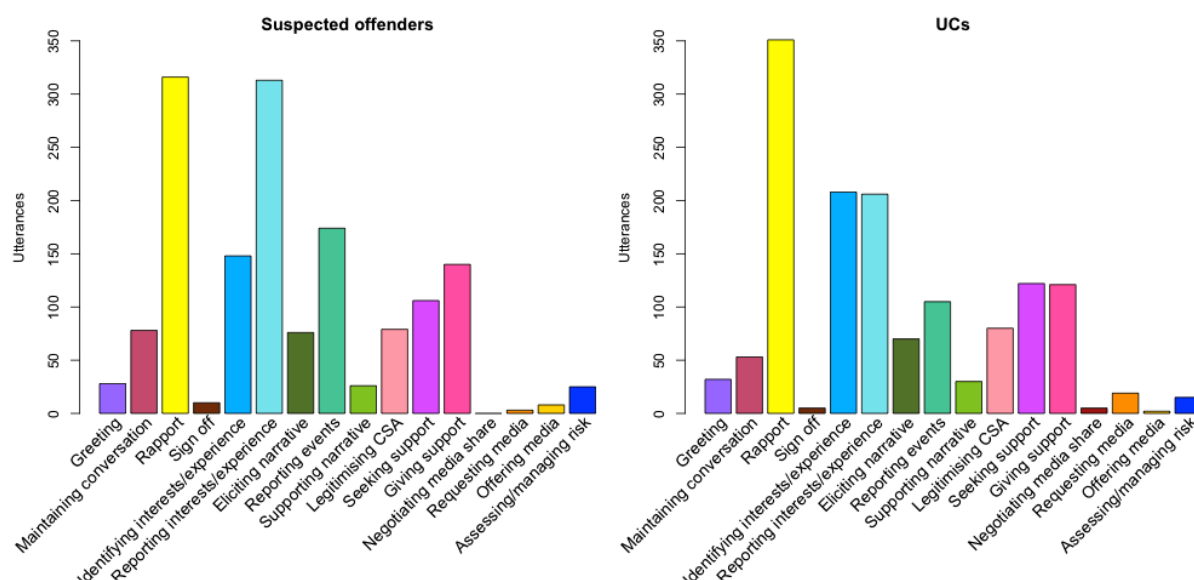


Figure 7.1. Total move frequencies of suspected offenders and UCs.

This comparison shows that overall, the frequencies of the offenders' and UCs' moves are fairly similar. Both groups use 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. Also similar is the amount of *Identifying interests/experience*, *Eliciting narrative*, *Legitimising CSA*, *Seeking support* and *Giving support* moves.

Saying this, important differences can be seen, particularly in the moves associated with sharing interests and experiences, and support. Interestingly, the suspected offenders overall use *Reporting interests/experience* around twice as much as *Identifying interests/experience*. The UCs, on the other hand, tend to do this in equal measure. The high amount of *Reporting interests/experience* of the suspected offenders is reflected in the comparatively high use of the *Identifying interests/experience* move of the UCs, for whom a primary (and very focused) aim is to gather intelligence and detect illegal activity. But the similar rates of both moves by the UCs show that while they make more inquiries about the offenders than they receive about themselves, they just as readily give up their 'own' details.

In a similar vein, the suspected offenders are seen *Reporting events* notably more than the UCs. However, this is not explained by a higher use of *Eliciting narrative* by the UCs - there is no significant difference between the groups in this regard. It may be the case that the suspected offenders, with genuine tales of abuse and desires for future abuse, simply have a wide breadth of real experience from which to draw when engaging in this act of story-telling.

But in the same way as many of the Study 1 offender's imagined personas lacked the bank of sociolinguistic resources available to P12, the UCs lack the experiential resource necessary to offer detailed narratives of sexually abusive activity. They must rely, then, only on what is consciously acquired from previous exposure to offender-offender interactions. 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 UCs can only pretend to. Considering these points, it seems unsurprising that the UCs use the *Reporting events* and *Reporting interests/experience* moves less frequently than the suspected offenders.

A related difference is that the offenders tend to *Give support* slightly more than they *Seek support*, whereas the UCs use these moves in fairly equal measure. This might again be due to the fact that the suspected offenders have real experience of CSA offending, illicit media exchange and the risks and problems that accompany these practices, and are therefore simply better equipped to lend support than the UCs, who lack this experiential resource.

Another discrepancy is that the UCs *Request media* slightly more than the offenders, probably because a primary aim for them is to identify producers and consumers of abusive material. Additionally, the offenders tend to *Assess and manage risk* slightly more than the UCs, perhaps because the potential personal risks for suspected offenders (e.g. criminal conviction, incarceration, public vilification, etc.) are more significant than those for UCs.

While the differences are generally explainable, it is possible that such discrepancies (in particular the UCs' comparatively limited tendency to describe sexual and abusive interests, experiences and events) could 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. While UCs are of course restricted in their online activities by operational policies, it seems pertinent that they are able to (as far as possible) consciously gather the experiential resources necessary to engage in such conversations at the same level as the suspected offenders.

Comparing UC1 with suspected offenders

To gain a more nuanced understanding of the comparative move use, it is interesting to look at the move frequencies across individual interactions. Because UC2 and UC3 contribute comparatively little to the dataset as a whole, this portion of analysis mainly focuses on comparisons involving UC1, who converses with each of the 25 suspected offenders.

Figure 7.2 illustrates move frequencies of the 25 suspected offenders in their conversations with UC1.

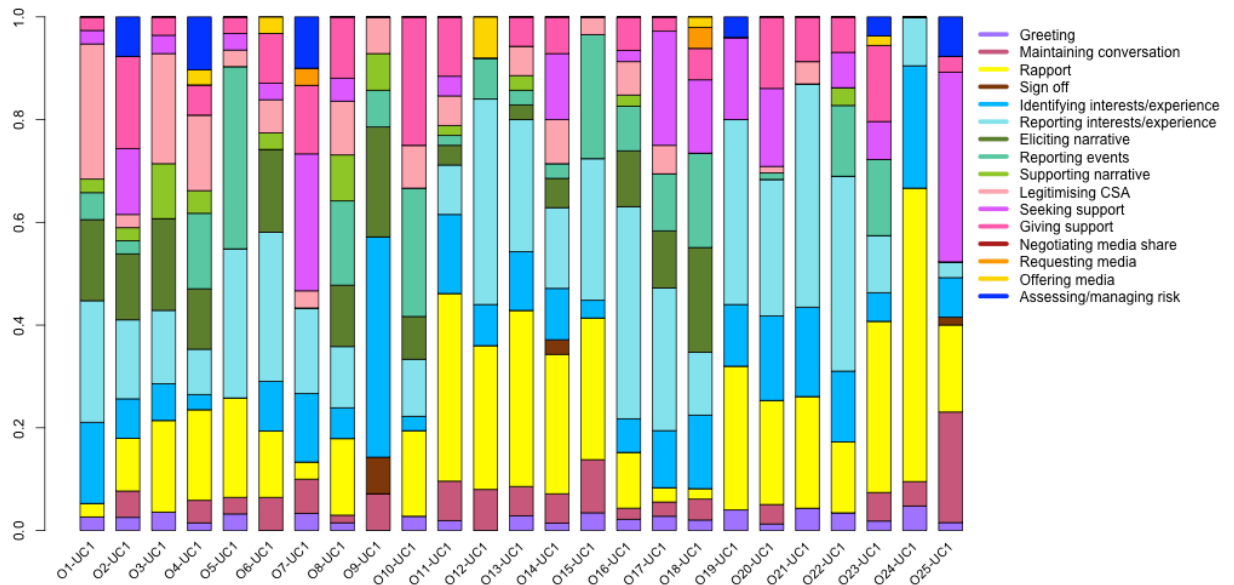


Figure 7.2. Move frequencies of suspected offenders in conversations with UC1.

Figure 7.2 shows that while there appear to be certain trends across the board, the individual variation in move frequency is significant. Compare O1 with O25, for example. About a third of O1's utterances pertain to *Identifying* or *Reporting interests/experience*, whereas only a fraction of this is seen in O25's moves. A frequent move for O25 is *Seeking support*, whereas this is used rarely by O1. This sort of variation might in part reflect key motivations of each suspected offender in the conversations and the relative importance of their interactional goals and related identity positions. It is also likely influenced by UC1's moves across each individual conversation.

Figure 7.3 shows UC1's move frequencies across the same conversations.

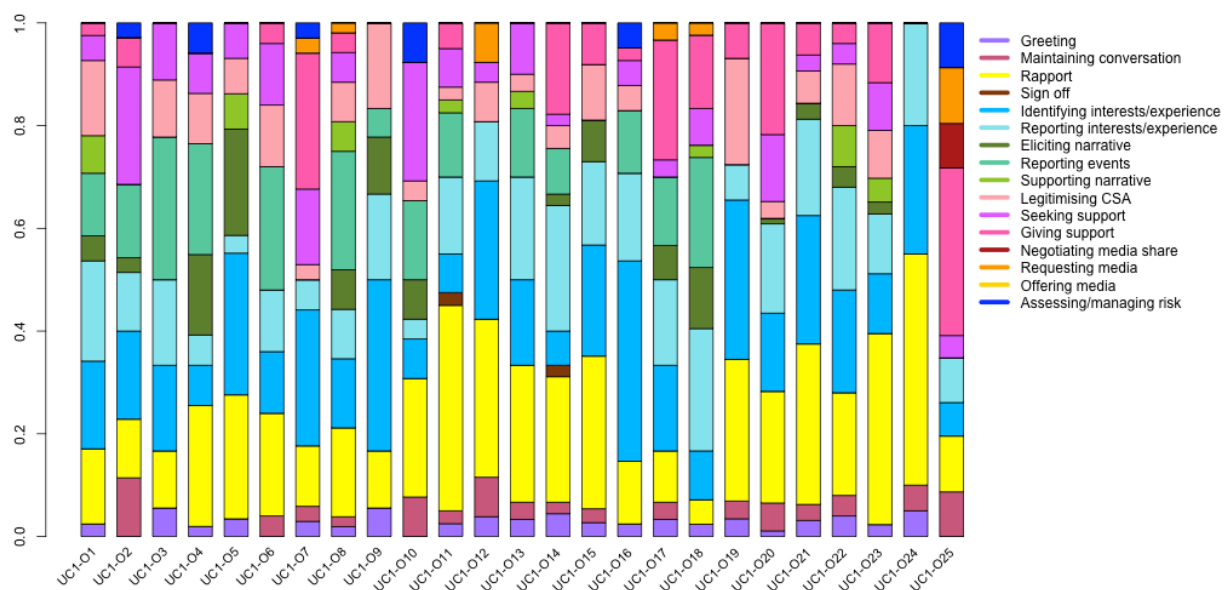


Figure 7.3. Move frequencies of UC1 in conversations with suspected offenders.

The most striking thing about this illustration is that it demonstrates a similar amount of variation from a single individual across each of the 25 conversations. It shows that UC1 adapts his use of moves (and identity performances) throughout conversations with different suspected offenders, rather than remaining in any fixed position.

The second notable point is that UC1's move frequencies across the conversations loosely reflect those of the suspected offenders' seen in figure 7.2. This can be seen either by identical move use or corresponding move use, e.g. O25's frequent use of the *Seeking support* move corresponds with UC1's frequent use of *Giving support* in the same conversation. This suggests a certain degree of linguistic accommodation (Giles, Taylor & Bourhis, 1973; Gallois, Ogay & Giles, 2005) between participants, which is also indicated by the "common ground" frequently achieved through series of complete adjacency pairs (Beňuš, Gravano & Hirschberg, 2011, p. 3003):

- | | |
|----------|--|
| T4 L130: | O4: some areas a bit worse than others |
| T4 L131: | UC2: yes i imagine it is |
| T24 L3: | O24: How are you? |
| T24 L4: | UC1: very well how about yourself? |

The move similarities also indicate that the interactions are generally cooperative. When collapsed down to just the global moves, these similarities are even clearer.

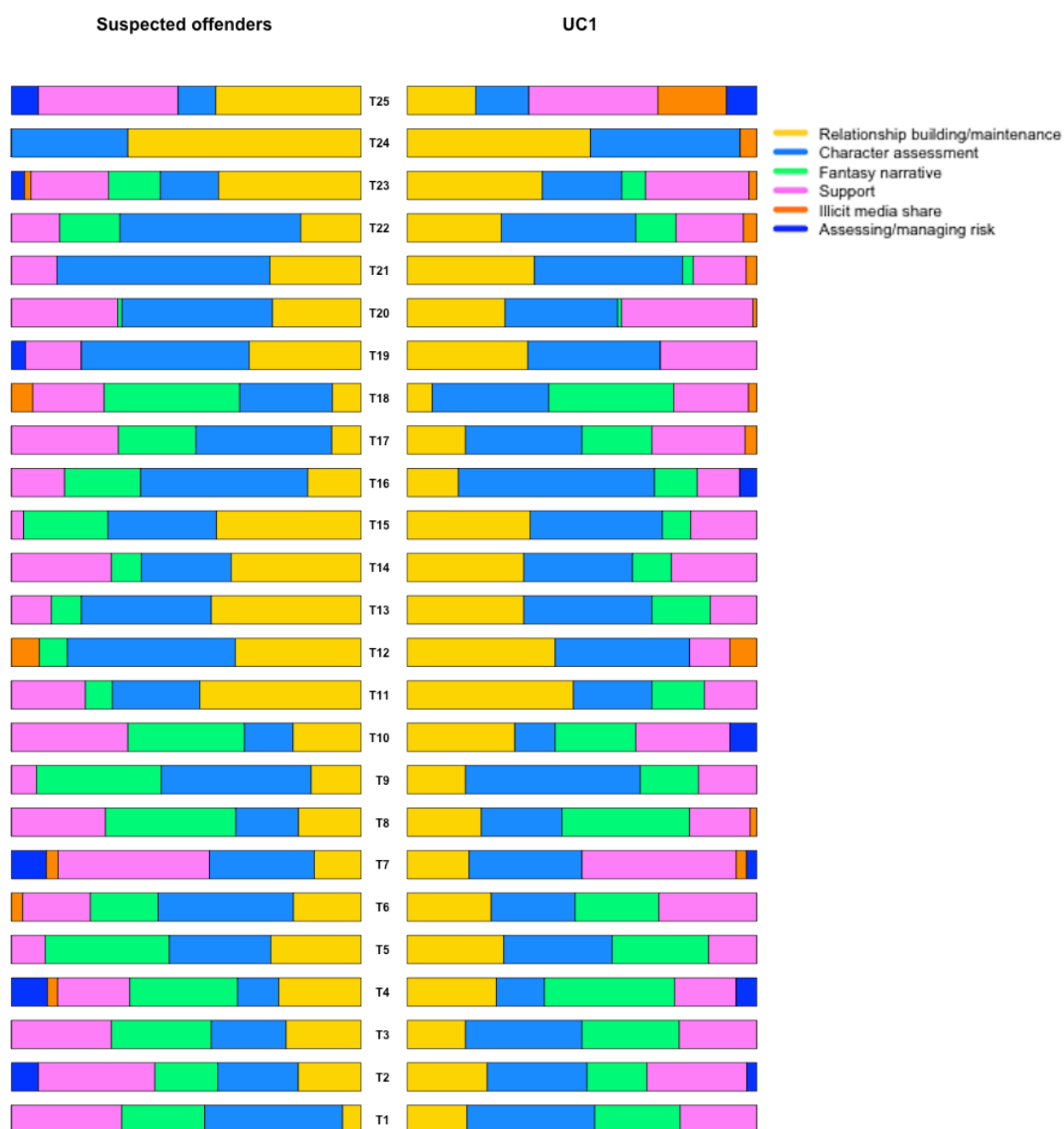


Figure 7.4. Comparative global moves of UC1 and suspected offenders.

It is perhaps unsurprising to see this sort of accommodation in what are generally amicable, cooperative conversations. What the illustrations above do not show is whether any potential accommodation is stronger with either participant group, i.e. which participants might be converging more to the other in each interaction. What is apparent though is that move use converges throughout conversations with all UCs. Figure 7.5 demonstrates this by comparing move frequencies across conversations between individual suspected offenders and multiple UCs.

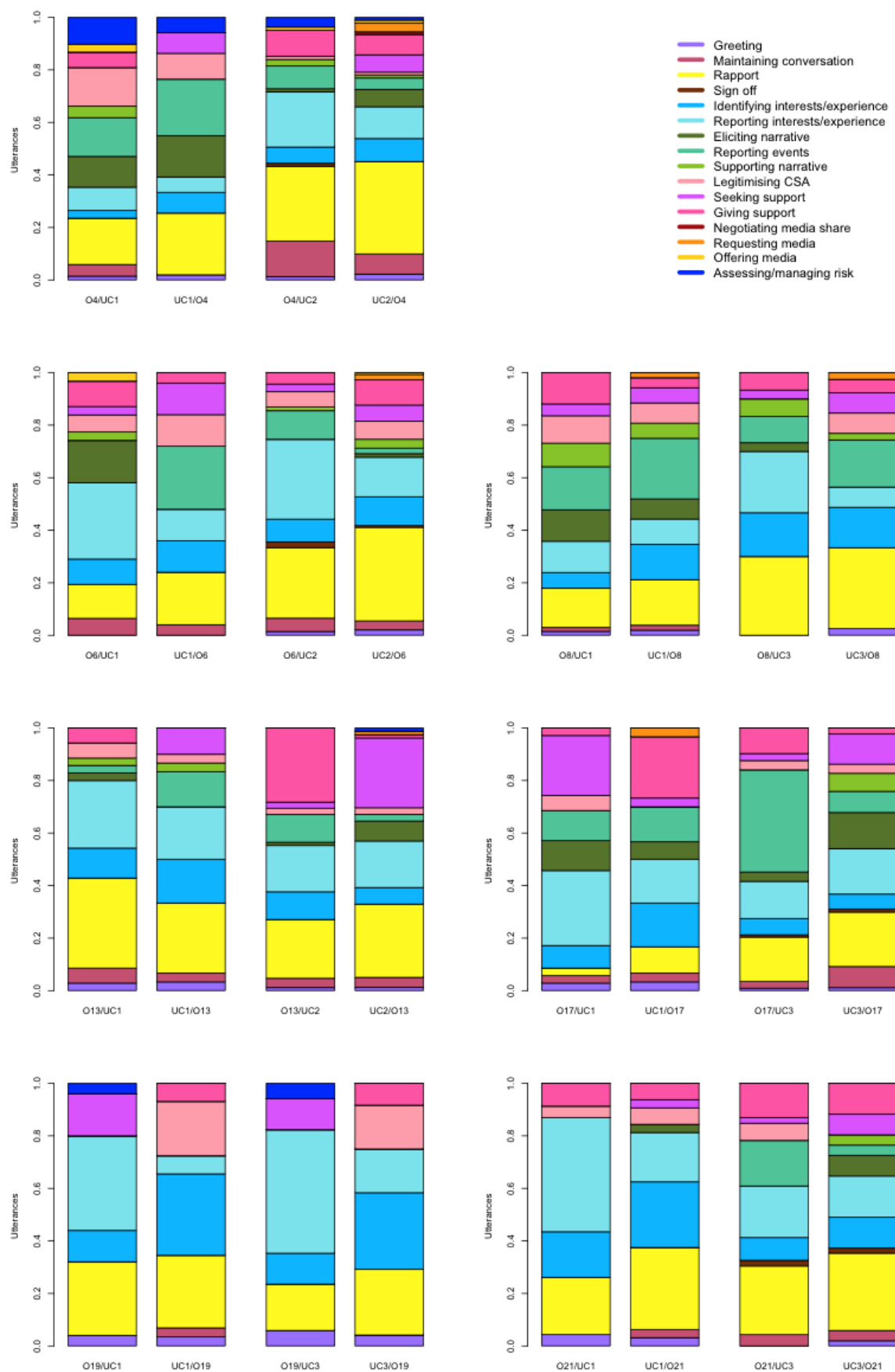


Figure 7.5. Comparative move frequencies in conversations between single suspected offenders and two UCs.

What these comparisons indicate is that move frequency is more consistent within conversations than within individuals. The UCs involved in these conversations do not seem to perform fixed and unchanging identity positions; rather, their moves and identity positions adapt as they converse with different suspected offenders, and vice versa (similar to the offender in Study 1, who was seen to vary in his use of moves across different interactions, although to a lesser degree). This is with the exception of O19, whose move use is highly stable across conversations with two different UCs (see move-map for T19 in appendix H). The two conversations engaged in by O19 are extremely similar, centring around the O19's children and their family "clothing fetish" (T19 L6) (this is reflected strongly in the move-map for T19). O19 seems singularly focused on this topic, even using identical or near-identical utterances across the two conversations on several occasions, for example:

T19 L5:	UC1: how about you? [what ages do you like?]
T19 L6:	O19: our two girls are 8 and 6 - not active but we do share a certain clothing fetish
T19 L37:	UC3: Hello. Who are you mum to?
T19 L38:	O19: hiya - our two girls are 8 and 6 - not active but we do share a certain clothing fetish

In this pair of exchanges, O19 gives almost identical responses even though the UCs' previous utterances do not seek exactly the same type of information. It is possible that O19 was using the copy-paste function in these cases, and similar examples can be found in T19 L8/42, L12/46 and L14/49. This seemingly strong motivation to discuss a single subject means that O19 is usually the individual to set the conversational agenda in each of her interactions, and this reasonably explains her consistent move use across the two conversations. It is interesting to note that the moves of UC1 and UC3 are also fairly consistent, suggesting they both responded to O19 in similar ways.

Comparing move structures

Using move-maps, a structural analysis of the moves reveals an overriding interactional pattern across the dataset (full move-maps are provided in appendix H). The conversations most commonly begin with a *Greeting* move (purple), followed by a period of *Character Assessment* (blue, light blue), which may be short or long, and is likely (but not always) accompanied by some amount of *Rapport* (yellow). This opening move sequence generally depicts participants politely 'eyeing each other up' in order to gauge the other's interests as well as their own potential gains from the contact. Figures 7.6-7.8 illustrate this opening move pattern.

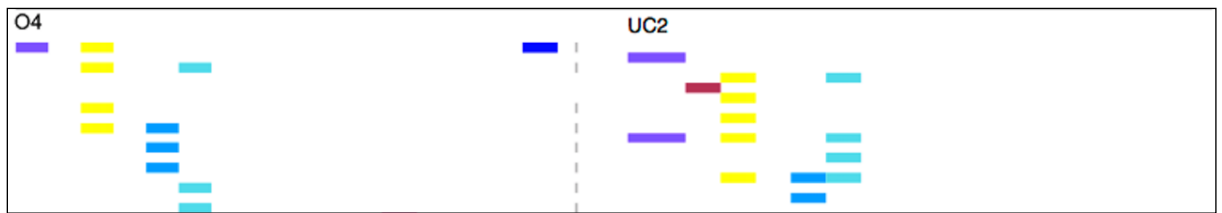


Figure 7.6. T4C2 opening move structure.

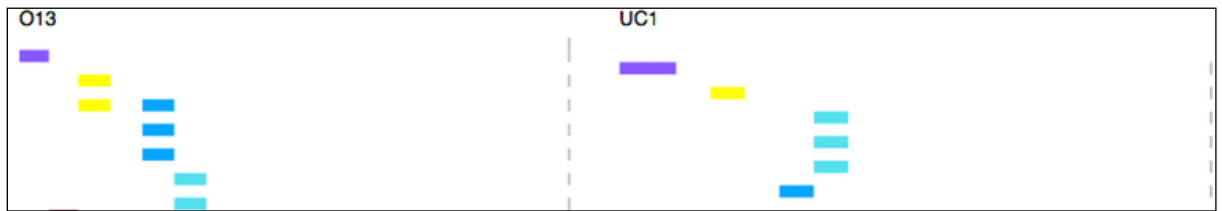


Figure 7.7. T13C1 opening move structure.

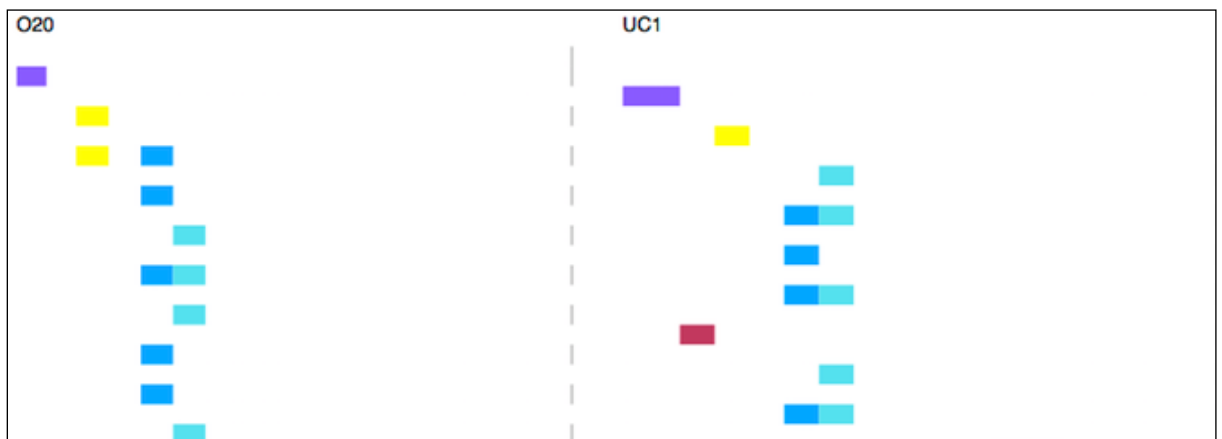


Figure 7.8. T20 opening move structure.

This pattern occurs across the vast majority of the conversations (see move-maps for T1, T3, T4C1, T4C2, T5, T6C2, T7, T8C1, T8C2, T9, T10, T11, T12, T13C1, T14, T15, T16, T17C1, T17C2, T18, T19C1, T19C2, T20, T21C1, T21C2, T22, T23, T24) and does not seem influenced by the conversation initiator (of the 33 total conversations across the 25 transcripts, 21 are initiated by UCs, and 12 by offenders). The prevalence of this opening move structure indicates that these particular moves together work as necessary preparatory groundwork from which the participants can progress to other topics and conversational goals. This is seen in the subsequent use of one or more of the three remaining global moves - *Fantasy narrative*, *Support* and *Media sharing*.

Most commonly, the conversations progress from the opening phase with a combination of *Fantasy narrative* and *Support* moves (T1, T3, T4C1, T4C2, T5, T6C1, T8C1, T8C2, T9, T10, T11, T13C1, T13C2, T14, T15, T16, T17C1, T17C2, T18, T21C2, T22, T23), suggesting that these are fairly ordinary motivators drawing offenders into these sorts of interactions. In most cases, the *Fantasy narrative* moves (green, light green) tend to occur in fairly defined phases, whereas *Support* moves (light pink, purple, dark pink) can be more scattered throughout the conversations. Figure 7.9 exemplifies this common move structure as it occurs in T6C1.

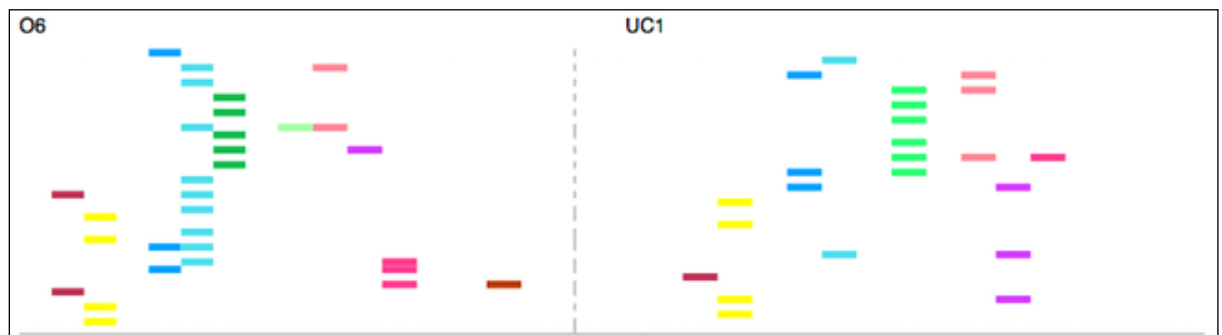


Figure 7.9. T6C1 move structure.

Other conversations (T7, T19C1, T19C2, T20, T21C1) feature no or very few *Fantasy narrative* moves and seem to focus instead on the *Character assessment* and *Support* functions. *Media sharing* moves are seen in only a small proportion of conversations and are most often initiated by UCs, usually towards the ends of conversations (see T4C2, T6C2, T6C3, T12, T25). It is important to remember that the conversations in question are introductory; it may be the case that later on, once more trust has developed between participants over time, these sorts of conversations might exhibit more balanced discussions about sharing illicit media. Of course, for the UCs, establishing their interlocutor's relationship with such material is a priority, so it is unsurprising that they seem more forthcoming in this way. It is useful nonetheless to note the relative imbalance, even though it is small.

This structural analysis has shown that the suspected offender-UC conversations tend to begin with a preparatory phase of *Establishing and maintaining relationship* and *Character assessment*, which enables participants to progress to what might be considered the primary functions of the conversations, which include *Fantasy narrative*, *Support* and *Media share* moves. Aside from the slight discrepancy in the introduction of *Media share* moves, overall, there is nothing structural that flags the UCs' linguistic behaviour as being notably different from that of the offenders. This, too, suggests a degree of linguistic convergence between

the participants, and it seems plausible that this is more on the part of the UCs, who show here their ability to move fluidly through a variety of micro and macro-identity roles (friend, expert, sexual interest, trader, co-fantasist, etc.) depending on what seems to best suit their interlocutors and in accordance with their own operational needs.

Support moves, speech acts and identity

The third issue this study seeks to address is how exchanges of support are realised linguistically, and what sorts of identity positions are performed by use of these moves, specifically at the level of the speech acts used by the suspected offenders and UCs. Pilot Study 1 (see Chapter 5) discussed the potential role of speech act analysis in move identification, and suggested that while speech acts may not necessarily help to determine moves, particular moves may involve a preferred set of speech acts for individuals. It also showed that the framework can provide a somewhat formalised method (Searle's (1975a) *F(p)* structure) for describing the strategies which work to achieve moves. For example, one of the main strategies of the *Rapport* move is *Reporting (F) hobbies and interests (p)*. This section aims to examine more closely the relationship between moves, speech acts and identity by exploring the use of a single pair of reciprocal moves - *Seeking support* and *Giving support* - and the strategies working towards them, specifically in terms of speech acts.

CSA offenders are known to convene in online abuse-related environments for a number of reasons, one of the most important being the supportive network of like-minded individuals they can facilitate. The support that offenders can benefit from may be practical, involving the exchange of advice and abuse techniques (Davidson & Gottschalk, 2011; McCartan & McAlister, 2012), psychological, in the form of reassurance and validation of abusive acts (Quayle & Taylor, 2003; Davidson & Gottschalk, 2011), or it might involve opportunities for planning collaborative abuse (Tremblay, 1993; Cohen-Almagor, 2013).

Support being such a valuable motivator for offenders gathering together online, then, the rhetorical moves identified as *Seeking* and *Giving support* are explored here in more detail. Firstly, the most common strategies of each move are demonstrated in terms of speech acts. Following this is a description of some of the more typical patterns of speech acts used in support exchanges, and the sorts of identity positions indexed by both suspected offenders and UCs therein. Finally, the use of a particular speech act involved in *Seeking* and *Giving support* - that of predicting - is explored in a specific conversation (occurring in T20) where support moves look to amount to the possible planning of a co-abuse event.

Speech acts in Seeking and Giving support

Table 7.2 illustrates some of the more common strategies involved in the *Seeking support* moves as realised by speech acts. These are presented according to the taxonomy of speech act types proposed in Pilot Study 1.

Speech act type	Illocutionary force (F)	Propositional content (p)
Invitationals	<i>Inquiring</i>	about victim access methods
		about risks involved in CSA practices
		about methods of online material sharing
	<i>Requesting</i>	help with victim access
		technological assistance
		involvement with interlocutor's abuse plans
		moral guidance/emotional support
Assertives	<i>Reporting</i>	technological difficulties
Expressives	<i>Expressing</i>	concern about risks associated with CSA practices
		desire to abuse (specific scenario or in general)

Table 7.2. Speech acts involved in strategies of Seeking support.

Unsurprisingly, strategies of *Seeking support* are most often realised by the invitational speech acts of inquiries and requests. Occasionally help is also sought by reporting problems and expressing concerns.

Table 7.3 illustrates the most common strategies of *Giving support* as realised by speech acts.

Speech act type	Illocutionary force (F)	Propositional content (p)
Invitationals	<i>Inquiring</i>	About nature of problem or request
	<i>Suggesting</i>	Alternate sources of illicit online material
	<i>Warning</i>	About risks associated with CSA practices
Assertives	<i>Reporting</i>	Previous abuse experience/details
Expressives	<i>Expressing</i>	Sympathy/empathy for interlocutor
	<i>Praising</i>	Interlocutor's abuse methods
Commissives	<i>Offering/promising</i>	To contact interlocutor in the future
		To try and assist victim access for interlocutor

Table 7.3 Speech acts involved in strategies of *Giving support*.

The strategies of *Giving support* are most often realised by invitational speech acts like suggestions and warnings, as well as reports and expressions of sympathy, empathy and praise. Unlike *Seeking support*, however, this move also involves the occasional use of commissives, mostly in the form of offers of help.

Speech acts and identities in Seeking and Giving support

The analysis found that while exchanges of support can come in a variety of forms and are not always realised in a systematic way, five particular speech act structures emerged fairly regularly across the dataset where participants were observed to be sharing support. The participants in each of these structures can broadly be seen as performing roles of 'support seeker' or 'support giver', but they can also be seen taking on a range of additional identity positions within these exchanges, as well as assigning them, in a display of the relational aspect of identity construction (Bucholtz & Hall, 2005).

Structure 1: inquiry → report.

The first support exchange structure is realised by one participant's inquiry, met by the other's report (or statement), as in the following exchanges:

T13 L20: UC1: what environments you tried getting into?
T13 L21: O13: rough housing estates

T18 L39: O18: how did u get the boys
 T18 L40: UC1: through a bloke i had been chatting to for ages online

Structure 2: inquiry → inquiry.

A support-seeking inquiry might also be met with a further inquiry aimed at gathering additional information about the nature of the help required, as in the following:

T6 L29: UC1: [...] anywhere you could recommend I only started using tor recently
 T6 L31: O6: what do you like watching?

 T17 L9: O17: u ever see girl vids?
 T17 L10: UC1: yeah seen a few is it just the vids and pics that you like?

These first and second structures both involve one participant seeking to learn about the other's personal experience of offline or online abuse behaviour. In doing so, one identity position performed by the UC and offenders respectively might be 'inexperienced', or 'less-experienced abusers'; at the very least, their attempts to seek support explicitly acknowledge their own potential to benefit from the knowledge and experience of their interlocutors. In assuming this role, they simultaneously position their interlocutors as potentially knowledgeable, experienced abusers. In all four exchanges, the recipients of these support requests readily take up the role of 'experienced abuser' projected onto them by demonstrating their knowledge and experience. This position is arguably performed to an even greater degree in the second structure, as the support requests in these instances are met with offers of even more specialised help than that requested. This type of response could be seen as indexing an identity not just of experience, but expertise. Interestingly, support seeking and support giving roles are performed by both offenders and UCs in the above examples, and this is true across the dataset.

Structure 3: request → offer.

The third common structure is realised by a request met with an offer:

T6 L223: UC2: would she let me fuck her?
 T6 L225: O6: I can ask her

 T10 L26: UC1: does he have access to anyone younger would love it
 T10 L27: O10: i could try to find out

This structure involves support seekers (both UCs in this case) directly requesting practical assistance with possible future abuse. Requests like these in some ways also index a certain

level of ‘experienced abuser’ in their manner of being bald and on-record (Brown & Levinson, 1987), rather than hedged, as they might be by less experienced or timid offenders (although overzealousness might also indicate inexperience). Nonetheless, UCs 1 and 2 here are support seekers, offering their interlocutors the opportunity to perform the roles of ‘experienced’ or ‘expert abusers’. This does not happen in these exchanges, however. While the suspected offenders in each example indeed offer their support, both offers are mitigated by the use of modal auxiliary verbs *can* and *could*, minimising any certainty that the help will be realised. By tentatively offering their ‘best efforts’ rather than more definitive support, the support givers in this case seem to be performing closer to ‘accommodating/helpful associate’ or even ‘friend’, while remaining non-committal. Arguably, had the offers instead been *promises*, perhaps realised by use of the high-certainty modal verb ‘will’ (e.g. ‘I will ask her’, ‘I will try to find out’), this would have indicated a level of confidence in the suspected offenders’ abilities to fulfill the offers (suggesting they might have established connections with other offenders) which would likely contribute to an overall more authoritative tone, indexing a more experienced abuser.

Structure 4: report/complaint → suggestion.

Support seeking is also done through reports, which are sometimes met with suggestions for help. Because the reports here concern negative issues (dysfunctioning technology) they could also be interpreted as complaints.

T7 L41:	O7: no instaltion on that link u sent me
T7 L42:	UC1: id google how to install *program* and follow the instructions pal
T25 L26:	O25: pc is playing up njo doubt
T25 L34:	UC1: try a different folder

Both examples of this fourth structure see the support seekers (both suspected offenders) reporting technical difficulties. But in doing so, they avoid explicitly inquiring about how to overcome the problems or directly requesting help, which might have positioned them as being technologically inept or inferior. By using the less direct means of reports (or complaints) the offenders deflect responsibility for the problems. In both cases, the UCs respond with suggestions for help, but these differ in tone and arguably index different interactional roles. In the first example, the UC’s advice to ‘follow the instructions’ from Google highlights that the support was already available to the offender who had simply failed to access it. Not only this, but the UC’s suggestion is framed as a statement of something he himself would do, and the sarcastic sounding endearment term ‘pal’ further contributes to a general tone of condescension. All these features seem to position the UC

as a knowledgeable technology user and accessor of IIOC, and simultaneously position the suspected offender as inexperienced and even unintelligent. The second example conversely sees the responding UC simply providing a suggestion for help. This difference is perhaps because in the first instance, the offender hints that his interlocutor (who sent the link) might be responsible for the problem, causing the UC to take offence, whereas in the second, the offender blames only the piece of technology in question.

Structure 5: report/complaint → expression of sympathy/empathy.

The final noted structure is realised by reports/complaints being met with expressions of sympathy or empathy, in displays of moral or emotional support:

T4 L205:	O4: [I haven't had access to a child in] 7 years
T4 L206:	UC2: bloody hell how are you managing?
T23 L28:	O23: harder nowadays [to access abuse opportunities]
T23 L29:	UC1: tell me about it

This structure too begins with a report/complaint, this time pertaining to difficulties associated with abusing children. Again, the two examples demonstrate the performance of slightly different identity positions. The first sees the suspected offender reporting his personal experience of having been unable to access victims for what he presumably perceives to be a long time. The responding UC expresses both sympathy and empathy towards the offender with the exclamation “bloody hell” and by implying that this problem would call for certain coping strategies. Through these expressive speech acts the UC performs the role of ‘concerned/understanding friend’ or at least ‘understanding fellow abuser’. Additionally, the seemingly rhetorical question (“how are you managing?”) allows the UC to perform this friendly identity while attempting to obtain potentially useful investigative information. The second example shows the suspected offender and UC engaging in a joint expression of the hardships involved in seeking victims. The suspected offender’s initial utterance demonstrates a certain level of historical experience by comparing the abuse opportunities available in the past with those of recent times. The responding UC expresses understanding and empathy, but does not offer any personal sympathy, as in the previous case. The identity positions of both participants seem largely oriented towards ‘offenderness’, experience and expertise, rather than friendship.

The structures found to be typical in this dataset all begin with the *Seeking support* move, and while this is the more common structure, it should be noted that support is not always

solicited. An example of this can be found in T1, whereby the suspected offender mentions a particular physical environment in reference to abusing children:

T1 L45: O1: I know. Love forgotten publictoilets too

This utterance is interpreted primarily as an assertive statement and expressive (of desire), but it arguably also functions as a suggestion or recommendation, which amounts to a strategy of *Giving support*, even though it was unsolicited.

Conditional predictions in potential co-abuse planning

Aside from the more common speech act structures detailed above, one particular conversation revealed an interesting realisation of support moves as observed in the speech acts used. This conversation is part of the interaction detailed in T20 and concerns a discussion around a potential opportunity for co-abuse between the participants. A pivotal feature of this exchange is the use of the assertive speech act of predictions, which are found at a high concentration here compared with the rest of the dataset. Below are some examples, many of which were deemed as pertaining to both the *Seeking* and *Giving support* moves.

T20 L96: O20: yeh. She [the victim] would need to be alone first of all
T20 L100: O20: yeh. it would not be easy
T20 L102: O20: [it would be] easier with 2 of us
T20 L103: UC1: yes it would
T20 L104: O20: [it would cause] far less suspicion if a man and woman together
T20 L109: O20: [it] would probably have to be a village location
T20 L113: UC1: [...] in a village [...] she would be noticed missing quicker
T20 L122: O20: i think around your area would be better

These predictions are characterised by the use of modal auxiliary *would* (even where these are implied (as in T20 L102, T20 L104)). In some cases they are predictions of necessity, stipulating that something would *have* to happen (T20 L96, T20 L109). In all cases, the predictions are conditional, dependent on the stipulation that the abusive event will take place at some point in the future. It is these aspects of the predictions which obscure the speakers' intentions to the point where it would be extremely difficult (did we not know that one participant was a UC) to establish whether the exchange depicts an instance of sincere abuse planning. Had the higher certainty modal 'will' been used instead (e.g. "... it will not be easy", "i think around your area will be better"), the predictions might conceivably convey genuine planning. It is also possible, however, that the use of 'will' by the UC might have conveyed an over-eagerness signalling inexperience or a disregard of the risks involved in

the potential abuse event, alerting the suspected offender to potential identity deception. The use of lower certainty 'would' may therefore work to index a more experienced (and authentic) offender identity, as well as reflect the language of the suspected offender.

It is easy to imagine the UC's motivations in such a conversation as he attempts to gauge the level of risk this particular offender poses both online and offline. In doing so, he is also able to plausibly perform the offender identity, particularly by actively offering expertise (T20 L113), rather than passively going along with the ideas proposed. The suspected offender's motivations are more difficult to comment on. It is possible that this entire conversation is an exercise in fantasy, but using conditional predictions with low-certainty modals in this way arguably allows the suspected offender to express an interest in committing the abusive act at the same time as testing how far his interlocutor might be genuinely interested in collaborating with him, all without actually committing to any real plan. This strategy possibly offers some protection from accusations associated with conspiracy to commit sexual offences, and importantly enables both participants in this scenario to begin co-constructing their identities as 'co-abusers' or partners.

Discussion

The results of this analysis support Macagno and Bigi's (2017) argument for the move as a valuable unit for dialogue analysis in its ability to show how joint goals are co-constructed through the interactants' individual communicative goals. The analysis has also shown how the interactants discursively co-construct identities of offenderness through the use of combinations of reciprocal moves which together work towards global goals.

In line with Bucholtz and Hall's (2005) relationality principle, this work showed that the most prominent identity positions performed in these conversations are based in the various types of relationships established by the interactants, and the socially meaningful roles they assumed and ascribed to each other. As well as general offenderness, the conversations exhibit performances of friendship, business, sexual interest, expertise, and various combinations of these. What was striking was the UCs' demonstrated capabilities to adapt their positions as necessary both across and within conversations with suspected offenders of diverse interests and pursuits, performing both 'support seeker' and 'expert' roles. An important part of this success is likely due to the fact that the UCs have spent time studying similar conversations and equipping themselves with the necessary sociolinguistic and technological resources to assume such a range of identity positions within the sphere of CSA offending (Grant & MacLeod, *in preparation*).

Communicative accommodation was seen particularly in the similar frequencies of participants' moves. This linguistic convergence coheres with Omoniyi's (2006) hierarchical model of identity, as we can see the often multiple roles assumed by the UCs adapt and evolve in line with the shifting of their communicative goals, along with those of their interlocutors. What is not clear from the analysis is whether it is the UCs or the offenders who accommodate more with the language of the other, or if indeed there is an imbalance at all. Arguably though, the UCs are likely better motivated to converge linguistically and appear similar to their interlocutors than the offenders. This is because every offender, regardless of their specific interests (fantasy vs. media exchange, for example) is potentially useful to the UCs in some way, and the longer the UCs can engage with an offender, the greater their chance of obtaining useful information. The offenders, on the other hand, are driven by real and specific (though often multiple) CSA-related interests, and are probably less likely to continue a conversation with someone who does not share those particular interests and from whom they might not benefit.

Regardless of which group converges more towards the other, and despite the discrepancies in move frequencies between the groups, (e.g. the seeming reluctance of the UCs to provide sexual narratives), it seems that the UCs in question have for the most part managed to acquire the necessary linguistic resources to successfully assume offender identities 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; of course, it is in the UCs' interest to ensure high cooperation, but it might not have occurred were it not for participants' identities being perceived as authentic CSA offenders (Seargeant & Tagg, 2014). Other evidence is that no offenders in the dataset challenge or question the UCs' authenticity, although as MacLeod and Grant (2017) point out, an offender's mistrust of their interlocutor is likely to result in immediate termination of the interaction. Reflecting on this, there was no evidence from the final lines of the transcripts to suggest that any of the suspected offenders were suspicious, but it is, of course, still possible. The UCs' seemingly successful performance, however, focused on the assumption of interactional, micro-identity positions, and did not require them to play with broad macro-identity facets like gender or age, which are reportedly more difficult to conceal convincingly (Lincoln & Coyle, 2012). In this way, assuming the identity of female child victim, for example, may pose more of a challenge for some UCs than assuming that of the adult male offender. UCs may therefore benefit from specialised linguistic training targeting particular 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.

One of the most significant points regarding the high level of similarity between the suspected offenders' and UCs' moves is that it inspires confidence in these interactions being (if not perfectly, then closely) representative of genuine offender-offender interactions. As genuine offender-offender IM interactions are as yet inaccessible to researchers, these suspected offender-UC interactions are currently the closest we can get to observing the linguistic behaviours and activities engaged in by offenders when they converse with each other. The findings from this study suggest we can treat them as a reasonable proxy dataset for this task.

The speech act analysis considered the range of ways in which support is exchanged in the interactions and how support moves are used to perform a variety of identity positions. It has also suggested that identity markers can be found not just at the level of the move but in the individual speech acts used, and sometimes even in the use of specific verbs of modality. Additionally, this analysis demonstrated the shared use of conditional predictions and showed how this might contribute towards the collective performance of co-abuse, and it has drawn a tentative link between the use of conditional predictions with low modality and potential abuse planning. It has also demonstrated the possible indexing of the experienced offender identity through the use of a single modal verb. Such markers may prove useful in determining the experience levels of suspected offenders.

Conclusion

Overall, the current study has shown that the UCs in question have performed offender identities fairly convincingly, and that the strategy of linguistic accommodation can be a fruitful one for UCs in this particular identity assumption task. It would be useful in future work to compare conversations like these with those in which offenders are seen to raise suspicion about UC identities, so that particular UC moves might be identified as more or less successful. Another application would be to replicate this analysis with conversations where UCs are tasked with performing as victims, to see how identity positions like age, gender, and other facets of 'victimness' are performed through the use of moves and speech acts. A useful task further to the speech act analysis would be to compare the speech acts used in conversations like that in T20 with those known to have involved genuine planning, to see if speech acts and modal verbs might change as plans shift from hypothetical to actual. The following chapter presents the final study, which considers the performance of the 'newbie offender' identity by individuals attempting to gain entry into established communities of online offenders.

Chapter 8: Study 3: Performing the ‘newbie’ identity in online offending communities of practice

Introduction: context and aims

Online spaces enable offenders to engage in acts like distributing and consuming IIOC and to exchange advice about abuse methods (see Chapter 2, ‘Internet and technology affordances’ section). It is becoming apparent that at least some of these offenders operate as part of established online communities (Grant & MacLeod, 2016; Westlake & Bouchard, 2016). A recent criminal case concerning a postgraduate researcher demonstrates this in its involvement of what the National Crime Agency (NCA) call their first ever “hurt-core” prosecution, where ‘hurt-core’ refers to “hidden dark web forums dedicated to the discussion and image and video sharing of rape, murder, sadism, torture, paedophilia, blackmail, humiliation and degradation” (NCA, 2017). It follows that where there exist platforms for sharing material of this nature, there are groups of individuals frequenting them and facilitating such activities. Westlake and Bouchard (2016) found from an analysis of hyperlinks between over 4 million CSA-related websites, that around these sites emerged two large ‘core’ communities and 3-5 small communities of varying stability. But beyond this, little is known about the nature of such communities and how individuals might go about gaining membership.

The current study explores these issues by examining the performance of the newbie offender identity in forum posts written by individuals who explicitly identify as either ‘newbies’ or ‘new members’ in six different Tor fora (the term ‘newbie’ is defined as any inexperienced newcomer to a group, subject area or activity). It draws mostly from literature around communities of practice (CsoP) (e.g. Wenger, 1998; Eckert, 2006) and online CSA-focused communities (e.g. Westlake, Bouchard, & Girodat, 2017). The posts depict the newbies attempting to gain membership into existing communities of suspected CSA offenders operating on the dark web. Within this overarching goal, secondary issues include the extent to which the newbies’ moves and identity positions might be influenced by the forum types in which the posts were found and the extent to which the newbies’ moves are indicative of the success or failure of any particular post in aiding the individuals’ pursuit of community membership. The second main aim of the study is to explore how strategies involved in a subset of the identified moves are used in the performance of offending competence and expertise, and how these strategies might contribute to the process of persuading established community members to grant membership to newcomers. The research questions are summarised as follows:

1. What rhetorical moves are used in the performance of the newbie identity in forum posts written by individuals attempting to gain membership into existing communities of suspected offenders operating on the dark web?
2. How are competence and expertise performed in newbie forum posts and how does this performance contribute to the persuasive process of attempting to gain membership into existing communities of suspected offenders operating on the dark web?

It is hoped that descriptions of the moves and of performances of competence and expertise could aid law-enforcement agencies in the task of identifying new individuals attempting to gain access to established groups of offenders as well as establishing the levels of offending expertise of both newbies and existing members. Secondly, it is hoped that identifying ways to distinguish newbies from more experienced forum users could assist UCs in online identity assumption work specifically where this involves engagement with established online communities of CSA offenders.

Online sex abuse fora as communities of practice

In order to address the research questions, it is important to first consider whether the individuals frequenting the six fora can reasonably be considered to be operating as communities of practice. This section firstly details the criteria for the development of CsoP according to Wenger (1998, 2010), and then provides descriptions of each forum, including the interests, norms and practices engaged in by members of the respective online communities.

Eckert's (2006) definition of the CoP (see Chapter 3) centralises the mutual interests and goals shared by community members, describing CsoP as collections of people "who engage on an ongoing basis in some common endeavor" and as "emerg[ing] in response to common interest or position" (n.p.). Taking this further, Wenger (2010) explains that meanings are negotiated and organised amongst members of a CoP through an interplay of two processes: firstly, through *participation* in community endeavours, activities, and with other members; and secondly, through *reification*; the creation and use of artefacts (for Wenger this includes both processes and products), e.g. words, concepts, guidebooks, rules etc. (Wenger, 1998; 2010). It is through the dual processes of participation and reification that community participants create "a set of criteria and expectations by which they recognize

membership” (Wenger, 2010, p. 180). These criteria are crucial for the development of CsoP and include the following:

1. Mutual engagement - through participation, the establishment of community norms, expectations and relationships.
2. Joint enterprise - through interaction, the creation of a shared understanding of the community’s purpose and endeavours.
3. Shared repertoire - the use of communal resources in pursuit of the joint enterprise.

According to Wenger (1998), it is these criteria that are used to establish an individual’s status in relation to a CoP as “a competent participant, an outsider, or somewhere in between” (p. 137). Johnson (2001) notes that membership of online communities is more fluid and typically harder to recognise than in more traditional offline communities. Online communities are thought to arise around interests, activities and needs (Squire & Johnson, 2000; Johnson, 2001), and because they lack the formal boundaries of “place-based” offline communities, they are more flexible and less constrained (Johnson, 2001, p. 51). Interestingly, Johnson (2001) argues that the lack of face-to-face interaction in online communities results in fewer group norms, and an increased level of control for individuals. This may be true of online communities in general, especially those which are public and non-deviant, but this is not so for the subjects of the current study, who are heavily bound by rules and regulations associated with both security and etiquette (evident from forum post content which will be seen in due course), which govern each forum, partly owing to the extremely high-risk nature of the use of such environments. In contrast to Johnson’s view, the above criteria outlined by Wenger (1998) are also in line with research into online communities generally. As Angouri (2016) notes, there is no unified definition for an online community, but “evidence of group norms” (p. 325) is a consistently identified feature of CsoP.

Describing the fora: rules, norms and practices

The posts analysed are taken from six online fora. The actual forum names are omitted; instead, each is referred to by a descriptive label which aims to encapsulate the main interest of its users. The six forum labels are as follows: *CG* (computer-generated) *IIOC*, *IIOC (Babies)*, *IIOC (Young boys)*, *IIOC (Pre-teens)*, *IIOC General*, and *Support network*. Each forum is made up of a collection of message boards which reflect a range of broad and narrow user interests and purposes within the general domain of CSA. While individuals might frequent any number of these fora (users sometimes refer to other message boards

than that in which they are posting), and there may be overlapping practices or cultural norms between them, it is assumed that each forum has the potential to represent a distinct online CoP.

Many of the groups in question explicitly identify as communities (this is seen mostly in forum post content but also on navigation pages of the *CG IIOC* and *Support network* fora). But to demonstrate how the communities around each forum go further than this to meet Wenger's (2010) criteria, information regarding the shared interests, norms, rules and practices of the communities was collected for each forum. This was done using an online database known as Avatar, a tool developed for law enforcement personnel which scrapes web content, enabling the user to search through thousands of texts of different types including forum posts, IM chat conversations and private messages, from a variety of Tor platforms. It is important to note that the range of available information on Avatar regarding each forum varies; for some there are screenshots of home pages containing forum rules and regulations and for others this information is presented less formally in the contents of forum posts. Table 8.1 summarises the most salient available information (low-level details, for example rules on technical specifications of imagery are omitted). This information is sourced from a range of different areas of the fora, including the sites' home pages, navigation pages, forum posts specifically addressing rules and guidelines by site administrators, and other forum posts. Official rules prescribed by site administrators are presented alongside other community norms, because even though they may have not developed organically, prescriptive rules arguably become norms for CsoP as they are adhered to by members repeatedly and over time. It is clear from the forum post content of site administrators and others that such rules are enforced through systems of warnings, membership suspension and blocking, and because of this, it can be assumed that the majority of individuals frequenting these fora generally adhere to the rules imposed. It seems safe to assume that many online communities such as these would not be able to operate at all without their members' observance of certain rules, particularly those regarding online security and identity concealment.

Table 8.1 describes the fora. While norms and rules are presented here (as far as possible) as separate from practices, it is noted that these can be difficult to distinguish, for example it is a norm (stemming from a prescribed rule) for members of the *CG IIOC* forum to use a screen name consisting only of letters, but the creation of screen names in this particular fashion could also be considered a practice shared by community members.

Forum	CG IIOC	IIOC (Babies)	IIOC (Young boys)	IIOC (Pre-teens)	IIOC (General)	Support network
Interest/purpose:	"Gay shota" - computer-generated fantasy artwork and stories depicting relationships between young boys or young boys and adult men	CSA, IIOC specifically featuring "babies and toddlers"	CSA, IIOC specifically featuring boys	CSA, IIOC specifically featuring "pre-teen" children	CSA, non-specific IIOC	CSA, referred to as 'Child love', providing support for paedophiles
Rules and norms:	Entry requires registration and self-introduction, membership maintenance requires regular active use (commenting)	Member ranks with associated privileges, e.g. "Producers Zone" and "VIP Zone"	Ban on revealing personal information relating to self or others	Entry requires user to post some form of IIOC in which "the child is performing a sexual act"	IIOC must involve subjects between the ages of 3-17 only	Ban on "trolling, spamming, flooding"
	Ban on "traditional" IIOC - all imagery is computer generated	Ban on sale or trade of IIOC	Ban on sale or trade of IIOC	Ban on "Hurtcore"	Files must be appropriately encrypted	Usernames must be respectful of children
	Ban on discussion of abusing children and forum threads that might prompt this	Ban on particular topics including rape, torture, necrophilia and snuff (content featuring death)	Emphasis on praise and appreciation rather than criticism	Ban on pornography involving adults only	Posts must include preview of uploaded content	Any images posted must be "legal and unsuggestive"
	Ban on imagery "depicting extreme violence or death."	Emphasis on praise and appreciation rather than criticism		Ban on posting personally identifying information	"No spam"	Avatars must not be "offensive to a paedophile" or "sexually suggestive"
	Usernames must be consist of letters only and read as names (not just strings of letters)	Emphasis on discussing the beauty of IIOC subjects 'as opposed to' abuse		Ban on sale or trade of IIOC	Ban on posting personally identifying information or that identifying others	Member rankings according to number of posts
	Communication with other users must be respectful	Post titles describe content of IIOC		Emphasis on praise and appreciation rather than criticism	Ban on "Hurtcore"	Ban on posting personally identifying information
					Ban on sale or trade of IIOC	Emphasis on friendliness and respect towards other users
						Emphasis on "loving" children and "consensual relationships" rather than hurting children and focusing only on sexual aspects
Practices:	Production, sharing and consumption of computer-generated artwork	Production, sharing and consumption of IIOC	Production, sharing and consumption of IIOC	Production, sharing and consumption of IIOC	Production, sharing and consumption of IIOC	Creation and sharing of "true or fictional stories about paedophilia"
	Writing and sharing fantasy stories	Creation/discussion of official rules for site use	Creation of website tutorials	Discussion of forum post contents/IIOC	Discussion of forum post contents/IIOC	Creation and use of guides regarding online security and paedophilia
	Forum-based discussions around created "artworks" and fantasy stories, including critique and appreciation	Creation/use of practical instructions on how to post images and videos	Discussion of forum post contents/IIOC	Discussions related to other aspects of CSA	Discussions related to other aspects of CSA	Creation and use of avatars
	Collaborative works between members	Discussion of forum post contents/IIOC	Discussions related to other aspects of CSA	Production, sharing and consumption of CSA-focused fantasy literature	Official moderation team acting as gatekeepers	Discussions related to paedophilia
	Creation/discussion of official rules for site use	Discussions related to other aspects of CSA	Creation/discussion of official rules for site use	Instant messaging communication in chat room	Creation/discussion of official rules for site use	Private discussions between two members only
	Community gatekeeping by official moderators/administrators	Community gatekeeping by official moderators/administrators	Official moderation team acting as gatekeepers	Creation/discussion of official rules for site use	Sharing advice and support	Awarding positive or negative "Karma" to other users through "applaud" and "slap" buttons which appear on forum posts
	Sharing advice and support	Sharing advice and support	Sharing advice and support	Sharing advice and support	Creation/discussion of official rules for site use	Reporting community "news"
						Official moderation team acting as gatekeepers
						Sharing advice and support

Table 8.1. Rules, norms and practices shared by users of six CSA-related fora

Several common themes arise across the six fora, for example, users are typically not allowed to sell or trade IIOC, are discouraged from posting personally identifying information, and commonly share advice and support. Some norms and practices, however, are more discriminating, for example the *IIOC (Pre-teens)* forum has a dedicated section for 'Hurtcore', which is explicitly banned in the other five fora. It is worth mentioning here that the *IIOC (Pre-teens)* forum defines 'hurtcore' as "[material depicting] a child that is clearly crying or distressed/ Actively trying to get out of the situation by cannot [sic]/ Any injury to a child or blood is drawn.", so in this context the term refers just to the nature of the IIOC itself, rather than the wider criminal practice of its exchange or the environments in which the activity takes place, as in the definition above from the NCA.

Another discriminating norm concerns the *Support network* forum, which bans IIOC altogether, maintaining that all images posted must be "legal and unsuggestive" (it is partly for this reason that the term *offenders* was considered an inappropriate blanket term for all subjects in the current study, and why the terms *suspected offenders*, *forum users* or *members* have been selected instead).

The forum descriptions indicate that the six fora qualify as CsoP according to Wenger's criteria, in that each one brings together a group of people who engage in a range of common activities and practices and develop tools and resources in the pursuit of shared interests and endeavours. These may be broad, general interests in the sexual abuse of children, or narrower sub-themes of this domain, such as age-specific interest groups or those focused on the creation and sharing of computer-generated imagery (as in *CG IIOC*). This is not to say that all community members necessarily engage in an ongoing basis, but the forum content suggests that there is at least a core group of individuals in each community who contribute regularly as well as some who seem to occupy something of a high status in comparison to others. These high-status contributors are often referred to as administrators (or 'admins'), and they generally do the 'welcoming' of new members and other forms of gatekeeping such as issuing rules and providing instructions. Expert CSA offenders are described in the literature (see Tener, Wolak & Finkelhor, 2015; Christensen, 2017a) and it follows that expert online offenders also exist. It seems likely that forum administrators would assume the role of expert within these communities, and that they represent one end of a scale on which other users of varying levels of engagement, commitment and expertise also exist. Quayle *et al.* (2014) point out that in online contexts, technical savvy can function to make up for an individual's lack of historical offending experience. General observations from the forum posts indicate that there are individuals with interests and experience in a range of online CSA-related fora and who are as a result

fairly well versed in the common rules and regulations that govern most of these sorts of online environments. We might consider these individuals to make up a wider, more general and looser community of online suspected offenders, within which there exist narrower, more purpose-specific communities, such as the six examined here.

Methods

Data collection and selection

The data for this study was collected from the Avatar database. Forum post titles were searched for the terms 'newbie' and 'new member', and the relevant posts (and responses) were collected over a six-week period (between 13th October 2016 and 30th November 2016). Posts were collected only from fora where English was used as the primary language, (a total of six). A number of posts were deemed inappropriate for analysis and thus rejected, including posts in which users were seeking to find new members rather than declaring themselves as such, posts that looked to depict non-offenders trolling genuine forum users, posts in which the user's command of English was inadequate for reasonable interpretation, and posts in which substantial content appeared to be missing. This left a total of 71 forum posts from six different fora suitable for analysis (posts are referred to as FP1, FP2, etc.). Each post appears to be authored by a different user, except for FP15 and FP25, which are posted by accounts with the same username in two different fora, and are remarkably similar in content. It is important to remember that an individual may operate more than one of the usernames displayed in the dataset, so it is only tentatively assumed that across the 71 posts, there are 70 individual users in total.

Data description

Table 8.2 illustrates the dataset characteristics. The full dataset of 71 forum posts can be found in appendix 5 (volume 2).

Forum	Number of posts	Author gender proportion	Mean post length (words)	Standard deviation
CG IIOC	8	3M, 0F, 5 unstated	54	34
IIOC (Babies)	3	2M, 0F, 1 unstated	51	18
IIOC (Young boys)	5	2M, 1F, 2 unstated	127	110
IIOC (Pre-teens)	1	0M, 0F, 1 unstated	20	0
IIOC (General)	48	18M, 5F, 25 unstated	116	88
Support network	6	1M, 0F, 5 unstated	132	37

Table 8.2. Summary of newbie forum post characteristics.

As can be seen, the posts are unevenly distributed throughout the six fora. Eight newbie posts were found in the *CG IIOC* forum, making up 11% of the overall dataset. The three posts found in the *IIOC (Babies)* forum make up 4% of the dataset. Five posts are from the *IIOC (Young boys)* forum and these constitute 7% of the dataset. Only one newbie post was found in the *IIOC (Pre-teens)* forum, this single post accounting for approximately 1.5% of the dataset. The large majority of posts (48) come from the *IIOC (General)* forum and comprise 68% of the dataset. Six posts were found in the *Support network* forum and these make up 8% of the overall dataset.

Gender was derived either from users' screen names or from information included in the post content, which usually came in the form of an explicit statement, e.g. "I'm a Boy..." (FP71) or by reference to the user's genitalia, e.g. "... i got a very big boner..." (FP18). The majority of posts (55%) were found not to reveal explicit information about their author's gender. Across the whole dataset, of the 32 users who did, 26 identified as male, and six as female. This information may of course be unreliable, although the ratio of those identifying as males and females roughly reflects Wager *et al.*'s (2018) estimation that a quarter to a third of OCSA offenders are female.

The posts are on the whole quite short, their mean averages ranging between 20 and 132 words. All texts were posted between March 2014 and October 2016.

Procedure

The move analysis was conducted as described in Chapter 5 (by determining the most likely communicative functions of text segments in the forum posts). Because Pilot Study 2

determined the move identification process to be valid, it was deemed unnecessary to repeat this task; instead, a second coder (also a trained linguist) was presented with the initial move set derived by the author (including some example strategies), and tasked with analysing ten forum posts (over 10% of the dataset) picked at random. The forum posts were provided as single whole texts, rather than segmented into pre-defined chunks so that the second coder could interpret the move boundaries independently from the first coder. She was asked to indicate what she perceived to be the primary moves made throughout each text.

The reliability test resulted in 85% overall agreement between the two coders in terms of perceived moves across the texts. Those discrepancies which arose centred around two main issues, the first being differing move boundaries. In 4/10 texts, Coder 1 (the author) had taken a segment and assigned a general overall move, where Coder 2 had broken this segment into a number of smaller segments and assigned multiple moves. In all cases, Coder 2's moves included the main move assigned by Coder 1, demonstrating overall agreement but a slightly finer grained level of analysis by Coder 2. The second main discrepancy concerned two particular moves. Where Coder 1 tended to identify a move termed *Expressing motivations*, Coder 2 tended towards a move termed *Demonstrating alignment*. Discussions around these instances revealed that Coders 1 and 2 were satisfied that both moves were being achieved by the same utterance even if there was disagreement regarding the *primary* goal of that utterance (this was also seen in Pilot Study 2). One example is the utterance "I love Baby Boys" (FP9), which can feasibly function to demonstrate a user's motivations for using the forum (*Expressing motivations*) and at the same time, their similarity to others in the community (*Demonstrating alignment*). This was expected to some extent as there is some overlap in the strategies identified in these moves. Given this high level of agreement between coders, the move set remained as initially presented throughout the rest of the analysis, with some refinements to the move definitions.

Following the reliability test, the frequency of each move across the dataset was then calculated (all figures are rounded up to nearest integer). In contrast to the transcripts in Studies 1 and 2, it was considered more suitable to code for the presence or absence of each move rather than the frequency of moves within the posts due to their relatively short length. The removal of all images by the Avatar tool includes emoji, and where this occurs, the tool replaces the emoji with 'Censored' followed by a link to the removed symbol. Where it was clear from the link which emoji/emoticon had been used, this was retained in the text, but where it was unclear, the link was replaced with '*emoji*'.

Upon reading the texts it became apparent that sometimes there are formal processes involved in the acceptance of new members into the communities, which generally happen after a period of time in which the newbie user must 'prove' various aspects of his/her worthiness, e.g. trustworthiness, willingness to break laws, ability to provide IIOC, etc. Because this study concerns only the initial forum posts and immediate responses, unfortunately in most cases these processes are not visible in the current dataset, making it impossible to determine conclusively the contribution of each post to the success or failure of each newbie in attempting to gain membership. Only a small handful of posts have responses (presumably from forum administrators) which include newbies' official membership status (e.g. "Membership under review") (FP66, FP67, FP69, FP70, FP71). But for those that do not, it is possible to gain some informal idea of the success of these initial posts by the immediate responses from existing community members. As such, each post was also coded as belonging to one of five categories according to the responses received (if any). The codes used for this include:

1. Welcomed: the post received a welcome message from one or more responders.
2. Welcomed with Instruction/Warning: the post received a welcome message from one or more responders along with an instruction or warning about community norms/practices.
3. Rejected: the post received a rejection message.
4. Ignored: the post received no response.
5. Unclear: the post received a response message interpreted as neither a welcome nor a rejection.

Limitations

One of the main limitations of this study is the imbalance in the distribution of posts from different fora, i.e. that posts from the *IIOC (General)* forum constitute the large majority (68%) of the dataset, the others contributing comparatively small amounts. Each individual forum represents a unique online environment with its own set of functions and parameters which will affect users' contributions. A larger number of posts from the other fora would enable an investigation of the extent of this effect by comparing posts of different forum types. While this is not feasible with the current dataset, it was still deemed useful to consider posts from as many fora as were available in order to describe the processes involved in requesting entry into these online communities as broadly as possible. The forum types and their potential effects on posts are taken into account.

A second limitation is that it is possible that follow-up responses could have been posted after the end of the data collection period. However, because there is a two-week gap between the most recent post and the beginning of data collection, and because post responses are typically immediate and do not continue for more than a few days after the initial post, it is unlikely that follow-up responses are missing from the dataset. Even so, those posts initially coded as Ignored (i.e. they had received no responses) were revisited nine months after the initial collection and in all cases no new responses had been received.

Finally, the ambiguity associated with some of the emoji used means that in some cases it is impossible to interpret their possible communicative functions. However, they are found only sparingly across the dataset so this issue is unlikely to affect the analysis significantly.

Analysis

Across the 71 forum posts, 12 moves collectively encompassing 82 strategies were identified (a full list of moves and strategies can be found in appendix I). Posts were found to comprise between two and eight unique moves. The following section describes each move in terms of its function(s), its most prominent strategies, and its general positioning in the forum posts. Following this is an exploration of move frequency across the dataset, as well the possible influence of forum type on the moves observed, and finally whether the moves can be seen to indicate the relative success of the posts in aiding the newbies' pursuit of community membership.

Rhetorical moves in newbie offender forum posts

The length and slightly more monologic nature of these texts meant that move boundaries were often difficult to discern (compared with the IM data in Studies 1 and 2 where clear utterance boundaries aided this task to some degree), with stretches of text working to achieve multiple and overlapping moves. Because of this it is difficult to visualise the forum posts in an equivalent way to the transcript move-maps in Studies 1 and 2. Instead, the structures of the posts are discussed in terms of the positions at which each move is typically first introduced.

Greetings serve to introduce the new forum user and to address community members. They typically include a greeting term followed by audience address, e.g. "Hi everyone!" (FP8), "Hi all" (FP42). As would be expected, they are typically found at the beginnings of posts, occupying either the first or second move position.

Demonstrating newness is used to indicate the user's status as a 'newbie' either in relation to the specific forum or to CSA offending more generally. Prominent strategies include explicitly stating newcomer status, e.g. "I am new to the forums..." (FP10), expressing discomfort about using the forum, e.g. "First, I have to confess it's seems weird to me to be here..." (FP56) and indicating a lack of experience either with CSA fora use or offending, e.g. "When I know for sure [...] what I'm doing..." (FP56). This move can also involve demonstrating differences between the newbie and existing community members, e.g. "[I'm] Not a graphic artist..." (in the *CG IIOC* forum which facilitates the creation and sharing of graphic imagery by its members) (FP4), and seeking tolerance for a lack of experience, e.g. "...please be patient if I dont get it all right." (FP12). Although occasionally introduced towards the middle and ends of posts (e.g. FP18, FP55), *Demonstrating newness* (where used) is typically found in the first or second move position, suggesting that users prefer to openly identify as newcomers from the outset, before moving on to other areas of discussion.

Expressing motivations serves to indicate a user's reasons for wanting to join a particular community, as well as their motivations for contributing a post to the forum. The main strategies include stating the user's hopes or intentions within the community, e.g. "I am looking for friends on here to wank with and chat to." (FP23), expressing general or specific domain interests, e.g. "I prefer ages 12-16..." (FP42) and describing how the user came to engage with CSA fora, e.g. "It's been a long journey to end up finding my self here." (FP63). Other strategies include explaining the purpose of the post, e.g. "I just wanted to say hi..." (FP40) and professing a dependency on CSA material, e.g. "I then got hooked..." (FP55). This move is less fixed in position than the previous two, but is generally found towards the beginning and middle of posts.

Demonstrating alignment serves to show the new user's existing alignment or affiliation with either the particular community in question or some wider community of online offenders. It encompasses the largest number of strategies of any move (19), the most prominent being accentuating likenesses between the user and the community, e.g. "Hello fellow pedos." [emphasis added] (FP14), "Hello brothers and sisters" (FP16). It also involves stating the user's historical or existing membership of the immediate or similar communities, e.g. "I used to belong to this board under another name" (FP2), and demonstrating a sexual interest in children and offending experience, e.g. "I spent ages just looking at her little legs..." (FP23). Other prominent strategies include demonstrating knowledge or experience of community norms and practices (see table 8.1), e.g. "I read the rules and know what is expected of me." (FP6), "I put all of my passwords [...] on a encrypted hard drive..." (FP2), explaining the origin of the user's CSA interests, e.g. "... a friend of mine [...] left his computer

accidentally on..." (FP16) and professing (or disposing of) the 'lurker' status, e.g. "I've always been a lurker, but thought I would get involved..." (FP33). Other strategies include self descriptions using deviant terms, e.g. "I'm a pedo" (FP36), expressing acceptance of others' preferences, e.g. "...I personally don't care for younger girls really but each to their own :D" (FP52) and othering non-offenders or wider society, e.g. "I wish the world were a more understanding and open, non-judgemental one..." (FP57). Many of these strategies are general and could apply to several or all of the fora in question, but alignment to specific communities can look very different between fora, for example aligning with the common practice of uploading IIOC in the *IIOC (General)* forum would be unacceptable in the *Support network* forum, according to the rules posted by site administrators (see table 8.1). On rare occasions, users are seen to misalign themselves with the CoP in question, for example FP71 seems to involve a request for some sort of IIOC but the *Support network* forum in which it was posted specifically bans this, stating in the official forum rules that all material posted must be "legal and unsuggestive". This user was one of the two explicitly rejected by an existing CoP member (the other, in which the author claims to be a 12 year old girl, is dismissed as "trolling" (see FP32)). *Demonstrating alignment* is typically used in the first half of posts but does occur towards the end in some instances (e.g. FP34, FP50, FP67). There is some overlap in strategies with *Expressing motivations*, as some individual utterances, e.g. "I prefer ages 12-16..." (FP42) can function to serve both moves at once.

Demonstrating value is a move of self-promotion, serving to convey the value that the newbie might offer the community if granted membership. The main strategies include expressing the intention to provide IIOC (or actually providing a link to such material), e.g. "...I will post alot more stuff!" (FP12), offering/demonstrating community-specific skills or services, e.g. "...would love to [...] serve as a muse..." (FP4) and demonstrating ability and willingness to follow community rules, e.g. "...am quite capable of clicking the thanks icon and not cluttering up the threads..." (FP24). Other strategies include describing the value of the post itself, e.g. "This short post is small but good quality and probably worth downloading." (FP12) and self-complimenting (including reported compliments), e.g. "I was called a white knight before..." (FP20). This move typically occurs towards the ends of posts, but is found earlier on in a small number (e.g. FP4, FP13, FP50).

Stating limitations is in some ways opposite to *Demonstrating value*, in that it serves to explain the ways in which the user is unable to meet the expectations or requirements of the CoP. The main strategies involved are stating a lack of shared or general skills, e.g. "...i'm not artist..." (FP5) and stating a lack of illicit material to offer, e.g. "...have no videos or stuff to share." (FP11). The move also includes justifying a lack of materials or participation, e.g. "I'm

here on a mobile so cant post stuff..." (FP14), seeking understanding or forgiveness for limitations, e.g. "... I hope youll give me some understanding." (FP14) and expressing uncertainty about the immediate post, e.g. "Dont know what else to write here..." (FP42). The move typically occurs towards the ends of posts, although very occasionally it is found within the first two moves (FP26, FP39). It seems at first an unusual move to find in texts whose principal aim seems to be persuasion, but *Stating limitations* allows the newbie users to display their knowledge of what might be expected of them as potential community members, while demonstrating what they can offer and potentially negating face threats (Brown & Levinson, 1987) from existing community members. Interestingly, similar forms of self-deprecation were noted by Coupland (1996) in dating advertisements, who reasoned that this might cause potential suitors to attribute qualities of "openness" and "a mature ability to self-criticize" (p. 201), which may also be true for the newbies here.

Expressing appreciation serves to show a newbie's appreciation for the immediate forum, the community in general and individual members. This move is mostly achieved through general praise and compliments, e.g. "Excellent work some great talent" (FP7), praise to specific members, e.g. "The work of *screen name* and *screen name* seem particularly interesting." (FP1) and expressing gratitude for the existence of the community, e.g. "...i'm glad that i have found a community who loves all that i loves..." (FP10). Other strategies include showing deference to community members, e.g. "Interested in art like *screen name* produces but by no mean not that adept yet." (FP3), expressing positive feelings towards the community, e.g. "I LOVE YOU ALL." (FP16), encouraging continued efforts of the community, e.g. "Let's keep this going, people!" (FP45) and thanking the community, e.g. "Thanks!" (FP15). This move is generally found towards the middle and ends of posts, and occasionally appears as the final move (e.g. FP33, FP36, FP46, FP50) due to the fact that thanking functions both as a strategy of *Expressing appreciation* as well as a type of *Sign off*.

Seeking support is defined here in the same way as in Study 2; it is used to obtain help, advice or guidance regarding on and offline CSA practices. The main strategies include providing context for the problem in question, e.g. "I am a dad of two daughters..." (FP27), stating a general need for help, e.g. "...i have a question." (FP17), and requesting specific advice to do with forum use or contact offending, e.g. "I wanted to ask, how I can set a profile picture." (FP13), "...how do you go about seducing him.." (FP15). Other strategies include requesting moral guidance, e.g. "I made this post also to hear [...] how [others] think [...] about this "younger Stuff"." (FP18), expressing worries or difficulties associated with CSA interests, e.g. "My problem with this "thing" is you are very alone with this attraction!" (FP18) and (when seeking advice related to contact offending) assuring the community that the user

poses no 'harm' to children, e.g. "I am very kind and not they type to hurt, etc...." (FP29). This move is one of the least fixed in position and may occur at the beginning, middle or end of posts. Where it does occur, *Seeking support* seems to be the primary purpose of the posts, leaving community membership as more of a secondary goal.

Requesting membership accounts for open attempts to gain membership into the community. Strategies include explicit requests, e.g. "Can i please join the gang???" (FP3), implicit requests, e.g. "I'm looking forward to be (hopefully) part of this community." (FP6) and seeking connections with individual members, e.g. "Please befriend me if you have similar interests." (FP26). Where the move occurs, it typically does so towards the ends of posts, sometimes featuring as the penultimate move (e.g. FP3, FP8, FP66, FP67).

Exerting authority is used to demonstrate a user's level of authority or status as a CSA offender or forum user. The main strategies are asserting a high level of experience or lengthy history of offending and forum use, e.g. "I was in some of the pioneer web based boards" (FP26), minimising others' knowledge or experience, e.g. "This forum is a quiet haven compared to what I'm accustomed too!:" (FP24), and using domain-specific terminology, e.g. "It was the same feeling that led me to loiter around *forum name* during the wild times of the p-t newsgroups and subscribe to *forum name*..." (FP24). Other strategies include alluding to personal acquaintances with high status offenders, e.g. "You would never believe me if I told you who got me started..." (FP26) and alluding to the possession of 'secret' knowledge, e.g. "But that is as much from that as i will say." (FP26). The general level of force of these strategies is the reason that the term *exerting* is selected over more subtle options like *claiming*, for example. When used, it typically occurs towards the middle and ends of posts.

Othering is used to highlight the differences between the newbie and those the newbie feels are somehow different or 'worse'. The main strategies used to do this are stating a lack of intention to 'hurt' victims, e.g. "I am very kind and not the type to hurt, etc." (FP29) and stating a lack of contact abuse experience, e.g. "I've never done anything pedomish in real life..." (FP31). Where present, this move typically occurs towards the ends of posts.

Sign offs are simply used to signal the end of a forum post. This is mostly done through thanking (hence the overlap with the *Expressing appreciation* move) or by using a screen name. Less common strategies are trailing off, e.g. "So yeah..." (FP51) and well-wishing, e.g. "Have a nice night everyone :)" (FP56). When used, *Sign offs* naturally occur in the final move position.

Move frequency

Figure 8.1 illustrates the prevalence of each move across the dataset as a whole.

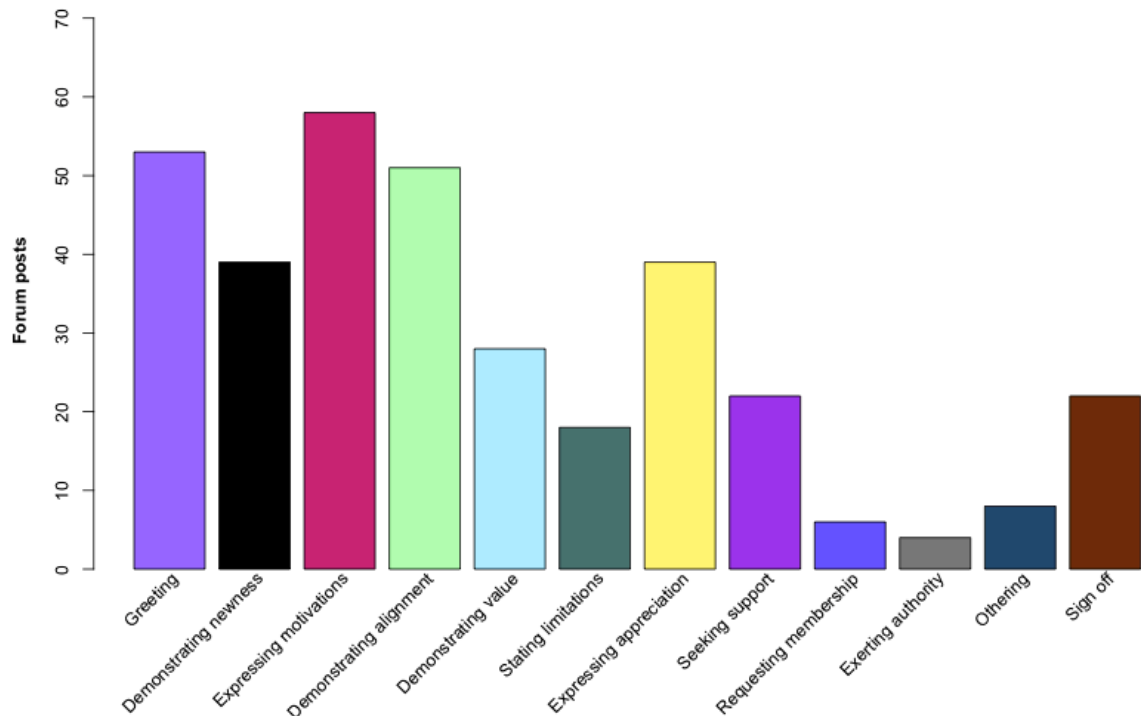


Figure 8.1. Number of forum posts exhibiting the 12 identified moves.

As can be seen, the most commonly observed moves across the 71 forum posts are *Expressing motivations* (found in 82% of posts), *Greetings* (75%), and *Demonstrating alignment* (72%). This suggests that these moves represent the most important rhetorical functions of these posts as well as the key persuasive techniques for most users attempting to gain membership into their desired communities. The high use of *Expressing motivations* is unsurprising; it seems natural that individuals wishing to join a group would want to justify their reasons for doing so. Likewise, a high number of *Greetings* makes sense for a corpus of texts in which self-introduction is a primary goal. The high use of *Demonstrating alignment* is more interesting in that it shows an important strategy here is positioning oneself as already aligned with the practices and values of the community, rather than as an outsider merely expressing a desire to belong. This is arguably particularly important in the online CSA context because of the high risks associated with meeting and trusting unknown individuals.

Expressing appreciation and *Demonstrating newness* are relatively common, each occurring in around 55% of posts. *Demonstrating value*, *Seeking support*, and *Sign offs* were slightly

less common, featuring in 40%, 31% and 31% of posts respectively. *Stating limitations* is unsurprisingly quite rare, appearing in only 25% of posts.

Even more rare are the moves *Othering*, *Requesting membership* and *Exerting authority*, occurring in around 11%, 9% and 6% of posts respectively, suggesting that these are not particularly representative of the general goals of those pursuing membership of online CSA communities. The low frequency of *Exerting authority* seems unsurprising for a corpus of texts written by individuals who identify as ‘newbies’. Similarly, it is not surprising that *Othering* is a low-frequency move; it seems logical that those wishing to join a particular community would focus on foregrounding their similarities to that community rather than potential differences to various portions of it, and this is demonstrated in the relative prevalence of the *Demonstrating alignment* move. The low frequency of *Requesting membership* is more interesting, given that gaining membership is arguably the primary purpose of these posts. This might be explained by the fact that having ‘newbie’ or ‘new member’ in the post titles does some of this request work implicitly for the users, as do combinations of *Demonstrating newness*, *Expressing motivations* and *Demonstrating alignment* in the post contents. While there are no ‘obligatory’ moves (i.e. no single move is found in all 71 posts), these three high-frequency moves seem to be the most characteristic of the posts generally and could reasonably be considered ‘core’ in relation to the task of requesting community membership, given their dependence on the immediate context compared with other moves. It seems likely that requesting community membership in this more implicit manner also works to minimise face threats (Brown & Levinson, 1987) as direct requests leave the user more vulnerable to rejection. Also, implicit requests could make it easier for newbies to meet rejections with denials that membership was their intended goal.

Moves and forum types

The forum type will to some extent have influenced users’ language, and as the corpus is dominated by texts from the *IIOC (General)* forum, the overall move frequency is more representative of newbie posts from this forum than any other. But even considering the low numbers of texts from the remaining fora, there are some interesting points to note when comparing them in terms of move use. Figure 8.2 illustrates move frequency as seen in posts from each forum.

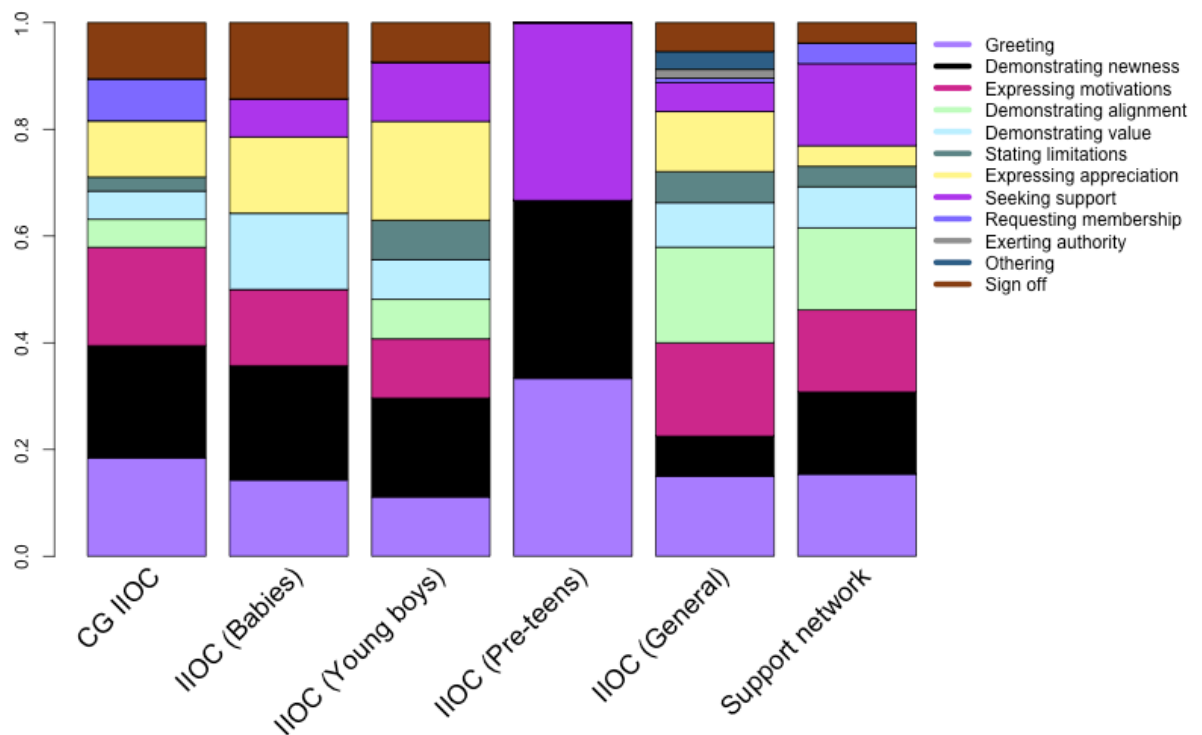


Figure 8.2. Move frequency by forum.

Firstly, it needs noting that only a single post came from the *IIOC (Pre-teens)* forum, so this is discounted from the current discussion. The remaining five fora look fairly similar in terms of move distribution though, barring a couple of interesting differences which might reflect specific features of the individual fora. For instance, we might infer that *Demonstrating value* is more important than *Demonstrating alignment* for users of the *IIOC (Babies)* forum, which could relate to its particularly extreme nature. Another difference is that the *Requesting membership* move occurs at the highest proportion in the *CG IIOC* forum which specifically focuses on computer-generated imagery created by users, and the *Support network* forum, which is centred around providing a supportive network for those with a sexual interest in children. It could be that the narrow central themes of these two fora make the joining criteria somewhat clearer than the others, and therefore users feel safer in directly requesting membership. Another point is the comparatively low use of *Demonstrating newness* in the *IIOC (General)* forum. This can partly be explained by the fact that 42 of these posts were posted in an existing forum thread entitled “Welcome New Members Thread or introducing myself”, which already provides the newbie context for the post, so in these cases users were likely less motivated to explain this position.

Other differences between the fora are less explainable, for example there is no obvious reason as to why there is no use of *Demonstrating alignment* or *Stating limitations* in the

posts of the *IIOC (Babies)* forum where they appear in posts from every other forum, or why *Expressing appreciation* is used least in posts from the *Support network* forum. Perhaps explicit appreciation is less important in an environment specifically oriented towards support, but far bigger datasets are needed to explore this and similar questions.

Moves as indicators of success or failure

Another important issue is how ‘successful’ we might consider the posts to be in terms of aiding the users’ pursuit of membership into their respective CsoP. As previously mentioned, each post was coded based on its response posts as either ‘Welcomed’ (W), ‘Welcomed with Instruction/Warning’ (WwI/W), ‘Rejected’ (R), ‘Ignored’ (I), or ‘Unclear’ (U). This section presents a proposed method of analysis as an exploratory attempt to gain some informal idea of how each post was received by the CsoP in question, and whether the presence or absence of any particular moves might indicate the relative success of the posts. It is acknowledged that the procedure has not been tested for reliability and could be strengthened, although it is worth noting that categories presented themselves readily and posts were not difficult to assign. Figure 8.3 demonstrates the move frequency of posts in each category.

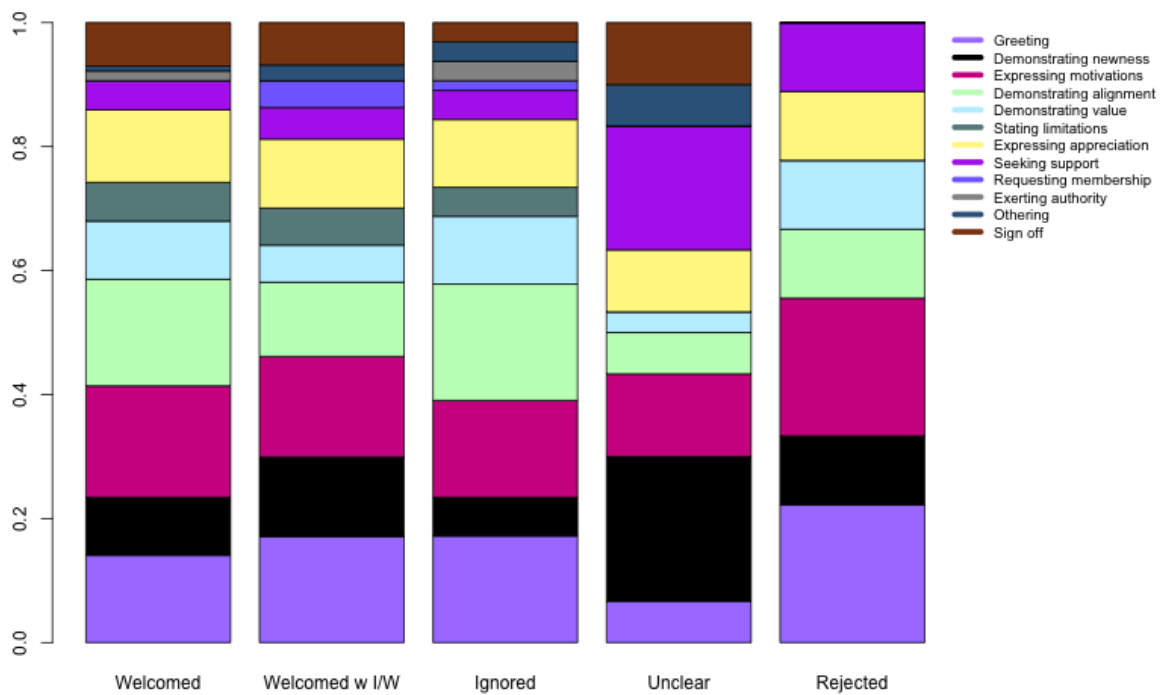


Figure 8.3. Move frequency in posts by reception category.

Firstly it is worth noting that only two posts (about 3% of the dataset) were explicitly rejected, so it is difficult to comment on these in terms of patterns or tendencies (although it is interesting that these move proportions do not differ wildly from other categories). Secondly, those categorised as ‘Unclear’, (7 texts, comprising around 10% of the dataset) tend to involve larger proportions of *Stating limitations*, *Seeking support* and *Demonstrating newness*, and smaller proportions of *Demonstrating alignment* and *Greetings* compared with posts which were welcomed (with or without instruction) or ignored. These discrepancies are most likely due to a subtle but fundamental difference in purpose in the posts categorised as having ‘Unclear’ responses. On the whole, these posts primarily function to ask a specific question or for advice regarding a particular topic, which is reflected in the comparatively high proportion of the *Seeking support* move. As such, the responses to these posts usually involve simple answers to the questions or the requested advice. It follows then that these users would be more motivated than others to be open about their limitations and explicitly ask for help, and less motivated to greet the community and show their alignment and similarity than those for whom the primary goal is to gain membership.

Finally, in the posts which were marked ‘Welcomed’ (around 35% of the dataset), ‘Welcomed with Instruction/Warning’ (around 34%) and ‘Ignored’ (around 18%) appear remarkably similar in terms of move frequency, suggesting that the presence/absence of particular moves in these posts is not necessarily a good indicator as to the kind of response it is likely

to receive. This question could be better tested against a corpus with a higher number of posts which were explicitly rejected.

Discussion

The analysis revealed a range of rhetorical moves used in the performance of the newbie identity by forum users seeking to gain entry into online CsoP of suspected CSA offenders. Within the overarching performance of the newbie identity we saw three moves which seemed to work most towards the main goal of requesting of membership into the communities, which were *Demonstrating newness*, *Expressing motivations* and *Demonstrating alignment*. In relation to this main goal, there are various points of interest regarding lower-level micro-identity positions. Of particular interest are performances of competence and expertise, positions which likely contribute to the notoriety and respect of high-status offenders in online CSA-related communities (Westlake, Bouchard, & Girodat, 2017). These performances are important for the identification of more experienced CSA offenders, but are not necessarily expected of hopeful newcomers expressing a desire to join existing communities. To address the second aim of the study, the following section focuses on how a subset of three moves - *Exerting authority*, *Demonstrating value* and *Demonstrating alignment* - are used in the performance of competence, expertise and related micro-identity positions. Drawing from Bucholtz and Hall's (2005) principle of indexicality, it demonstrates the use of a range of linguistic forms within these moves in the performance of competence and expertise, and considers these positions in relation to the CsoP into which the users are seeking membership.

Bucholtz and Hall's (2005) indexicality principle describes how social meanings and identity positions are expressed through various linguistics forms, including overt labelling, implicature and presupposition, stances and styles. For example, it is through overt self-labelling in the post titles that the forum users identify as 'newbies' or 'new members' to begin with. Through these labels, each user begins the process of seeking membership by positioning themselves as individuals inexperienced with using fora of these kinds, looking for acceptance and to learn and gain from more experienced members. These labels, however, do not position the new users as 'outsiders' looking in on the group; rather, the use of 'newbie' and 'new member' allows them to situate themselves as already being a part of the community, albeit in a low-status position.

Performances of competence and expertise, however, often demand more subtlety than overt labelling. Here they are seen to be complex processes, mainly involving strategies of *Exerting authority*, *Demonstrating value* and *Demonstrating alignment*.

Exerting authority is the move most directly associated with expertise; it is clear to see how emphasis on the user's own lengthy offending experience or time spent frequenting related fora, and the minimisation of others' experiences would position the user as highly knowledgeable and experienced. Rather than being used to wholly perform as an expert offender, however, the move often seems to work to compensate for a user's own perceived deficiency or limitation regarding other aspects of online CSA offending. FP24, for example, sees a number of strategies of *Exerting authority* including demonstrating historical experience of CSA-related forum use, minimisation of others' experience and heavy use of domain-specific terminology, but this is only done after an admission that the user lacks experience in other ways ("I have no knowledge of the other sites I see referred to in other post... I've been severely restricted when it comes to internet access...") (FP42). In the overall attempt to be accepted into the CoP, it is not surprising that a user would want to balance this sort of admission by performing as an expert in other related areas. It is possible, though, that this sort of admission could be a coded reference to prison time served by the user which may in fact index an experienced offender. It is common for this move to indicate either that a user has been a long-time offender but is new to CSA fora or perhaps newer technologies more generally, or to signal a user's return to CSA fora after a period of non-use or non-offending. As we have seen though, this move is observed in only four posts (or 6% of the dataset), and this low level of use is perhaps to be expected from a group of individuals identifying as newbies or similar.

The *Demonstrating value* move indexes various levels of competence, firstly because it demonstrates that the user has some understanding of what is likely to be valuable to the community, and secondly that the user is willing to and/or capable of providing it. Sometimes what is offered is a commitment to being a 'good' member of the community, as seen in FP16, which shows an understanding that there are certain ways to behave and practices to engage in accordance with norms and rules which govern the forum. More specific offers and promises, such as for the provision of IIOC or increased forum engagement demonstrate knowledge of what these norms and rules might be. The provision of links to IIOC can be where the *Demonstrating value* move indexes a level of competence closer to expertise, showing that the user has experience with obtaining such material either through similar channels to the forum in use or through their own contact abuse of children (IIOC producers carry a particularly high status in CSA communities, often having access to areas of fora that

are restricted to others, as in the “Producers Zone” in the *IIOC (Babies)* forum). FP12, for example, includes a link and password, as well as a remark that the IIOC provided is “good quality and probably worth downloading”. This indexes competence at a number of levels, mainly through implicature. Firstly, the link and password demonstrate the user’s possession of and willingness to share IIOC. Secondly, the assessment that the IIOC is of “good quality” shows that the user has experience with IIOC at a range of different perceived ‘qualities’, and positions the user as a competent judge of this quality. Finally, the assertion that it is “probably worth downloading” demonstrates an understanding of the risk-reward ratio of this particular material, i.e. if it were not of “good quality” it may not be worth the risks associated with downloading IIOC. By doing this, FP12 simultaneously demonstrates what the user is able contribute as well as some of the ways in which the user can avoid causing trouble for the group. It is easy to see how performing competence in these ways might work to persuade existing members to grant community membership.

Demonstrating alignment (the most frequent of the three moves) also indexes different levels of competence because it shows users’ understanding of the rules, norms and practices central to the CoP. As mentioned in the analysis, strategies involved in this move can be quite general and apply to any of the six fora, such as demonstrating a sexual interest in children. The general understanding that these fora are, broadly speaking used by individuals with a sexual interest in children is sometimes alluded to in the posts themselves, e.g. “I like Child Porn (obviously)...” [emphasis added]. Other examples of more general demonstrations of alignment are displays of knowledge regarding official rules of the CoP, or the use of familial terms to draw a likeness between the newbie user and existing CoP members, e.g. “Hello brothers and sisters” (FP16). But this can also happen at a more nuanced level, whereby users will demonstrate some knowledge or experience specific to the values of a particular community, for example one user’s stated intention to “get to level 2 sometime!” (FP60). This utterance indicates the user’s knowledge that reaching “level 2” involves specific activities or achievements, and the omission of these details implies that this knowledge is shared among the existing members of this CoP and does not need explaining.

It seems likely that the newbies who are able to demonstrate alignment to a CoP in more specific ways are those who have expended greater amounts of effort to familiarise themselves with community rules and norms, and by doing so, are likely able to perform a greater level of competence than others who have not done this. One way of acquiring this familiarity is through a well-recognised practice in online communities known as ‘lurking’ (see e.g. Whittaker *et al.*, 1998; Nonnecke & Preece, 1999; 2000; 2001; Nonnecke *et al.*, 2004;

Rafaeli, Ravid & Soroka, 2004; Preece, Nonnecke & Andrews, 2004; Nonnecke, Andrews & Preece, 2006; Radin, 2006; Rau, Gao & Ding, 2008; Bishop, 2012; Schneider, von Krogh & Jäger, 2013). Nonnecke and Preece (1999, 2000, 2001) note that definitions of the term tend to vary, but generally, lurkers are described as individual participants of online communities who contribute publicly to those communities only infrequently or not at all (Whittaker *et al.*, 1998; Nonnecke & Preece, 2001; Rafaeli, Ravid & Soroka, 2004). The practice is said to be largely encouraged by online communities precisely because it “allows a visitor to observe the group’s norms before participating” (Radin, 2006, p. 597). Such encouragement to read and learn community rules is observed in various guideline posts written by administrators of the fora in question. An individual’s first public contribution after a period of passive participation is referred to in the literature as ‘de-lurking’ (e.g. Rafaeli, Ravid & Soroka, 2004; Radin, 2006), and it is in this action that the lurker identity is performed by the newbies in the current study.

Performance of the lurker identity is not uncommon (occurring in around 30% of posts) and the position is indexed in a number of ways. The clearest is the use of overt self-labelling, e.g. “I’m mostly a lurker, but I’m plan to interact more...” (FP22), “I’ve always been a lurker, but thought I would get involved...” (FP33). Mostly though it is done through overt reference to the process of de-lurking without using the actual term, e.g. “Hi, I’ve been here for a long time but this is the first introduction” (FP28), “I’ve been here for awhile so I’m not exactly new but I’ve never introduced myself” (FP38). Occasionally, however, the lurker identity is performed through implicature, e.g. “I guess I’ll finally introduce myself...” (FP31), where the use of “finally” signifies an extensive period of passive forum participation before this instance of de-lurking.

There are several reported reasons for lurking in online communities, including shyness, a desire for anonymity, a need to continue learning about the community, feeling that browsing alone is sufficient and feeling unable to contribute (Nonnecke & Preece, 2001; Nonnecke *et al.*, 2004). Any of these may be true for the newbies in this study. It seems reasonable to assume then that de-lurking can happen for opposing reasons, i.e. an increase in confidence, a sense of familiarity with the community’s norms and practices, or feeling that browsing alone is no longer sufficient. Some of these reasons are evidenced in the posts, for example FP19 demonstrates a user’s increased confidence: “I’ve been hanging round for a bit [...] reluctant and nervous to register but I think that now I am reasonably secure...”. Other users reference the ways they have been learning about the community and forum environment, e.g. “I’ve seen some of the pictures, I read stories” (FP6), “I’ve been [...] looking at the easy to access boards...” (FP19). Another reason for de-lurking which might be

characteristic of online CSA CsoP is that it is sometimes stipulated that membership requires active participation (as seen in official rules posted by administrators of the *CG IIOC* forum). Active participation may also see users rewarded with higher membership ranks along with increased access to certain areas of the fora. This motivation is expressed openly in FP30: “Im fully admitting i would be a quiet lurker if not for the new rules to collect some real posts before you can go to some areas of the forum.”.

Whatever the particular motivation for de-lurking, it allows the users to demonstrate a certain degree of exposure to the community, showing that they have watched and learned the appropriate ways to behave. It also demonstrates that these users are ready in various ways to commit to being a recognised and actively participating member. Performing as a lurker enables the users to construct a kind of dual identity which might be referred to as the ‘competent newbie’; by de-lurking they can openly identify as newbies, but newbies with an existing level of competence in the forms of familiarity with the norms of the group and confidence in their ability to engage in its practices. It can be seen how this approach might be a persuasive tool for users attempting to ingratiate themselves with CsoP for whom rules and regulations of behaviour are crucial to their existence.

This study provides some evidence that these three moves are used to indicate various levels of competence and/or expertise. It would be interesting to apply the same analysis to posts which were explicitly rejected, to explore further the extent to which their presence or absence might suggest individuals’ experience and competence levels at the time they choose to approach abuse-related communities.

Conclusion

This study has shown that there are groups of individuals who come together online to engage in activities and practices which support common endeavours around a shared sexual interest in children; in short, that there are suspected CSA offenders operating in established online communities of practice. It has identified and described a number of rhetorical moves contributing to the performance of the newbie identity in forum posts written by individuals attempting to gain membership into these CsoP. It found no typical move structure which might represent a generic structure of the texts, but rather that some moves appear to have preferred positions, while others are less fixed. The study focused on the newbie users’ performance of two related identity positions - competence and expertise. It discussed the performance of these positions through the moves *Exerting authority*, *Demonstrating value* and *Demonstrating alignment* in particular, as well as demonstrating

some of the lower-level linguistic forms used and how the performance of the lurker micro-identity contributes to the performance of competence and the dual identity position of the competent newbie.

It is hoped that this study can usefully contribute to policing strategy, firstly by aiding the identification of levels of competence in CSA forum-users claiming to be newcomers. It seems likely that the most experienced or 'expert' offenders are those that pose the greatest threat to children. Secondly, it is hoped that this research may prove useful in online identity assumption tasks where UCs may be required to perform as newbie offenders. Additionally, the findings might provide a foundation for which future research can continue to shed light on the linguistic behaviours of users of online CSA-focused environments. Areas identified for further investigation include the potential effect of forum type on moves and move frequency and whether the presence or absence of particular moves might indicate the relative success or failure of a post in aiding the user's attempt to gain acceptance into a specific community.

Chapter 9: Discussion

Introduction

The three studies presented in Chapters 6-8 each addressed a set of narrow questions around identity performance in a unique OCSA context. This chapter brings together the findings of these studies thematically in order to address the broader research questions of the thesis:

1. What can move analysis contribute to research into online child sexual abuse?
2. How are rhetorical moves and strategies used as a resource for identity performance by interactants in online child sexual abuse interactions?
3. What can these findings contribute to social identity theory?

The discussion first considers what the move analysis framework can contribute to OCSA research, including addressing gaps in the literature associated with current interpretations of the term grooming and the use of decoy data. It also considers implications of the current work in relation to genre theory, before evaluating move analysis in terms of its benefits, drawbacks and potential solutions to problems encountered in its use. Secondly, drawing from findings from the three studies, the discussion examines how moves are used in identity performance, with reference to variation within and across texts, interaction types and individuals, and indexical links between moves and identity positions. Finally, these findings are discussed in relation to current theories of identity construction, and a move-based model for identity performance is proposed. The chapter begins with a brief summary of each study and considers project limitations and how these might be addressed in future research.

It is acknowledged that a range of similar terms are used throughout this thesis to refer to related concepts around moves and communicative function, and so it seems useful to briefly distinguish what is meant by these:

- *Moves*: stretches of language which perform a communicative function which may be achieved by multiple strategies
- *Strategies*: lower level communicative goals which work to achieve a move
- *Shared moves*: moves used by both participant types (offender and victim(s)) in Study 1
- *Global moves*: moves representing joint communicative goals which are striven for collaboratively by participants (see Study 2)

- *Support moves*: moves associated with support (i.e. *Seeking support*, *Giving support*) (see Studies 2 and 3)
- *Speech acts*: basic minimal units of communicative function (e.g. promising, threatening, offering)

Study summaries

Study 1 (Chapter 6) concerned the case of a child sex offender in his early twenties who created and strategically managed multiple online personas in his pursuit of victims. The study focused on his online interactions with 20 different victims, with the aim of comparing his multiple personas in terms of the rhetorical moves and strategies used by each, as well as how far potential move variation might work towards indexing particular identity positions. It was found that the majority of the offender's personas were fairly consistent in terms of move frequency and structure, and mostly performed identity positions pertaining to the sexual pursuer or sexual aggressor. One persona (P12) was found to diverge significantly from this position and through move frequency and structure it was suggested that this persona tended towards more of a friend or boyfriend type role. Perhaps most interestingly, based on police intelligence, this persona also appeared closest to what we might consider the offender's 'home identity'. The study also noted important differences between the language used by the real child victims in the study and that used by adult decoys in previous research, which seemed to influence the offender's use of forceful and coercive moves like *Overt persuasion* and *Extortion*.

Study 2 (Chapter 7) examined 25 CSA-focused IM interactions between suspected offenders and undercover police officers (UCs) posing as offenders, in order to identify and compare moves and identity positions and consider the relative success of the UCs' performance as offenders in the interactions. Another aim was to examine in detail a pair of reciprocal moves - *Giving* and *Seeking support* - and identify their contributions to various identity positions. It was found that although individual variation in the suspected offenders' move use was considerable, the UCs' use of moves was remarkably similar to that of the suspected offenders. In fact, move frequency was generally more consistent within conversations than within individuals across the dataset, suggesting that both the suspected offenders and UCs were engaging in linguistic accommodation to some degree. It was speculated that the UCs have stronger motivations for converging with the suspected offenders than vice versa. A potentially discriminating factor was the UCs' comparative reluctance to offer sexual/abusive narratives, highlighting this as a potential area for improvement. The high level of similarity between the two participant types overall was interpreted as positive indicator for these

interactions being somewhat reflective of genuine offender-offender interactions. The study also showed the conversations tended to follow a semi-typical rhetorical structure, and that the participants made use of global moves (representing joint goals) to co-construct their offenderness. Finally, five typical speech act structures involved in the exchange of support were observed and discussed in terms of their contributions to performances of offenderness, friendship and expertise, among other positions.

Study 3 (Chapter 8) focused on the performance of the ‘newbie’ identity as observed in the moves and strategies in 71 forum posts from six different fora written by individuals attempting to gain membership into existing communities of practice (CsoP) of suspected CSA offenders on the dark web. It also considered the moves involved in the related performances of competence and expertise, and how these identity positions work persuasively in the attempt to gain community membership. Important moves observed in this pursuit were *Expressing motivations*, *Demonstrating alignment*, *Demonstrating newness* and *Expressing appreciation*, while performances of competence and expertise were mostly seen through the use of *Exerting authority*, *Demonstrating value* and *Demonstrating alignment*. The practice of ‘de-lurking’ was identified as an important and popular strategy of *Demonstrating alignment*, and one which worked to perform the dual identity of the ‘competent newbie’.

Limitations and future research

Individual limitations regarding each study were addressed in the individual study chapters. This section discusses the more general drawbacks and points to areas for future research where these might be addressed.

The first limitation concerns the sizes of the studies; each involves a relatively small dataset and number of participants. Larger datasets and participant numbers would no doubt yield wider varieties of linguistic behaviour. While this work has begun to broaden the scope of behaviours considered within discussions of OCSA beyond grooming, further research is needed to build a more comprehensive picture of offending in each context.

It is worth mentioning again that this research did not focus on the linguistic behaviours and identity performances of victims. Even so, Study 1 did show some differences in the linguistic strategies of genuine victims compared with adult decoys, and how the offender’s moves might have been impacted as a result. There is clear room for further research here; as well as developing understanding of the limitations of using decoy data, future studies focusing on

victims' moves in online abuse interactions and their impact on offenders' moves could lead to the identification of more and less successful approaches to ceasing abusive interactions. Similar research concerning vulnerable adults would also contribute to a fuller understanding of online sexual abuse and victimisation.

One problem that persists is the subjectivity of move analysis. While the methods used in the current work were tested for reliability and validity, and each study showed high agreement between two coders' move interpretations, it is likely that parts of the data analysed would have been interpreted differently by another researcher. Moreno and Swales (2018) showed that reliability and validity can be tested rigorously with large teams of researchers, but working with sensitive data makes its wide circulation for reliability testing impossible. Future work might therefore address the development of further experimental testing methods for reliability and validity in move identification.

A final limitation concerns the intricate nature of naturally occurring data; often it is evident from the texts (particularly the IM transcripts in Studies 1 and 2) that participants are using other modes of communication alongside the IM chat (e.g. photo exchanges, webcam use, telephone conversations), so it must be acknowledged that the transcripts alone do not capture all communication happening between the participants at any given time. This also means that occasionally there is little context from which to discern the most likely communicative functions of a given utterance. Of course, data of this nature is extremely difficult to obtain and offers insights into online sexual crimes which are inaccessible otherwise, and so it is crucial that such data remain accessible for research. But if appropriate datasets became available, it would be extremely useful to take a multimodal approach to online interactions to consider the textual elements alongside other semiotic resources (images, videos, etc.) used by interactants. This would enable a fuller picture of interactional behaviours in abusive contexts to be established.

What can move analysis contribute to OCSA research?

Some of the main contributions of this research relate to concerns regarding the OCSA literature, in particular, the problematic use of the term 'grooming', and the over-reliance on data featuring adult decoys.

Looking beyond grooming

A general observation from this project is that OCSA interactions can vary greatly, and online grooming is just one type of behaviour (or collection of behaviours) observed in this domain. This variation is evidenced most obviously by the presentation of three quite different interaction types, but also we can see that interactions of the same type may exhibit a range of activities and linguistic behaviours. For example, the suspected offender-UC interactions in Study 2 range from conversations of co-fantasy to IIOC exchange. Moreover, a range of behaviours are often observed within single interactions. Those examined in Study 1, for example, would likely be perceived in the public domain as online grooming interactions, which are often likened to a process of gradual seduction (e.g. Berson, 2003; Craven, Brown & Gilchrist, 2007; Ospina, Harstall & Dennet, 2010; Christensen, 2017b). However, these interactions often begin with highly sexualised questions and statements, and sometimes involve what appear to be periods of non-devious, friendly conversation. Others involved moments of intimacy and flirting, which ultimately ended up in attempts at extortion. Importantly, while some of these behaviours may indeed form part of a grooming process, often they are clearly distinct from grooming behaviour.

One clear way of conceiving the variation in types of OCSA interactions is by comparing the three different move sets exhibited across the studies. While there is some overlap, the move sets are fairly discriminatory. Table 9.1 displays the three move sets. To facilitate comparison, moves above the dashed line are those common to at least two datasets, and the moves in Study 2 presented here are restricted to the sub-moves identified, i.e. global moves are omitted.

Study 1: Offender-victim interactions	Study 2: Suspected offender-UC interactions	Study 3: Newbie-suspected offender interactions
Greetings	Greetings	Greetings
Sign offs	Sign offs	Sign offs
Rapport	Rapport	
Assessing and managing risk	Assessing and managing risk	
Maintaining conversation	Maintaining conversation	
	Seeking support	Seeking support
Assessing likelihood and extent of engagement	Giving support	Demonstrating newness
Assessing criteria fulfilment	Legitimising CSA	Expressing motivations
Sexual rapport	Identifying interests/experience	Demonstrating alignment
Initiating sexual topics	Reporting interests/experience	Demonstrating value
Maintaining/escalating sexual content	Eliciting narrative	Stating limitations
Immediate sexual gratification	Reporting events	Expressing appreciation
Meeting planning	Supporting narrative	Requesting membership
Reprimanding	Requesting media	Exerting authority
Assessing role (O-only)	Offering media	Othering
Overt persuasion (O-only)	Negotiating media share	
Extortion (O-only)		
Desired response (V-only)		
Mixed response (V-only)		
Undesired response (V-only)		

Table 9.1. Comparison of move sets across three OCSA interaction types.

The table illustrates that there is only a small amount of overlap between the moves across the three interaction types, and that the only ones shared by all three are *Greetings* and *Sign offs*, which are commonplace features across different varieties of CMC (e.g. Waseleski, 2006; Waldvogel, 2007). The most significant overlap is seen in the offender-victim interactions and the suspected offender-UC interactions, in that both exhibit *Rapport*, *Assessing and managing risk*, and *Maintaining conversation*. The common use of *Maintaining conversation* is likely a reflection of the synchronous property of IM conversations, which make them in some ways similar to spoken conversations (Herring,

2001; 2007) but the former two moves seem more likely a reflection of the often cooperative yet high-risk nature of both interaction types. While the newbie forum posts appear most different from the other interaction types, they do share the *Seeking support* move with the suspected offender-UC interactions, which reflects the more generally supportive nature of these communicative exchanges. On the whole, though, the wide range of moves unique to each context demonstrates the degree of difference between the three interaction types as a reflection of interactants' rhetorical goals.

The interaction types also vary in their degree of structure. The suspected offender-UC interactions seem to have more of a typical move structure than the other types, largely beginning with a preparatory groundwork phase which involves some amount of *Rapport* and *Character assessment* before participants move on to what seems to be the primary purpose of the interactions, i.e. *Fantasy narrative*, *Support* or *Media exchange*, or some combination. The approach phases of the offender-victim interactions seemed to exhibit two discernible structures. The first involves an early use of *Initiating sexual topics* with *Assessing likelihood and extent of engagement* and little or no *Rapport*, whereas the second shows a large amount of *Rapport* with very few sexual moves and a much later use of *Initiating sexual topics*. But beyond the approach phases, these interactions did not seem to follow any obvious structure (importantly, though, this observation is made from manual examination of the move-maps whereas the issue would be better tested using computational methods which could be considered in future work). Interestingly, even though the newbie forum posts seem to be the most constrained interaction type in terms of having the most limited range of topics and communicative functions, no robust move structure was recognised here either. Rather, there was considerable variation in the order that most moves were used, perhaps suggesting that the newbies in question did not look to learn from or emulate other newbies' entry requests, even though these would likely have been accessible to them.

The observation that OCSA interactions come in many forms may seem unexciting and perhaps obvious, but it directly addresses the criticism that OCSA research and public domain communications tend to over-rely on the phrase *online grooming*, which is frequently used as a catch-all term for any form of OCSA. This problem arguably inheres two separate but related issues. First, the range of abuse-related activities that occur online is ill-reflected in both academic literature and public messages around online safety. While it is undoubtedly positive that the processes and linguistic strategies involved in online grooming are receiving attention in psychology and (to a lesser degree) linguistics, it is arguably just as crucial that we recognise and understand the content and functions of offender-offender interactions, which might involve the exchange of IIOC as well as advice and support, which works to help

others learn to be 'better' abusers. Second, there is a danger that within interactions perceived to be of the same type, e.g. offender-victim interactions, different varieties and nuances of abusive behaviour could go unrecognised. It is important to understand that grooming may happen alongside other more forceful approaches including various forms of blackmail and threats of a non-sexual nature, and that the process of grooming might be entirely absent from abusive interactions. Study 1 demonstrates this by showing how one offender used a wide range of sometimes conflicting strategies when conversing with victims. Some of these conversations reasonably depict instances of grooming, while others are explicitly sexual from the outset, strongly persuasive and sometimes threatening. This project has considered just three types of OCSA interaction and identified a wide range of exploitative and abusive behaviours, of which grooming is just one. It would be beneficial to continue examining other types beyond this, so that programmes designed to educate children, caregivers, educators and law enforcement about OCSA can be as informed as possible regarding the scope of online abusive behaviours and what they look like in practice.

The problem of decoy data

The second main criticism of the literature concerns a general need for studying OCSA texts from a wider range of sources than is being done at present. As noted, a large portion of the work in this area relies on PJ data which features adult decoys in the absence of that featuring genuine victims. Study 1 raised two important observations in this regard. The first was that the *Initiating sexual topics* move was not used exclusively by the offender but occasionally by victims, too. This suggests that some victims willingly engaged in explicitly sexualised conversation with the offender, behaviour which has been observed elsewhere (e.g. Malesky, 2007). Suffice to say the point here is not that these particular victims were in any way responsible for their abuse, but that many young people have legitimate, healthy sexual curiosity and agency (Quayle & Newman, 2016), which may at times increase their vulnerability to online dangers (Finkelhor, Mitchell & Wolak, 2000; Mitchell, Finkelhor, & Wolak, 2001). This seems especially important at a time where digital exhibitionism is a norm of social behaviour for young people in particular (Von Weiler, 2015). It should also be noted that victims' use of moves like *Reprimanding* and various strategies of risk management often showed impressive resilience. Interestingly though, these more forward victim behaviours are generally not observed of adult decoys posing as victims, and are reportedly among those more difficult for UCs to emulate in covert operations (MacLeod & Grant, 2017). The initiation and continued engagement in sexual topics by victims, then, marks an

important linguistic behaviour that potentially distinguishes genuine victims from adult decoys.

The second important observation from Study 1 was that this offender used clearly forceful moves like *Overt persuasion* and *Extortion*, which have not yet (to the author's knowledge) been observed in research using PJ data (e.g. Marcum, 2007; Gupta, Kumaraguru & Sureka, 2012; Inches & Crestani, 2012; Williams, Elliott, & Beech, 2013; Cano, Fernandez & Alani, 2014; Black et al., 2015; Lorenzo-Dus, Izura & Pérez-Tattam, 2016; van Gijn-Grosvenor & Lamb, 2016; Chiang & Grant, 2017; Winters, Kaylor & Jeglic, 2017) even when actively searched for (see Schneevogt, Chiang & Grant, 2018). These moves seem to be a function of the offender's having to deal with victims of varying levels of resistance not seen in the linguistic behaviour of adult decoys. The presence of these 'new' moves as observed in genuine conversations between an offender and his victims calls for further research into OCSA using naturally occurring data featuring genuine victims; only by doing this can we begin to fully understand both the benefits and limitations associated with decoy data.

Offender anonymity

The anonymity afforded to online offenders remains one of the biggest obstacles to policing OCSA and other types of online crime. One of the most significant issues this work has raised is whether move analysis might be used to identify suspected offenders who are known to operate multiple online personas, by identifying the persona(s) which are closest to what we might consider an offender's home identity. It is speculated that the offender in Study 1 is not the only individual to do this, and that multiple online personas are likely used in several types of online crime. Further testing of the framework on similar datasets to that in Study 1 is needed, but if move analysis proves to be useful in this way, it could have significant implications for policing online crimes of various types.

Genre

While this project did not aim to explore issues directly related to genre, the move analyses raised some interesting points in this regard worth briefly exploring. First, the newbie forum posts are arguably the closest of all three interaction types to reflecting Swales' (1981, 1990) and Bhatia's (2004) notion of genre (a recognisable communicative event which exhibits a set of communicative purposes recognised by a particular discourse community). This is firstly because the relatively narrow move set suggested that this interaction type could be seen as the most stable in terms of the communicative function and the topics involved, even

if there was no strong move structure to the texts (the offender-victim and suspected offender-UC interactions could not as readily be characterised by communicative purpose as these seemed far more varied). Second, the posts conceivably arise from within discernible CsoP (or at least in direct response to these communities), the norms and practices of which were outlined in Chapter 8 (*'Describing the fora: rules, norms and practices'*). This is harder to argue for the offender-victim and suspected offender-UC interactions, which demonstrated no obvious immediate presence of community influence.

A related point is that even though the newbie forum posts seem closest to qualifying as a genre, no 'obligatory' moves were identified in these texts. Similar to what Samraj and Gawron (2015) found of suicide notes, the posts seem more appropriately identified and characterised by their exhibition of one or more of a group of core moves, in this case, *Demonstrating newness*, *Expressing motivations* and *Demonstrating alignment*. Study 3 argued that these moves do the most work to indirectly request membership into a given CoP, which was identified as the primary communicative function of the posts. Contrary to suicide notes, however, the forum posts cannot necessarily be considered an occluded genre. While it is true that they are not openly available to be studied and discussed as more traditional genres are, there exists a readily accessible pool of similar forum posts that newbie users with a certain level of interest and computational skill are able to read and learn from before creating their own posts. The lack of a common structure in the posts, however, suggested that the newbies may not have done so. Study 3, then, supports Samraj and Gawron's (2015) argument for a more flexible interpretation of the concept of genre, that accounts for groups of texts which can be characterised by a set of core moves, and for which where there are no discernible obligatory moves or definitive move structure.

Evaluating move analysis

One of the main problems with using moves as the primary analytical unit is that they often have blurred boundaries and can be difficult to identify and define reliably, as well as code for consistently (Bhatia, 1993, 1996; Askehave & Swales, 2001; Moreno & Swales, 2018). A related problem is that the manual coding of texts can be extremely time-consuming. One of the methodological aims of this project was to address these problems, by exploring ways of introducing some degree of analytical rigour (and possibly speed) to the process of identifying and coding moves.

The first method explored (see Pilot Study 1) was the incorporation of speech act theory (Austin, 1962; Searle, 1969). It was thought that moves might be broken down into speech

acts, which might then point to a set of typical verbs that realise each move, and that this would lead to a more robust way of identifying moves for the human analyst, as well as potentially leading to the development of computational methods for identifying and coding moves. As described in Chapter 4 (*'Difficulties with move analysis'* section), computer-assisted approaches do exist, but they rely on a bottom-up method, deriving moves from low-level lexical features, which typically result in smaller move sets of more general, less descriptive moves than the functional top-down approach (Biber *et al.* 2007). Computational approaches seem less capable in this sense than the human analyst when the goal is to describe a wide range of nuanced linguistic behaviours.

In exploring the relationship between moves and speech acts, then, Pilot Study 1 (see Chapter 5) showed that certain moves might involve preferred speech act *types* (e.g. assertives, commissives, expressives, invitationals, authoritatives) by individuals, which may have useful implications in the tasks of online identity assumption and identifying individuals online. Ultimately it was found that in general, moves involved a variety of speech acts and verbs, and that verbs by themselves do not seem like reliable move predictors. One reason for this was that in the IM chat used as test data, verbs were often not realised fully or were dropped altogether, although testing this on different text types may well yield different results. The incorporation of speech act theory did, however, improve the robustness of the move analysis process in that formulating the strategies of each move as speech acts (i.e. according to Searle's $F(p)$ structure for illocutionary acts) helped to foreground the communicative functions of utterances as well formalise the system for describing strategies. Where possible this more formal approach was taken in the labelling of strategies across all three studies, but its greatest advantage was that it provided a clearer and more consistent method of communicating moves and strategies to a second coder, which improved the efficiency of reliability testing.

Reliability testing was the second approach to improving the rigour of the move analyses in this work. As Chiang and Grant (2017) had already shown that two linguists could code transcripts for moves with a high agreement, it seemed important to address the separate issue of whether two individuals would independently derive the same or similar moves from a given dataset. Pilot Study 2 (see Chapter 5) showed that this was indeed the case; the two trained linguists (one being the author) independently identified the same or highly similar moves across the majority of test data, and inconsistencies observed in the move descriptions and coding could mostly be reasonably explained. Additionally, all three of the main studies involved reliability tests which showed at least 80% agreement of moves as

coded by the author and a second linguist, showing all three identified move sets to be sufficiently reliable.

It has been seen, then, that in specific contexts such as the individual studies presented here, moves can be both reliably identified and consistently coded for. Of course, the processes of identifying and coding for moves relies on the intuition and subjective interpretation of the analyst, and this limitation must be recognised. The subjective nature of move interpretation, though, allows for a richness and nuance in description that reflects that of the language observed in the naturally occurring datasets in question, and which would likely not be captured in very detailed analysis of low-level grammatical features (Macagno & Bigi, 2017). The three studies presented have demonstrated that moves can be identified and described robustly *enough* to usefully explore a range of questions around linguistic expressions of identity in OCSA contexts. Furthermore, the project has shown that move analysis is capable of exploring such issues across diverse textual modes of varying dialogicity, as previously demonstrated by Boon (2015) and Macagno and Bigi (2017).

The project also supports Macagno and Bigi's (2017) argument that linguistic analysis at the level of the move provides an important and sometimes neglected middle ground between general descriptions of language and more detailed syntactical analyses. However, the problems associated with the speed of manual coding remain if the analyst wishes to derive moves based on communicative function. In which case, it follows that the top-down functional approach to move analysis will always depend on the subjective interpretation of the analyst, but as demonstrated, this has enabled rich and detailed descriptions of linguistic behaviour in a range of contexts, as well as a novel approach to examining identity performance based on individuals' communicative goals.

Having explored some of the contributions of move analysis to current understandings of OCSA behaviours, the following section aims to consider more closely the relationship between moves and identity.

How are rhetorical moves and strategies used as a resource for identity performance by interactants in online child sexual abuse interactions?

Variation

The fundamental theoretical assumption underpinning this work is that rhetorical moves and strategies can function as a type of linguistic resource for the performance of various facets of identity, both macro and micro. This has been seen in all three studies, each of which has shown that diverse ranges of identity positions are performed through the use of single moves and move combinations. It seems that it is in the degree of *variation* in the moves, strategies, move frequencies and structures, both within and across text producers, that the potential for identity performance lies.

The offender-victim interactions, for example, saw how variation in move frequency and structure within an individual offender across a number of interactions indexed a range of different identity positions, but most importantly, two considerably divergent ones, referred to as the sexual pursuer/aggressor and the friend/boyfriend.

Variation was seen to a greater extent in the suspected offender-UC interactions, which showed considerable differences in move frequencies between 25 individual suspected offenders, and in their performances of a correspondingly wide range of identity positions. The identities performed reflected differences in their motivations for participating in the conversations, for example, some seemed interested in sharing sexual fantasies where others were more focused on seeking some form of support. Investigating identity performance in such contexts could therefore contribute to the development of offender typologies. It was also seen that a single UC (probably through the process of linguistic accommodation) was able to achieve a similar level of variation across the 25 interactions as he conversed with each of the offenders, performing similar or complementary identity positions accordingly.

In some ways, the newbie forum posts exhibited the least variation, in that this group of texts was written by the largest number of individual participants (approx. 70) but exhibited the most limited move set (12 moves). This could indicate that these forum posts as an interaction type are more constrained than the IM interactions in Studies 1 and 2, and there are a few possible reasons for this. First, the posts seem to be driven by fairly narrow and focused communicative functions; generally speaking, the authors either wish to be welcomed into an existing community of offenders, or have some specific problem regarding

online or offline offending for which they are seeking help. Second, the communities addressed operate within strict and extensive codes of conduct which govern members' behaviours and practices, and on the whole, the forum posts make clear that the newbies seeking membership are aware of and intend to abide by these rules. Finally, the more stable topics and themes in the posts might be partly explained by their less dialogic nature and the relative absence of influence on the authors of immediately present interlocutors, unlike the IM interactions in Studies 1 and 2. These three factors go some way towards explaining the more restricted pool of moves used in creating these forum posts, and the subsequent narrow range of identity positions available to the post creators. It is possible then that in some contexts, the size of move set exhibited in a particular interaction type corresponds to the range of available identity positions of its users.

Returning to table 9.1, which compares the three identified move sets, we can consider how other aspects of the three interactional contexts drive the move variation observed. In the first context, the offender is seen to use both subtly persuasive moves like *Rapport* as well as strongly coercive moves like *Overt persuasion* and *Extortion*, not seen in either of the two other contexts. Much of this is explained by the offender's overriding motivations to obtain illicit imagery and various types of sexual compliance from his victims. However, these differences are also likely due to the power imbalance between offender and victim in this context being vastly different from that in Studies 2 and 3, both of which concern interactions between offending adults more equal in status (at least superficially). So the victims themselves and their responses to the offender form an important part of his available resource, which he draws upon in his performance of sexual pursuer/aggressor and friend/boyfriend. Study 3 also sees elements of persuasion as the newbies attempt to convince others that they belong to various offending communities. The persuasion here, however, is generally more subtle and is largely done through the performance of sexual offending competence. Again, this difference seems for the most part to be a function of audience type and power relations; the addressees in Study 3 are the higher-status individuals in this case. The Study 1 offender's motivations and the power imbalance between participants also partly account for the lack of any supportive moves in these interactions (which are observed in the other two types).

The suspected offender-UC interactions are characterised partly by their exploratory nature; large portions of these interactions are concerned with gauging a sense of the interlocutor's character and experiences, which seems less true of the other two interaction types. This seems largely down to the level of risk posed by this particular context for both participant

types as it is vital for the offenders to ensure that they are conversing with genuine like-minded offenders and just as important for the UCs to perform convincingly as such.

Although the second and third contexts are arguably the two most similar (in their representation of offender-offender communications), the newbie forum posts exhibit some interesting differences from the other contexts; namely in the absence of the *Rapport* and *Assessing and Managing Risk* moves. While some of the moves identified in Study 3 could arguably amount to attempts at establishing a rapport with the desired community, the lack of any explicit rapport-building moves could be a function of participant structure and the less dialogic nature of forum posts. The newbies are not conversing directly with individual members but the group at large (at least in the initial posts) and as such they do not have the resource offered by an immediately present interlocutor with which they might start to build rapport. Regarding *Assessing and managing risk*, it may be that this move is not seen because of the relative perceived 'safety' of this particular online environment; the high level of encryption coupled with the visible illicit activity engaged in by community members may provide a sense of comfort for the newbies, making this move less necessary.

So while most of the move variation across the three contexts seems driven by the motivations and interests of the participants involved, each context can be seen to lend its own resources and impose its own constraints on the moves and identities available to interactants.

Indexing identities

The principle of indexicality states that linguistic forms can index various social meanings and identity relations which stem from agreed norms shared among communities (Bucholtz & Hall, 2005). While move variation can be seen to account for differences between identity positions and individuals' shifting between various roles, performance itself is perceived through indexical links between specific moves/strategies and particular constructed identity positions. The three studies collectively have pinpointed relationships between certain moves and identity positions.

For example, the offender-victim interactions saw the moves *Rapport* and *Sexual rapport* consistently used in the performance of the friend/boyfriend type role, and conversely, the moves *Initiating sexual topics* (when introduced early on in conversations), *Assessing likelihood and extent of engagement* and *Maintaining/escalating sexual content* were fairly routinely used to perform the role of sexual pursuer. Importantly, it was found that the moves

observed in these interactions did not seem to index the broader, macro identity positions assumed by the offender, i.e. move frequencies and structures did not act as useful indicators of male and female gender performance, or that of different ethnicities, as was initially expected to a degree.

The suspected offender-UC interactions saw that a general performance of offenderness was largely done through the use of moves like *Identifying/Reporting interests/experience*, *Eliciting narrative*, *Reporting events*, *Supporting narrative* and *Requesting/Offering/Negotiating media* and *Legitimising CSA*. But within the overarching performance of offenderness, it was also seen that these moves could index smaller, more temporary interactional roles like trader, negotiator, support seeker, and expert. This study in particular highlights Bucholtz and Hall's (2005) relationality principle, as we see participants constructing these identity positions in relation to those of their interlocutors, e.g. where support seekers position their interlocutors as support givers, or experts. This study also demonstrates how global moves (which represent joint goals of the interactants) (Macagno & Bigi, 2017) are used by suspected offenders and UCs in the co-construction of offenderness and related positions.

The newbie forum posts displayed a range of moves associated with the performance of the newbie identity, including *Exerting authority*, *Demonstrating value* and *Demonstrating alignment*, which were seen to index in many cases performances of competence and expertise. Strategies within these moves echo other research into CSA offending expertise, such as Grant and MacLeod's (*in preparation*) work, which demonstrates expertise as indexed through the display of knowledge of the values of different types of IIOC and of technological practices which aid its secure exchange. Other strategies, like providing links to IIOC sources and demonstrating significant offending experience, were consistent with Tener, Wolak and Finkelhor's (2015) descriptions of expert offenders. But neither of these studies involved offenders who were self-proclaimed inexperienced newbies, and it was unexpected that individuals identifying as such would perform these same positions of competence and expertise. Expertise, however, carries persuasive rhetorical value (Vásquez, 2014), and in this case, the performance of competence and expertise within the wider performance of the newbie offender was seen to function largely to compensate for newbies' perceived inadequacies or deficiencies. Ultimately, it allowed them to perform as 'competent newbies', an understandably desirable position for those seeking to persuade more experienced individuals to grant them community membership.

It is posited that it is not just moves but also the lower-level strategies of moves that can index the performance of various aspects of identity. Study 2 in particular considered identity performance at the strategy level, focusing specifically on strategies involved in exchanges of support between suspected offenders and UCs, and the speech acts that realise them. It identified the following five typical speech act structures in support exchanges and found associated identity positions performed at this level:

- inquiries met with reports.
- inquiries met with further inquiries.
- requests for help met with offers of help.
- reports/complaints of a problem met with suggestions to address that problem.
- reports/complaints of a problem met with expressions of empathy and sympathy.

Through these strategies, participants were seen to perform and position each other in a range of identity positions including support seeker/giver, inexperienced/experienced offender, helpful/accommodating associate, unintelligent/incompetent technology user, expert technology user, fellow abuser and friend.

To consider identity performance below even the strategy level, Study 2 also explored a particular exchange in which an offender and UC looked to be discussing a hypothetical instance of kidnapping a child for abuse, and in doing so, appeared to be beginning to perform as co-abusers or partners. As well as through the moves and strategies observed, these identity positions were indicated in part through the use of the modal auxiliary verb 'would' in a series of conditional predictions of necessity, e.g. "[If we were to kidnap a child] ... She would need to be alone first of all" (T20 L96). It was suggested that through constructions like these, the participants could be testing the other's level of commitment while remaining uncommitted to the abusive act themselves, although it is unclear whether the offender in this conversation was interested in genuine abuse planning or engaging in fantasy. It was argued that the use of higher-certainty modal 'will' would have suggested more strongly that this conversation involved genuine abuse planning. But it makes sense that in a high-risk, low-trust communicative exchange such as this, participants would be extremely cautious and guarded, and it is possible though that using 'will' instead of 'would' might index a level of confidence or brazenness in either participant, which could raise suspicions regarding the other's identity and intentions. The use of 'would', then, could be functioning in this case to perform a convincing (or genuine) reluctance to commit, contributing to an overall performance of a knowledgeable, risk-aware offender. This suggests that identity performance can occur at all points on the scale, from the higher level

of the move, through the strategies that work towards the move, down to the verbs that realise the strategies.

This section has argued that identities can be performed by the use of rhetorical moves and strategies. By establishing specific relationships between moves and identity positions, each of the three studies has shown that rhetorical moves (as well as strategies and the verbs that realise them) can function as linguistic resources for identity performance. It is worth noting though that these studies have tended to focus on the performance of micro rather than macro identities. It would be interesting to explore the extent to which moves are seen to index broader social identity categories like age and gender, for example. The following section discusses findings from this work in relation to current theories of identity, and tentatively proposes a new model for identity performance based on rhetorical moves.

What can these findings contribute to social identity theory?

In order to explore what the findings from this project might contribute to social identity theory, this section first presents a brief summary of Bucholtz and Hall's (2005) interactional model of identity and reflects on its usefulness in relation to the current research and other identity models. Following this, a move-based model informed by findings from this project as well as existing models (in particular Grant & MacLeod (2018) and Omoniyi (2006)) is proposed.

Reflecting on the interactional model

In its incorporation of ideas from such a broad range of disciplines, Bucholtz and Hall's (2005) interactional model is one of the most far-reaching and influential in current identity work. It holds that identity emerges as a product of interaction, rather than being an internal, innate entity existing within us and preceding interaction. Identity is therefore conceived as something constantly (re)contested and (re)negotiated as we interact, and this is held for both macro identities, i.e. broad, social identity categories, like age, ethnicity and gender, as well as micro identities, i.e. small, temporary interactional roles that we can switch between across and within interactions. Each of these identity positions is indexed through (among other things) the range of linguistic forms we use in interaction, and only gains social meaning in relation to other available positions and those of other social actors with whom we interact. Finally, the model poses that identities can be constructed deliberately or unconsciously, through our own and others' perceptions and representations, and as a result of ideological processes and structures.

The popularity of this model (or elements from it) is justifiable; it is one of the fullest accounts of identity to date, its main strength arguably lying in the wide breadth of issues it encompasses. Certainly it can be seen to account for much of the linguistic behaviour observed in the three studies presented here, indeed we can see evidence throughout for each principle the model proposes. For example, Study 1 sees the offender frequently renegotiating his identity position as he strategically cycles through his repertoire of personas based on what he presumably perceives will most likely achieve compliance from each victim. In a more subtle way, Study 2 shows the UCs' identities emerging and shifting as they seem to converge towards the identity positions of their interlocutors in order to be seen as similar offenders with similar goals, displaying a range of different micro-identity positions from co-fantasist to IIOC trader. While the newbie forum posts in Study 3 do not demonstrate identity positions shifting to the degree seen in Studies 1 and 2, we can see micro-identity positions like 'competent newbie' and 'support seeker' as performed through moves and strategies. These positions seem entirely context-dependent, so it makes sense to say that they have emerged as a product of the language used in this narrow context and are likely not static positions that are consistently held by the post-creators across a diverse range of communicative situations.

Study 1 offers the clearest opportunity to consider the performance of macro vs. micro identities, as the offender plays with broad identity categories like age, gender and ethnicity as well as performing situationally specific identities like engaged listener, friend and sexual pursuer. But from the findings of all three studies, it seems reasonable to suggest that there is no clear divide between what we see as macro and micro identities. Rather, it seems more plausible to position identity roles on a cline between the two categories. For example, Study 2 sees a general performance of offenderness, which is considered closer to a macro position than the various lower-level positions performed within this like support seeker, trader, and expert, but still further than demographic social categories. Similarly, Study 3 demonstrates that within a more general performance of the newbie offender identity, varying degrees of lower-level competence and expertise are performed. The identities of offender and newbie offender, then, might sit somewhere in between macro and micro positions, perhaps closer to the micro end of the spectrum.

We can see throughout all three studies that the identity positions of individuals are relevant and possible because of their relation to positions of other social actors. A clear example is offered in Study 2, in which UC1 appears to readily assume a range of positions like friend, trader and co-fantasist where this matches or complements the positions of the suspected

offenders with whom he converses. Another example can be seen in Study 1 where, in response to the offender's performance of sexual aggressor, some of his interlocutors assume the role of victim by use of various risk management strategies like complying with the offender's demands or pleading with him to cease his actions. The role of victim here only has social meaning because of the offender's assumed position of aggressor, but it also gains meaning in relation to other available positions such as those pertaining to strength, power and resilience, which is seen on occasion where the offender's threats are met with equally aggressive 'verbal' abuse and threats of police contact. Both positions conceivably pertain to the victim identity, showing that victimness is a complex construction that may be performed in a variety of ways (McAlinden, 2014). This is important because, as McAlinden (2014) points out, victims are often over-simplistically framed as purely passive, innocent children, and any evidence that counters this impression of a victim's identity can fuel victim-blaming.

The studies also demonstrate the partiality of identity. Although it is impossible to explore the question of which roles might have been performed more and less consciously by individuals, certain identity positions are observed to be highly conscious and deliberate, for example the deceptive personas created by the offender in Study 1. It follows then that some of the identity positions of individuals observed across the project were likely less consciously performed. A likely candidate is the offender's Persona 12 in Study 1, who was seen to reveal information pertaining to verifiable truths about the offender's offline persona and physical world. At the very least we can say that this persona seems less deliberately deceptive than others the offender created. In a similar vein, the UCs' performances as offenders in Study 2 are deliberately deceptive and therefore highly conscious. Just as the majority of the Study 1 offender's personas are created, so too are the online personas assumed by the UCs. In both situations, these personas lack the bank of sociolinguistic history resources available to the individuals assuming them and so the offender and UCs must likely fabricate a certain amount of the information they present under time pressures, and often there must be a conscious effort to suppress aspects of their identities. The UCs' diametrically opposed goals of gathering intelligence/evidence and identifying abusive behaviours and media products perhaps makes the task of inventing sexually abusive back stories even more challenging. But even within the UCs' seemingly successful performances as offenders, we saw discrepancies in the move frequencies, the most extreme example being the UCs' limited use of *Reporting interests/experiences* and *Reporting events*. While it is easy to see how the UCs' operational task of intelligence gathering might impact their ability to fully suppress their institutional identities as police officers (Grant and MacLeod,

2017; 2018), it seems important to attempt to address such notable disparities so as to minimise their risk of exposure.

Limitations and solutions

Evidently Bucholtz and Hall's (2005) interactional model has important explanatory power, but the specific contexts in question raise some issues around identity for which it does not account. Two main issues are explored here.

Because the interactional model conceives identity as intrinsically fluid and changeable, and discounts the idea of any 'core self', one of the biggest challenges to it is the notion that the offender in Study 1 possesses some kind of 'home identity'. And yet, Study 1 shows that there are certain aspects of the offender in question, gleaned from details he gives surrounding his home location, workplace, vocation and name, (and which are verified by police reports), which together, give a vague but coherent image of a stable physical world which he inhabits. In sharing (true) information about these elements of his life, or these parts of his identity, he is arguably performing - at least more than with other personas - some version of 'himself'.

Study 1 posited that we might borrow from Goffman (1956) and explain the 'home identity' as being performed on the backstage, where performance is uninhibited by social constraints. Arguably though, the offender's abusive behaviours elsewhere shows that he has no problem breaking social conventions and expectations in interactions using other personas, so this concept does not satisfactorily explain the offender's oppositional performances. Returning to Butler (1990) and Cameron (1997), it is plausible that as identities become more congealed, they also become less conscious and more 'backstage', and therefore it gets harder for an individual to override the effects of persistent sociolinguistic histories brought to an interaction (the same problem of identity leakage experienced by UCs). From this perspective it seems likely that P12 is performed less consciously than the other personas and might be considered more 'core' than other aspects of the offender's identity. But the conflict presented by the idea of core identity facets within a general conception of identity as constructed and performed is perhaps best accounted for by Grant and MacLeod's (2018) resource-constraint model, which describes the overlapping types of resources that speakers and writers can draw upon in identity performance, and the corresponding constraints that limit the potential for identity performance. Most importantly here, it posits that certain resources are more stable than others. In particular, they argue that an individual's sociolinguistic history provides a more stable type of resource than others like those offered by the immediate speech activity or other interactants. We can see the offender drawing

upon aspects of the speech activity and interactants, but it is his sociolinguistic history resources that he (as P12) uses most heavily in discussions around his home and personal life, and in which we observe a degree of truthfulness not seen with other personas. Accordingly, this resource is drawn upon less by the offender in interactions concerning other personas, which tend not to feature personal topics to the same degree, and this is reflected in the lack of *Rapport* moves of these personas in comparison to P12.

Study 1, then, argues for a reconceptualisation of identity as inherently flexible, but also as incorporating a space for some elements of identity (particularly those related to an individual's sociolinguistic history) to endure more persistently than others. So while we are free to some extent to shift between different roles and perform multiple positions, there are aspects of our identities which shift less, or more slowly than others, or indeed inhibit our ability to do so.

The second main issue with the interactional model is less a dilemma than a limitation. While it goes into great detail regarding how identity positions are performed through indexical links between linguistic forms and ideological assumptions, it falls short of exploring individuals' motivations for decisions regarding identity performance and identity shift. This issue seems particularly salient in contexts concerning specific goal-driven behaviour such as grooming (Elliott, 2017), sexual extortion (Kopecký, 2017; Wolak *et al.*, 2018) and other forms of CSA. Omoniyi's (2006) hierarchy of identities (Hol) model takes us further in this regard, hinging on the fundamental premise that "An individual's various identity options are co-present at all times but each of those options is allocated a position on a hierarchy based on the degree of salience it claims in a moment of identification." (p.19). This view accounts for the multiplicity of identity as well as proffering that the reason a particular role is assumed (or not) is its relative salience at a given moment. While this seems reasonable, given the specific contexts in question, much of the linguistic behaviour observed and discussed is arguably better accounted for by the more "materialistic" form of the Hol model, which holds that rather than salience, selected roles are determined by their likely lucrativeness in relation to an individual's communicative goals (Omoniyi, 2006, p. 20). In other words, the identity position that rises to prominence on the hierarchy in any given moment is that which is most likely to aid us in achieving our interactional goal(s).

An individual's communicative goals may be broad or narrow, vague or specific. Even seemingly insignificant speech events, such as small talk with a stranger, or casual conversation between friends serve important social functions, and successful engagement in such interactions can be considered a legitimate communicative goal of participants. The

three contexts observed in this project, however, often present interactional goals far more specific. For example, a primary goal of the offender in Study 1 is to gain illicit material from victims for sexual pleasure. Taking Omoniyi's (2006) framework, it is the role of sexual pursuer/aggressor which most often rises to prominence from other available identity options. Conversely, when the offender appears to be seeking to build more intimate relationships, it is the contrasting friend/boyfriend role which comes forth. In Study 2, the suspected offenders appear to vary in their primary interactive goals; some wish to exchange stories and fantasise, others wish to seek or give support in various forms, and others seek to exchange IIOC. In each case, the UCs' corresponding identity positions rise to prominence, e.g. fantasist, support seeker, friend, negotiator, etc. For many of the newbies in Study 3, whose primary goal is to persuade others to grant them entry into an existing offender community, it seems to be positions of support seeking, competence and expertise that sit atop the identity hierarchy.

Another reason a goal-focused approach is particularly useful in the current contexts is that it allows us to account for deception in identity performance. This is not addressed in Bucholtz and Hall's (2005) interactional model, which goes only as far as to state that identity may be constructed with varying degrees of awareness. From a goal-focused perspective, it is possible to take deception as the point of departure, conceptualising it as a legitimate communicative goal in itself. In cases like that in Study 1, deception seemed to be a clear goal of the offender in many of the interactions and this creates a fundamental part of the background context against which to consider other goals and strategies. However, the goal of deceiving victims seemed inconsistent across this dataset as we observed one persona divulging true information of the offender and using limited false statements compared to others.

This benefit of a goal-focused approach is even clearer in relation to the UCs in Study 2. To an external researcher it is given that the UCs are deliberately performing identity positions far from their own usual repertoires, and for them, the goal of deceiving their interlocutors is paramount to other operational tasks associated with gathering intelligence. Without foregrounding the motivations for identity performance, the task of unpacking and classifying the UCs' moves and strategies is much more difficult. Should the analyst categorise utterances according to known operational motives of the UCs, or by the perceived pragmatic force on their interlocutors, or both? For example, a question such as 'where you from?' from a UC could be construed from the analyst's point of view as a move of intelligence gathering, while to the suspected offender it would likely serve as a strategy of building rapport. By starting from the perspective that deception is a fundamental goal for the

UC, it makes sense to categorise the UCs' utterances based on the most likely pragmatic force rather than dual-coding, and the task is therefore simplified. As seen, this approach results in the UCs' and offenders' rhetorical moves looking mostly similar, while we understand that the underlying motivations of each participant type are very different. Ultimately it facilitated the comparison between the two participant types and their linguistic behaviour, which was the main aim of Study 2.

The Hol model then offers some useful insights and seems apt for explaining much of the linguistic identity expression observed in the three studies, perhaps most importantly regarding individuals' shifts in and out of multiple identity positions. Its suitability arguably lies in its orientation towards the goals and pursuits of social actors, which is why moves, in their reflection of rhetorical goals, are a fitting analytical unit for describing linguistic behaviours in relation to identity performance. This goal-driven perspective importantly enables us to probe why individuals perform particular identities at given moments, and consider whether such performances might be deemed successful or otherwise, as well as account for potential deception in identity performance (as long as this is clearly known from the outset).

But while the Hol model provides a useful structure for conceiving of repertoires of identities, and accounts for the motivations that drive identity performance, it is not perfect. Arguably, it could be seen to work without the hierarchical element; in fact, this seems to add an artificial rigidity to the framework. In each of the three studies in question, we see particular identity positions gain relevance and prominence as conversational goals shift and evolve, but it seems more reasonable to assume there can be multiple roles, or elements of roles, coming forward simultaneously in any given pursuit, rather than just a single one sitting atop a hierarchy. For example, the individuals in Study 3 seem to perform a sort of dual identity consisting of two seemingly conflicting positions, termed the 'competent newbie'. Furthermore, while the UCs in Study 2 are performing as CSA offenders, at the same time it could be argued that this work contributes to the performance of the 'undercover police officer' identity. The Hol model also suggests that unused identities in any given moment remain static at some low point on the hierarchy, whereas it seems tenable that these roles would be constantly shifting in position, looming closer and further away to the 'prominent spot'. Not only this, but it makes sense that each identity position would also shift in and of itself, even unconsciously while 'out of use'. For example, when UC1 is primarily performing as 'friend' or 'support giver' to an offender, this model would suggest that the 'negotiator' position sits static and dormant until it is next needed, but arguably the negotiator role could be unconsciously influenced by factors both within and external to the current interaction and arise differently when next called upon. The UC's idea of what is involved in the act of

negotiation, of the qualities possessed by a good negotiator, and of the value of assets in particular negotiations are subject to change, especially over a long stretch of time and across different communicative contexts. This shift might happen by way of an acquisition (or loss) of sociolinguistic resources (Grant & MacLeod, 2018), as, for example, the UCs' ideas and performances of offenderness in Study 2 likely differed in various ways to their performances before they had spent time learning about offending practices and behaviours.

Arguably, then, models attempting to encapsulate the ever-changing nature of identity ought to account not just for the shifting positions of existing roles in relation to relevance and lucrativeness, but also for the potential for simultaneous performance of multiple roles, as well as the capacity for individual roles to change and evolve in and of themselves.

Towards a move-based identity model

Each principle proposed in Bucholtz and Hall's (2005) interactional framework can be observed in the various identity performances across the three research contexts, but this research argues that a framework which takes into account the conversational goals of participants more explicitly would have even greater explanatory power. Elements from the resource-constraint model (Grant and MacLeod, 2018) and the Hol model (Omoniyi, 2006) can usefully contribute to such a model but only take us so far. In light of findings from the three studies presented here, this section tentatively proposes a new approach to identity investigation based on rhetorical moves. The proposed model draws together the most relevant ideas from the interactional model, the resource-constraint model and the Hol model, with findings from the immediate research. It does not strive for the level of comprehensiveness of Bucholtz and Hall's (2005) interactional model and leaves much room for extension. The model is as follows:

We accumulate multiple potential identity positions or roles as our sociolinguistic histories develop over time. These positions are realised and reified as they are repeatedly performed through interaction. The roles we perform are fluid and ever-shifting, but some identity positions (or parts of them) are more fixed and stable than others. These more stable elements constitute an individual's 'home identity', which is in itself changeable over time as available sociolinguistic history resources are gradually accumulated, lost and transformed. Identity positions are not binarily macro or micro, but exist on a cline between these two extremes. Identity performance and interactional goals are intrinsically linked, perhaps even inseparable, and identity deception can function as an interactional goal. Emergence of particular identity positions and shifts between positions occur due to a process of strategic

selection based primarily upon lucrativeness in relation to an individual's interactional goals in a given moment (moments are not time-boundaried), as well as on the resources offered and constraints imposed by the context of interaction. This selection can occur with varying levels of consciousness. Multiple roles, including those conflicting, may simultaneously emerge as prominent, while other available roles continually shift in position according to relevance/lucrativeness in a given moment, but these also evolve in and of themselves as a result of changes in an individual's available resource types. An individual's addressee(s) forms an important part of their available interactional resources, both enabling and inhibiting the performance of particular positions. This is perhaps most pertinent in relation to the preconceptions and expectations of the individual that the addressee brings to an interaction, and the individual's perception of these expectations. Performance may shift in response to the responses and reactions of the addressee(s). Identities are performed in interaction through indexical links between linguistic forms and ideological assumptions. One linguistic form through which identity is performed is the rhetorical move, and strategies therein, and in this sense identity performance is driven by the communicative goals of interactants. Figure 8.4 illustrates the central components of this model (while smaller details are omitted).

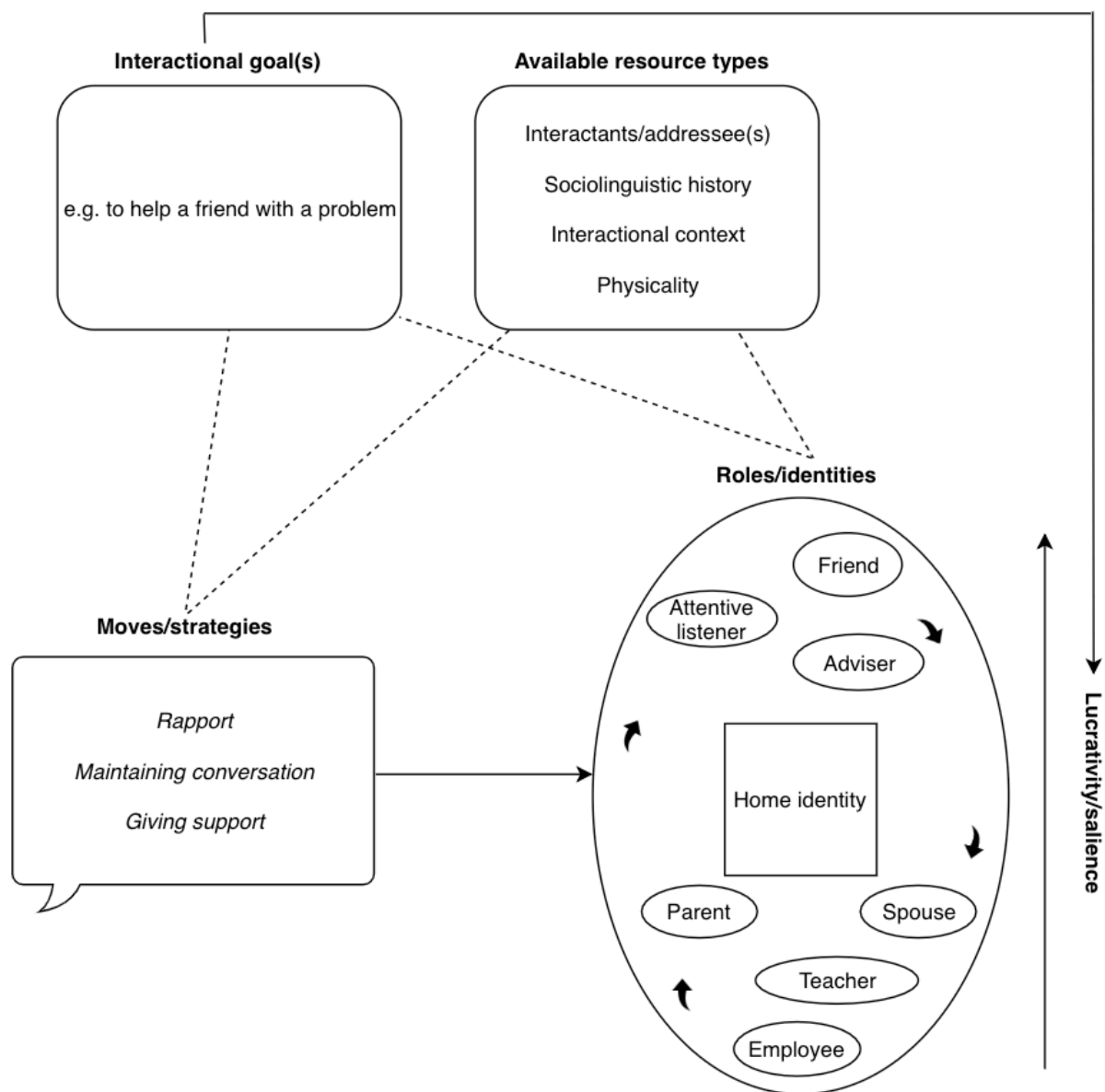


Figure 9.1. Model of identity performance through rhetorical moves.

The model depicts interactional goals and available resources as the main drivers of moves and consequent identity positions performed in interaction. Available identity positions are in constant flux but those most relevant or lucrative to our interactional goals are those that gain prominence (in this example, positions of 'friend', 'attentive listener' and 'adviser' are most prominent as the interactional goal is to help a friend). Dotted lines represent less clearly directional relationships between elements, whereas solid arrows represent straightforward links (i.e. moves and strategies work towards the performance of identities, interactional goals determine the lucrativity or salience of particular positions). The square 'Home identity' label and its central positioning indicate its more stable state compared to other aspects of identity.

One of the main strengths of this model is that it is neither purely constructionist nor essentialist. Taking ideas from both sides allows us to account for the fluid performance of identity and creation of multiple identities while acknowledging that these performances are limited by various factors. Similarly, by allowing us to conceive of a more stable 'home identity', we are able to describe some form of persistent 'self' within our otherwise fluid performance, which is often neglected in other models. Taking this more balanced approach, the model also acknowledges the potential for loss and adaptation of resources and subsequent available identities, rather than assuming we only gain and accumulate available identities over time. Positioning available identities on a moving scale of 'macro/microness' rather than in static opposition enables us to consider more closely the relationship of the particular role in question and its importance/lucrativity to the interactive context, and how this may change over the course of an interaction or over longer stretches of time.

The other main benefit of this model is arguably its goal-centric nature. First, this approach allows us to account for deception in identity performance. Acknowledging deception as a fundamental interactive goal allows for a clear interpretation of the surface goals of participants before considering these in relation to deceptive motivations. Second, the goal-centric nature of the model makes it highly applicable to identity investigation in forensic contexts, which naturally concern specific and often narrow interactional goals.

Of course, it also suffers some limitations. One concern is its lack of a clear structure and the ambiguity of relationships between particular elements, although arguably this reflects the nebulous nature of the concept of identity. Of greater concern is that its overwhelming focus on communicative goals makes it less suited to exploring identity performance in more everyday or mundane interactions, where goals may be far less clear, even to interactants themselves. Also, while the model allows us to take deception into account, this is only true where the analyst is explicitly aware of deception.

At the crux of the proposed model is that one of the ways in which we perform identity is through our rhetorical moves and strategies. By investigating issues of identity using move analysis we privilege the communicative goals of interactants, and at the same time expound information regarding how these goals are attempted and achieved (or not) linguistically. The contexts explored in this thesis are sensitive and severe, featuring offenders (and suspected offenders) whose goals are often unlawful and deplorable, and UCs, whose goals are centrally concerned with combating abusive behaviour. It makes sense, particularly in these contexts, to approach identity investigation from a goal-oriented perspective, and move analysis has arguably been shown to be a valuable tool in this regard.

Conclusion

Following brief summaries of the three studies, this discussion has explored three overarching research questions around identity, OCSA and move analysis. Firstly, it examined the contributions of move analysis to current understandings of OCSA. It did this by addressing two of the main criticisms of OCSA literature as presented in section Chapter 2, and by calling attention to the need for a wider acknowledgement of the diverse types of interactions and linguistic behaviours involved, as well as the need for further research using naturally-occurring data depicting genuine instances of OCSA. It also discussed the potential application of move analysis to the task of identifying anonymous online offenders. The discussion then presented an evaluation of move analysis in the current context, including proposed methods for addressing problems around reliability and subjectivity in move derivation. It also demonstrated possible implications for our understanding of genre, and argued for its continued use as a method for investigating issues of identity and OCSA. Secondly, it argued for the concept of rhetorical moves and strategies as resources for identity performance, by focusing on move variation within and across speakers and interaction types, and detailing indexical links between particular moves and identity positions. Finally, it proposed a move-based approach to identity investigation as informed by findings from the three studies and other models deemed particularly relevant in the OCSA context. This approach centralises the interactional goals of participants, incorporating rhetorical moves and strategies alongside elements from Bucholtz and Hall's (2005), Omoniyi's (2006) and Grant and MacLeod's (2018) models. The final chapter presents some of the potential implications of this research and concluding remarks.

Chapter 10: Conclusion

More children and adolescents now than ever before have the tremendous advantage of growing up in a world in which information is easily accessible, and learning opportunities abundant. But their safe and autonomous access to all the social and educational resources available online continues to be threatened by individuals seeking to engage in sexually abusive behaviours. It is paramount that researchers continue looking for ways to better understand and combat OCSA, especially as offenders find ever more sophisticated techniques to evade detection online. The key aims of this research were, therefore, to increase our understanding of linguistic identity expression in OCSA interactions, and to explore how participants in OCSA interactions linguistically approach their respective goals. This final chapter first summarises the conclusions from each of the three main studies, before considering the applications and implications of this research in relation to law-enforcement, education, and academic research. Finally, closing remarks are given.

Study conclusions

Study 1 found moves to discriminate between particular identity positions in a way that suggested that move analysis might be used as a method for identifying the 'home identity' of an offender where that offender operates multiple online personas. It also found some important differences between the linguistic behaviours of real victims and adult decoys which seemed to impact the offender's forcefulness in the way he approached the task of engaging victims in online sexual activity. This finding supports well-documented apprehensions regarding the use of decoy data (e.g. Briggs, Simon & Simonsen, 2011; Williams, Elliott, & Beech, 2013; Black *et al.*, 2015) but also provides a starting point to understanding the sorts of limitations it poses. Study 2 found moves to be a useful measure of comparison enabling the UCs' performance as offenders to be evaluated against that of genuine suspected offenders. It also described linguistic exchanges of support between suspected offenders and UCs and demonstrated that identity performance occurs at the level of the speech act as well as individual verbs. Study 3 observed some established online communities of practice comprising suspected CSA offenders. It identified the moves used to index the newbie offender identity position, and found the performance of micro positions *competence* and *expertise* to be used as persuasive devices in individuals' efforts to gain membership into various CSA-focused communities. The studies collectively have shone light on a range of different OCSA interaction types which are rarely described in the literature or in public domains, and presented move analysis as a useful method to

investigate identity specifically where research interests lie in the communicative goals of interactants.

Implications and applications

This project was undertaken in the hope of addressing (some aspects of) a real world problem. From the outset, the research targeted three different domains as potential beneficiaries: law-enforcement, education, and academic research. Arguably the findings from this collection of studies have implications for each of these areas, perhaps most significantly for law-enforcement.

In law-enforcement

Perhaps the most interesting aspect of this work for law-enforcement is the suggestion that move analysis might aid the identification of an offender's 'home identity', where that offender is operating multiple online personas. The use of move analysis to this end of course requires further testing on similar cases, but if it is found to be successful, it could guide investigators towards a 'most likely' persona or set of personas from a larger pool, potentially minimising time wasted attempting to verify false details provided by offenders. The other important finding from Study 1 concerns the fact that the offender was seen to use a small group of more forceful moves not previously observed in conversations between offenders and adult decoys posing as victims. It was proposed that this is most likely a function of audience type; that real victims are likely less compliant and more resistant generally than adult decoys, causing the offender in this case to call on more forceful tactics. In terms of identity assumption work, it may be the case that where police are tasked with performing as child victims online, the successful evocation of more forceful moves like *Overt persuasion* and *Extortion* might work towards a more genuine performance of the child victim identity. Similarly, it was seen that the use of overtly sexual moves, including *Initiating sexual topics*, were not restricted to the offender but sometimes a part of the victims' move repertoires too. This supports the idea that police officers posing as child victims are, in certain contexts, justified in initiating and using sexual themes in conversations with offenders, particularly if this is a previously demonstrated linguistic behaviour of an individual victim that the officer is tasked with impersonating.

Study 2 also offered useful information in the policing context, directly addressing UCs' performances of the offender identity. First it showed that a small group of UCs exhibited generally similar linguistic behaviour to the suspected offenders with whom they conversed in

terms of moves, move frequency and structure. It seems likely that prior to these interactions, the UCs had spent time studying similar interactions between offenders and thus managed to acquire the sociohistorical linguistic resources necessary to perform convincingly as offenders. The study also found a few discrepancies which the UCs might seek to address, including that the UCs tended to report their interests, experiences and abuse events less than the suspected offenders, and offer support slightly less frequently. This is likely because the offenders' interests and experience are genuine rather than consciously acquired, and they will therefore probably always be better equipped than UCs to discuss OCSA-related topics, despite the efforts exerted by the UCs to gain the appropriate resources. Other discrepancies included the offenders' slightly increased attempts to assess and manage risk compared to the UCs, and their decreased tendency to request media. The latter reasonably reflects the UCs' aim to identify producers and consumers of IIOC, but both issues could be addressed to reduce the gap between offenders' and UC's linguistic behaviours even further. Move analysis may also prove useful in the evaluation of UCs' performances of individual known offenders and victims. The framework could be employed before and after linguistic training in online identity assumption tasks in order to pinpoint areas for improved performance and ultimately minimise the risk of being identified as UCs.

Finally, Study 3 also offers potentially useful insights regarding law-enforcement. Firstly, it identified common moves in the performance of the newbie identity, which could guide UCs in performing as such in the attempt to infiltrate existing communities of offenders. Secondly, it seems likely that the most dangerous and potentially harmful offenders are those which might be considered 'expert', i.e. those with high levels of experience and power within offending groups. This study identified particular rhetorical moves associated with the performance of various levels of competence and expertise, which might assist investigating officers in building intelligence around individuals who frequent online CSA-focused communities in terms of their experience levels and potential influence on the community.

In education

Study 1 offers perhaps the most useful practical information for educators, caregivers and children, in its identification of a range of linguistic moves associated with different types of sexually abusive behaviour. As well as describing some of the behaviours associated with online grooming, it highlights the presence of other damaging practices like sexual extortion and other forms of manipulation and sexual bullying. The move set from this study might be used to inform education programs delivered to children and young people to make clear what OCSA can look like in genuine cases of abuse involving real victims. This case could

also serve to encourage victims not to blame themselves based on some perceived notion of their own 'stupidity' for falling prey to such exploitation, in its demonstration of the extreme efforts that offenders can go to in order to manipulate young people into sexualised interaction.

Studies 2 and 3 raise a more general awareness about OCSA practices outside of interactions between adults and children. While these interactions do not directly involve children, the moves identified in these studies give a frank and often disturbing insight into some of the interests and motivations of those seeking on or offline sexual engagement with children and young people. While these are at times distressing, it is valuable to understand the sorts of activities and behaviours that occur in these peripheral conversations which can end up impacting children in devastating ways, either on or offline. Study 2 does offer some hope, however, in showing that law-enforcement agencies are exploring new combative approaches to OCSA, and with demonstrated success in the case of assuming offender identities online.

In research

This project contributes to the small body of linguistic research addressing OCSA (e.g. Lorenzo-Dus & Izura 2017; Grant & MacLeod, 2016; MacLeod & Grant, 2017). It is hoped that the three studies have contributed valuable insights into OCSA practices and presented a novel methodological approach to analysing linguistic behaviour and identity performance, which might serve as a useful starting point for future research in this and other domains.

In terms of OCSA research, Study 1 indicated that genuine child victims behave differently in certain ways to adults decoys, leading the offender in this case to take more direct and forceful approaches at times. Across all three studies we have seen a wide variety of OCSA behaviours and practices that cannot reasonably be described as grooming. It is hoped then that future research in this area can take certain assumptions from these issues as points of departure: firstly, that PJ data is useful but limited in its capability to address certain questions regarding accurate reflections of OCSA strategies, and secondly, that OCSA practices and behaviours unfortunately diversify far beyond grooming. These points call for the continued use of genuine, naturally-occurring datasets in order to capture and describe the wide range of OCSA practices as accurately as possible. Furthermore, the work has shown the value of collaboration between researchers and law-enforcement agencies. As OCSA practices inevitably continue to evolve along with technological advancements, it is hoped that links between law-enforcement agencies and academics will continue to grow

and strengthen so that relevant data can be made available, enabling us to keep abreast of developments in OCSA crimes and the linguistic behaviours therein.

One theoretical contribution this project has made is in supporting Samraj and Gawron's (2015) argument that genres may arise even where no obligatory moves or internal discourse structures are observed (see Study 3). But further to this, the research has demonstrated that move analysis can be usefully applied outside of the sphere of traditional genre theory and analysis. Instead of employing move analysis to determine the discourse structures of genres (Swales, 1981, 1990; Biber, Connor & Upton, 2007), as the framework was initially developed for, the three studies have shown its capacity to address issues of identity, communication accommodation (Giles, Taylor & Bourhis, 1973; Gallois, Ogay & Giles, 2005), and linguistic variation within and across individuals. It has also shown that move analysis can be usefully applied to dialogue, and shown that discourse structures of interactions can be conceptualised as a complex network of interactants' rhetorical goals (Macagno & Bigi, 2017). A fundamental point this work has made is that there are ways of making the move analysis process more robust, including the incorporation of speech act theory (Austin, 1962; Searle, 1969), and that moves can be identified reliably and coded consistently enough to capture an accurate depiction of individuals' rhetorical goals. Finally, this work has proposed a novel approach to investigating identity as performed through rhetorical moves and strategies, which has enabled a close-up examination of the relationship between interactants' identity performances and their communicative goals. This goal-centric approach to identity investigation might serve as useful starting point for other identity researchers across a range of sociocultural disciplines, and particularly in forensic linguistics where the focus often lies on the unlawful actions performed through language.

In relation to the first two research contexts, this work has also shown some of the benefits of using move-maps (Chiang & Grant, 2017) to visualise the rhetorical structures of textual interactions. Move-maps enable the visualisation of variation across interactions and patterns in linguistic behaviour. Additionally, because they represent interactions only in terms of the moves observed, they also allow (to some degree) the language used in sensitive interactions which are not publicly accessible to be studied and discussed openly.

Closing remarks

Issues of identity have rarely been explored using move analysis. Doing so here has enabled a detailed examination of the linguistic behaviours observed in a range of interaction types which both exhibit and facilitate the online sexual abuse of children and adolescents. While

computational methods enable efficient analysis of large amounts of data, there are still important questions around the functionality of language in context that arguably depend on the human analyst. In its practical, theoretical and methodological contributions to the research field, it is hoped this work will raise a general awareness of the diversity and complexity of online child sexual abuse interactions as well as the value of exploring linguistic methods of inquiry into online sexual crime.

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Appendices

Appendix A: Javascript scripts: creating move-maps from chat-log transcripts

moves.js

```
var moves = [
  "Greeting",
  "Rapport",
  "Sexual rapport",
  "Maintaining conversation",
  "Assessing likelihood and extent of engagement",
  "Assessing criteria fulfilment",
  "Assessing and managing risk",
  "Initiating sexual topics",
  "Maintaining/escalating sexual content",
  "Immediate sexual gratification",
  "Meeting planning",
  "Reprimanding",
  "Sign off",
  "Assessing role",
  "Overt persuasion",
  "Extortion",
  "",
  "Greeting",
  "Rapport",
  "Sexual rapport",
  "Maintaining conversation",
    "Assessing likelihood and extent of engagement",
  "Assessing criteria fulfilment",
  "Assessing and managing risk",
  "Initiating sexual topics",
  "Maintaining/escalating sexual content",
  "Immediate sexual gratification",
  "Meeting planning",
  "Reprimanding",
  "Sign off",
  "Undesired response",
  "Mixed response",
  "Desired response"
]

var colmap = [
  '9999ff', //greeting - purple
  'ffff00', //rapport - yellow
  '6600cc', //sexualrapport - dark purple
```

```

'cc6666', //maint/conv. - dark pink
'ff33cc', //l'hood & ext - bright pink
'00cccc', //crit ful - turquoise
'3366cc', //risk ax - dark blue
'99cc66', //intro sex topics - light green
'006600', //maint sex topics - dark green
'33ff33', //imm grat - bright green
'ff9933', //meeting planning - orange
'b2bab5', //reprimanding - grey
'905B28', //sign off - brown
'00ffff', //role ax. - bright turquoise
'b30000', //overt persuasion - dark red
'F91919', //extorting - red
'GAP', // GAP
'9999ff', //greeting - purple
'ffff00', //rapport - yellow
'6600cc', //sexualrapport - dark purple
'cc6666', //maint/conv. - dark pink
'ff33cc', //l'hood & ext - bright pink
'00cccc', //crit ful - turquoise
'3366cc', //risk ax - dark blue
'99cc66', //intro sex topics
'006600', //maint sex topics - dark green
'33ff33', //imm grat - bright green
'ff9933', //meeting planning - orange
'b2bab5', //reprimanding - grey
'905B28', //sign off - brown
'82c6ec', //negative response - pale blue
'ffce91', //mixed response - beige
'f6969d', //positive response - salmon pink

```

]

htmlbuilder.js

```
function tableBuilder(data, rowContains, set) {
    var html = '';
    var transflip = false;
    var negativeCounter = 0
    var mixedCounter = 0
    var positiveCounter = 0
    var tvCounter = 0;

    html += '<table>';

    for (var i = 1; i < data.length; i++) {
        // data[i];

        if (data[i].join().match(/TV[0-9]{1,9}/)) tvCounter++

        html += '<tr data-row="' + data[i][0] + '" data-line="' + data[i][4] +
        '">';
        var firstCellOffset = 5;
        var divisionCell = firstCellOffset + 16;

        for (var j = firstCellOffset; j < data[i].length; j++) {
            var cell = data[i][j];

            if (j == divisionCell) {
                var divisionStyle = 'background-color:#ccc; width:1px; height:1px;
margin:0 auto;';
                html += '<td data-col="' + j + '"><div style="' + divisionStyle
                + '"></div></td>'
            }
            // check if cell contains anything
            else if (cell.length > 0) {
                html += '<td data-col="' + j + '" style="background-color: #' +
                colmap[j-firstCellOffset] + ';"></td>'

                // victim response
                if (j === 35) negativeCounter++
                if (j === 36) mixedCounter++
                if (j === 37) positiveCounter++
            }
            else {
                html += '<td data-col="' + j + '"></td>'
            }
        }
    }
};
```

```

html += '</tr>';

if (data[i].join().indexOf('TRANSCRIPT') > -1) {
    transflip = true;
    var divisionStyle = 'background-color:#000; width:1px; height:1px;
margin:0 auto;';
    html += '<tr><td colspan="34" style="'+ divisionStyle +'"></td></tr>'
    html += '<tr><td colspan="34" style="font-size: 8px">' + data[i][4] +
'</td></tr>'
}

if (data[i].join().indexOf('Session Start') > -1) {
    if (transflip) {
        transflip = false
    } else {
        var divisionStyle = 'background-color:#ccc; width:1px; height:1px;
margin:0 auto;';
        html += '<tr><td colspan="34" style="'+ divisionStyle +'"></td></
tr>'
    }

    var accountId = false;
    var lookAhead = 1;
    var matcher = /O1\s?\(A[0-9]{1,9}\)/;

    if (!set.account_num) {
        while (!accountId) {

            // Looking for a match on account i.e. O1(An) within a session.
            if (data[i + lookAhead].join().indexOf('Session Start') > -1) {
                break;
            }

            accountId = data[i + lookAhead].join().match(matcher);

            if (accountId) {
                html += '<tr><td colspan="34" style="font-size: 8px">' +
accountId[0].replace(/A/, 'P') + '</td></tr>'

                } else {
                    lookAhead++
                }
            }
        }
    }
}

```



```

    }

};

html += '</table>';

console.log({
    file: set.file,
    negative: negativeCounter,
    mixed: mixedCounter,
    positive: positiveCounter,
    tv: tvCounter
})

return html;
}

function keyBuilder (moves, colmap) {
    var movesUnique = _.uniq(moves);
    var colmapUnique = _.uniq(colmap);

    var html = '';
    for (var i = 0; i < movesUnique.length; i++) {
        html += '<div class="item">';
        html += '<div class="item-color" style="background-color: #' +
colmapUnique[i] + ';"></div>'
        html += '<div class="move">' + movesUnique[i] + '</div>';
        html += '</div>';
    };

    return html;
}

function dataNavBuilder (datas) {
    var html = '<ul>';
    for (var i = 0; i < datas.length; i++) {
        html += '<li>';
        html += '<a href="' + i + '">' + datas[i].nomRef + '</a>';
        html += '</li>';
    };
    html += '</ul>';

    return html;
}

```

tools.js

```
// http://www.bennadel.com/blog/1504-ask-ben-parsing-csv-strings-with-javascript-exec-regular-expression-command.htm
```

```
// This will parse a delimited string into an array of  
// arrays. The default delimiter is the comma, but this  
// can be overridden in the second argument.
```

```
function CSVToArray(strData, strDelimiter) {  
    strDelimiter = (strDelimiter || ",");  
    var objPattern = new RegExp(  
        (  
            "\\\" + strDelimiter + "\\r?\\n|\\r|^)" +  
            "(?:\\\"([^\"]*(?:\\\"\\\"[^\"]*)*)\\\"|" +  
            "([^\\" + strDelimiter + "\\r\\n]*)")  
        ),  
        "gi"  
    );  
    var arrData = [  
        []  
    ];  
    var arrMatches = null;  
    while (arrMatches = objPattern.exec(strData)) {  
        var strMatchedDelimiter = arrMatches[1];  
        if (  
            strMatchedDelimiter.length &&  
            (strMatchedDelimiter != strDelimiter)  
        ) {  
            arrData.push([]);  
        }  
        if (arrMatches[2]) {  
            var strMatchedValue = arrMatches[2].replace(  
                new RegExp("\\\"\\\"\"", "g"),  
                "\\\""  
            );  
        } else {  
            var strMatchedValue = arrMatches[3];  
        }  
        arrData[arrData.length - 1].push(strMatchedValue);  
    }  
    return (arrData);  
}
```

```
<html>
<head>
  <title>Move map</title>
  <link rel="stylesheet" type="text/css" href="style.css" />

  <script type="text/javascript" src="//code.jquery.com/
jquery-1.11.3.js"></script>
  <script type="text/javascript" src="//cdnjs.cloudflare.com/ajax/libs/
underscore.js/1.8.3/underscore-min.js"></script>
  <script type="text/javascript" src="tools.js"></script>
  <script type="text/javascript" src="moves_study1.js"></script>
  <script type="text/javascript" src="htmlbuilder.js"></script>
  <script type="text/javascript" src="data/refs.js"></script>
  <!--
  data/refs.js should return a file in the format of

  var datas = [
  {
    file: "filename.csv",
    nomRef: "reference",
    transcript_num: 1
  }
  ]
  -->
  <script type="text/javascript">
    $(document).ready(function() {

      var set = datas[0];

      if (window.location.hash) {
        var location_hash = window.location.hash.substring(1);
        set = datas[location_hash];
      }

      // initial data setup
      rebuildTable(set);

      if (set.transcript_num) {
        $('#trn').text('Transcript ' + set.transcript_num);
      }

      // add a key, nav, etc
      $('#key').append(keyBuilder(moves, colmap));
      $('#nav').append(dataNavBuilder(datas));
    });
  </script>

```

```

    $('#nav a').on('click', function(e) {
        e.preventDefault();

        var targ = $(this).attr('href');

        window.location.hash = '#' + targ

        rebuildTable(datas[targ]);

        if (datas[targ].transcript_num) {
            $('#trn').text('Transcript ' + datas[targ].transcript_num);
        }
        else if (datas[targ].account_num) {
            $('#trn').text('Profile ' + datas[targ].account_num);
        }

    })
});

function rebuildTable (set) {
    // clear first
    $('#viz').empty();

    jQuery.get('data/csvs_20170128/' + set.file, function(res) {

        var data = CSVToArray(res);
        var tbl = tableBuilder(data, set.nomRef, set);

        $('#viz').append(tbl);

    });
}
</script>

</head>
<body>
    <div id="info">
        <h1><span id="trn"></span></h1>
        <p>Key</p>
        <div id="key"></div>
        <div id="nav"></div>
    </div>
    <div id="viz"></div>
</body>
</html>

```

style.css

```
body {
    font-family: Helvetica;
    font-size: 100%;
}
table {
    border-collapse: collapse;
    height: 100%;
}
tr, td {
    padding: 0;
    margin: 0;
    border-spacing: 0;
}
td {
    width: 30px;
    /*border: 1px solid red;*/
    /*height: 4px;*/
}
#info {
    float: right;
    width: 30%;
}
#key {
    /*border: 1px solid #333;*/
    padding: 5px 5px 5px 0;
    margin: 5px 5px 5px 5px;
}
.item {
    clear: both;
}
.item-color {
    display: inline-block;
    float: left;
    width: 5%;
    height: 5px;
    margin-top: 7px;
    margin-right: 5px;
}
.move {
    float: left;
    width: 80%;
    margin-bottom: 7px;
}
```

```
#nav {  
    clear:both;  
    margin-top: 50px;  
}  
#nav li {  
    margin-bottom: 5px;  
}  
@media print {  
    #nav {  
        display:none;  
    }  
}
```

Appendix B: Data-sharing agreement

Data sharing agreement

This agreement is between:

the data owner: UK police force (*unsigned to retain anonymity, see Volume 2 for signed copy*)
the lead researcher: Emily Chiang
additional researchers: n/a

The data set this agreement refers to is described here:

1. Set of approximately 2,500 files containing chat-log transcripts of instant messaging interactions between a convicted child sex offender and multiple victims
2. Set of 27 files containing chat-log transcripts of instant messaging interactions between suspected child sex offenders and undercover police officers from Tor websites
3. The use of Avatar database from which forum posts found on Tor websites will be scraped.

The data set is provided under the following conditions.

Data security

- Data will not be shown to or passed on to any other researchers other than the named researchers within this agreement.
- Named researchers may be added to the agreement only with written permission of the data owner.
- Data will kept on a hardware-encrypted drive to approved CESG recognised High Grade encryption standards.
- When not in use, the data drive will be kept in a locked cabinet such that only named researchers in this agreement have access to the data drive.
- Where possible data and analysis should be carried out on the encrypted drive but where it is necessary to copy the data on to other devices for the purpose of specific analyses then the following conditions must be followed.
 - Data will not be copied onto any networked device.
 - Any device containing the data will be kept in a locked room or cabinet such that only those named in this agreement can have access.
 - Once analysis has been completed all reasonable care will be taken to remove the data from the device, for example by re-formatting or re-imaging hard drives.
- Any printout or transcript of data will be kept in a locked cabinet such that only the named researchers within this agreement have access to transcripts.
- When the data is no longer required, or if this agreement is terminated, all data will be destroyed in front of witnesses and the data owner informed. For electronic devices this will mean re-formatting or re-imaging drives, for paper documents these should be shredded and waste disposed of securely.

Outcomes and Publication

- The data owner recognises the value of academic publication of research derived from this data.
- The data owner should be consulted as to possibility for collaborative publication of research outcomes.
- The researchers will ensure that any publication will not include material from the data that could identify any individual mentioned in the data, and where there is doubt that this can be achieved, will liaise with the data owner prior to submission of any writing for publication.

- The researchers will take care to ensure that no sensitive tactic is revealed through publication, and where there is doubt that this can be achieved, will liaise with the data owner prior to submission of any writing for publication.
- The data owner should be acknowledged as owner of data, and the data set should be properly cited.
- Whether or not any publication arises out of the data, the researchers should report back to the data owner any significant findings from their work on the data.

Time limits

- This agreement covers a period of two years from its signature.
- At the end of the time of the agreement data should be destroyed or returned as described above, or a new agreement for a further period of time should be sought.
- At the end of the time of the agreement a brief report should be provided setting out the research for which the data has been used and outcomes of that work.

Signatures

Data owner: XXX

Lead researcher: Emily Chiang

Date of agreement: 21/09/2016

Date of end of agreement: 21/09/2018

Data extension agreement (anonymised):

From: XXX

Date: Wednesday, 15 August 2018 at 13:35

To: Tim Grant [REDACTED]

Subject: Extension to period for keeping data

Tim,

I understand that the retention period for the material Emily Chiang holds ends on the 21/09/18. Just to confirm that the retention period for the material you hold can be extended until the examination process is fully resolved.

I trust this is sufficient for your needs. If this period extends beyond 9 months please come back to me for us to re-consider the retention period.

Many thanks,

XXX
UK Police Force

PhD Student Research Ethics Approval Form (REC1)

PLEASE NOTE: You MUST gain approval for any research BEFORE any research takes place. Failure to do so could result in a ZERO mark

Name Emily Chiang

Student Number [REDACTED]

Proposed Thesis title: Rhetorical moves and identity performance in online child sexual abuse interactions.

Please type your answers to the following questions:

1. What are the aim(s) of your research?

1. To determine the rhetorical moves and discourse structures of online sexual abuse conversations involving sexual offenders, victims and undercover police officers.
2. To consider identity performance through rhetorical moves and strategies by the various participant types.
3. To compare the discourse structures and linguistic features of online conversations of three types:
 - a. offender to child: chat-logs from instant messaging conversations
 - b. offender to undercover police officer posing as offender: chat-logs from instant messaging conversations
 - c. offender to offender(s): forum posts by individuals seeking to join existing communities of child sexual offenders operating in dark web environments

2. What research methods do you intend to use?

1. Swales' (1981) move analysis will be used to determine the rhetorical moves and structures used in online sexual abuse conversations. This involves reading through sets of transcripts and forum posts and determining as far as possible the communicative purpose achieved by each participant contribution (or conversational turn). Some example moves include *Building Rapport*, *Assessing Risk* and *Planning Offline Meeting*. Colour-coded visualisations of the transcripts (termed 'move-maps') will be created on the basis of the identified moves and represent the rhetorical structures of the interactions. The resulting set of move maps will then be used to examine variation in rhetorical structures and patterns across the data set. From a social constructionist view of identity (Bucholtz & Hall, 2005), move patterns will be used to consider the various identity performances of each participant type.
2. Linguistic analysis of individual moves will be undertaken in order to identify the specific linguistic features which work to achieve the rhetorical goals of participants. For example, a previous similar project (using publicly available online data) showed that some of the more common linguistic features used in the *Assessing Risk* move include imperative clauses, WH-questions and the end-position 'lol'.

3. Please give details of the type of informant, the method of access and sampling, and the location(s) of your fieldwork. (see guidance notes).

I wish to work with a large collection of files containing transcripts of sexual abuse conversations between offenders and child victims, offenders and undercover police officers, and forums posts by offenders to other offenders. These will be obtained from a UK police force and detail sexual abuse interactions from a mix of resolved and unresolved cases. A portion of the data will be scraped from an online database known as Avatar; this commercial tool is provided by the same UK police as provided all other data, in agreement with the tool developer.

4. Please give full details of all ethical issues which arise from this research

Due to the inclusion of minors and the serious nature of the offences involved, this data is of course extremely sensitive. The data in question – in hard and soft form - must be stored securely. Any publications resulting from this research must not include data that could lead to the identification of participants. The researcher must receive appropriate psychological support. The data may contain information that identifies individual(s) involved in unresolved cases.

5. What steps are you taking to address these ethical issues?

All data selected for analysis will be anonymised, i.e. any identifying information will be removed, including names (and screen names, barring Study 3), specific locations and contact details. All data will be stored securely on an encrypted, password protected flash drive known as IronKey. Any other device onto which data might be moved for the purposes of analysis will be not be networked. The IronKey and any hard copies of transcripts will be kept in a locked storage unit at all times when not in use. All data used in the final thesis will be considerably selected so that it will be untraceable to the subjects involved. Sensitive portions of data featuring in publications will be stored in private appendices. The researcher has been vetted by the police force providing the data and cleared to work with the data. All terms of the Data Sharing Agreement between researcher and data owner (the UK police force) will be adhered to – see Data Sharing Agreement appended to this form. For the two studies which might include unresolved crimes the data was provided by the police and Study 2 involves officers in undercover roles and so it is agreed that the researcher is not bound to report any identifying information regarding potential offending individuals to the police.

6. What issues for the personal safety of the researcher(s) arise from this research?

Psychological/emotional difficulties associated with prolonged exposure to sensitive material.

7. What steps will be taken to minimise the risks of personal safety to the researchers?

The police force providing the data have ensured that the files contain no imagery. Regular contact with an approved psychologist from the Regional Crime Unit (who are providing the data) has been negotiated at no additional cost to the researcher or to Aston University. The psychologist works with police teams in this area and will meet the researcher initially, then every three months whilst working with the data. The psychologist has the option of requiring more frequent meetings and can also suggest that the researcher should no longer be exposed to the data (or has a break from it).

References:

Bucholtz, M. and Hall, K. (2005). Identity and interaction: a sociocultural linguistic approach. *Discourse Studies*, 7 (4-5), 585-614.

Swales, J. (1981). Aspects of Article Introductions: Aston ESP Research Reports No. 1. Language Studies Unit, Aston University, Birmingham.

Statement by student investigator(s):

I consider that the details given constitute a true summary of the project proposed

I have read, understood and will act in line with the LSS Student Research Ethics and Fieldwork Safety Guidance lines .

Name	Signature	Date
Emily Chiang	[by email]	15/08/2017

Statement by PhD supervisor

I have read the above project proposal and believe that this project only involves minimum risk. I also believe that the student(s) understand the ethical and safety issues which arise from this project.

Name	Signature	Date
Tim Grant	[by email]	15/08/2018

This form must be signed and both staff and students need to keep copies.

Appendix D: Pilot study 1 moves and strategies

Move	Function(s)	Strategies	Textual examples
Rapport	To establish and maintain a friendship/relationship with victim	Inquiring about personal details including name, age, location, friends	"whos this?" "where you from?" "still in school?"
		Giving personal information including name, location	"kl im from *place*" " "*name* u"
Sexual rapport	To establish and maintain a positive sexual relationship with victim	Giving sexual compliments	"nice tits"
		Offering sexual 'favours'	"dont worry ill let u see summet 2"
		Attempts to sexually attract/entice	"im fresh out da showerrr"
		Attempts to comfort/reassure victim about sexual activity	"u dnt hav to show ur face if u dnt wnt to"
		Using positive emoticons in sexual context	"just point cam at summet good ;)"
Assessing Accessibility	To determine victim's physical distance	Inquiring about victim's location	"where you from" "same, what part?"
Assessing criteria fulfilment	To determine if victim fulfils preferred criteria (physical)	Inquiring about victim's age	"still in school?"
		Requesting photos and video chat	"u gt any pics?"
Assessing likelihood/extent of engagement	To gauge level of victim's willingness to engage in sexual interaction	Inquiring about age	"still in school?"
	To gauge likely extent of victim's sexual engagement		

		Requesting/inquiring about victim's access to and willingness to interact via webcam	"no cam?" "aww y not"
		Inquiring about victim's previous sexual experience	"even dun it?" "wot u dun?"
		Inquiring about likelihood of future sexual activity	"not gonna let me hav a lil peek?"
		Requesting future sexual activity	"ok u promise me u will go on tmorrow nite in ur bra for me?"
Initiating sexual topics	To introduce sexual topics into conversation		"nice tits"
Immediate sexual gratification	To achieve/satiate immediate sexual arousal	Requesting webcam chat in sexual context/sexual photos	"lemme see u before u go" "u gt any pics?"
Material Offers for Sexual Activity	To entice victim into complying in sexual activities	Offering money for sexual activity	"ill give u £300 for a bj :P" "go on cam and ill put some money in it right nw for u"
Maintaining/escalating sexual content (includes all other sexually-oriented strategies)	To desensitise victim to sexual topics	Describing self in sexual context	"im so hard"
Maintaining conversation	To ensure continuation of current conversation	Checking victim's presence in chatroom	"you there"
		Backchanneling	"kl"

Appendix E: Study 1 moves and strategies

Move	Function(s)	Strategies	Textual examples
Greeting	To initiate conversation	Greeting terms	"u there?" "Heyyy."
		Sending 'nudges' (in-client function)	"*username* sent you a nudge"
Rapport	To establish and maintain friendships/relationships (including professional relationship in case of P4 model agent persona)	Inquiring about/ sharing personal information (e.g. hobbies, interests, relationships, daily life, etc.).	"How old are you?" "wu2 [what you up to?]" "i was with one of my x's for 4 yrs"
		Inquiring about/ sharing physical attributes	"you got green eyes?" "my hair ent like that enymore had it all cut off"
		Compliments/flattery (and positive responses)	O: "u luk nice" V: "fanx u 2 x"
		Webcam/image requests and cooperation (often in-client function)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
		Expressing feelings/emotions (including emoticons/emoji)	"peoplee jus keep pissin me off today" :) :(:p 😊 😞 😏
		Phatic expressions/general chat	"u ok" "soo what you wanna chat about"
		Requesting/giving contact details	"*phone number* if u want to text me x"
		Politeness terms (apologising, thanking, laughter terms, etc.)	"soz'[sorry]" "ty [thank you]" "Lol" "hah"
		Encouraging further/future interaction (including 'nudges')	"please dnt go ur the only nice girl i know" "kk on tommorow..?"
		Endearment terms	"No proebblem hunni x"
		Seeking/giving sympathy	"fuck sake i always ruin things" "aww"
		Friendly insults/arguing, banter	O: "lol you're wrong" V: "i'm right." O: "nah" V: "yaah :L"
		Returning questions	O: "heyy u bi" V: "no u"
		Accepting mixed/negative responses	O: "will i get to see a clearer pic?" V: "no yet" O: "ok"

Sexual rapport	To establish and maintain a positive sexually-oriented relationship	Denying sexual motivations	V: "...im not going on cam or sending you pictures..." O: "nooo it wasnt 4 tht"
		Retracting sexual questions/requests	V: "what piics" O: "none lol im joking"
		Justifying/mitigating negative responses/polite rejection	"Canrtt lil kidss in thee room" "im busy atm lol im always busy soz x"
		Checking age-gap approval	"18tht 2 old?"
		Self-deprecation (physical appearance)	"you wont like my older pic, i look fatter a and pale for some reason lol"
		Inquiring about/sharing sexual history, preferences, practices, etc.	"how often you do it then?" "ever been with a girl?" "i wear like really skimpy outfits haha" "personality or looks?"
		Boasting about sexual experience	"lol i aint bragging but, ive been with a few girls who have been too worn out for sex after loooooool"
		Sexual compliments/flattery (and positive responses)	O: "nice tits" V: "thanks"
		Webcam/image requests and cooperation (sexual context) (often in-client function)	"You have invited *username* to start sending/viewing webcam" " "*username has accepted your invitation to start sending/viewing webcam" "send it babe"
		Friendly insults/arguing, banter	"your dp [display picture] is rude. shame on you."
Maintaining conversation	To maintain/sustain continued interaction and facilitate future contact	Mock/hypothetical meeting planning	O: "when you coming round?" V: "nowWell not now after iv eaten my letter chips"
		Retracting sexual questions/requests	V: "what piics" O: "none lol im joking"
		Sending 'nudges' (in-client function)	"You have just sent a nudge."
		Fillers/voiced pauses	"ermm" "uh"
		Self-correction	"msn plsu" ... "plus*"
		Indicating temporary absence in conversation	"brb"

		Checking interlocutor presence	"u there cockteasee?"
		Attempts to regain attention	"oi cocktease lol" "talk to meee" "please dnt go ur the only nice girl i know"
		Straightforward response to questions	O: "...evr fingered on cam? :p lol" V: "nah"
		Backchannelling (non-semantic responses)	"ha" "lol" "ok" "ya"
		Reporting/inquiring about technical difficulties	V: "how come ur cam is not workin?"
		Requesting clarification	O: "summet involvin one of ya hands :)" V: "wat"
Assessing likelihood/ extent of engagement	To gauge likelihood and extent of interlocutor's engagement (general and sexual) and/or offline meeting	Proposing hypothetical scenarios	"ok so if we met and i tried it on with ya you would say bye..??" "if my cam worked would we be on our way to *venue name* right now?lol"
	To gauge victim's physical distance and availability for online interaction		
		Webcam/image requests (often in-client function)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
		Inquiring about/sharing sexual history, preferences, practices, etc.	"how often you do it then?" "ever been with a girl?" "u a cam tease?"
		Sexual requests	"show me ur tmmy then?"
		Questioning/ challenging negative response	V: "not on cam" O: "why not lol"
		Requesting contact/ location details	"asl" "where are you based?"
		Webcam/image requests and cooperation (sexual context) (often in-client function)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
		Inquiring about home environment/immediate surroundings	"...can any1 see ur screen? I wanna ask u summet" "hu u wiv?" "tell me wen ur alone yh"

Assessing criteria fulfilment	To gauge how far interlocutor meets preferred criteria	Inquiring about age, physical appearance and clothing	"how old are you?"
		Inquiring about ethnicity and physical appearance	"u mixed race?" "do u have nice legs?"
		Inquiring about clothing	"what u wearing ;D" "uniform?"
		Webcam/image requests (often in-client function)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
Assessing and managing risk	To gauge and manage types and levels of risk associated with current interaction	Webcam/image requests (often in-client function) (for ID verification or insurance)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
		Refusing webcam and image requests/giving excuses	"dont work on this laptop" "don't think i have 1"
		Expressing suspicions regarding interlocutor's identity	O: "i dont like how u dont trust me" V: "i dont liike how you make me so suspiciouse"
		Explaining limits/rules for engagement	"...before i sleep with someone they either HAVE TO get tested or use condoms..."
		Refusing to accept/open files	"i ent opening it theres a virus on it :/ x"
		Threatening to end relationship/contact	O: "i wouldnt ruin what it is we might have :D" V: "but i would happily ruin it if you lied to me..."
		Inquiring about home environment/immediate surroundings	"...can any1 see ur screen? I wanna ask u summet" "hu u wiv?" "tell me wen ur alone yh"
		Mitigating seriousness of sexual questions/ comments	"...evr fingered on cam? :p lol" "maybe i willu gotta earn it ;) aha"
		Inquiring about contraceptive methods	O: "u on pill?"
		Expressing personal strength	"... i have self respect and standers"
		Inquiring about interlocutor's identity, relation to self, access to contact details and motives	"who is this" "do i know you..." "were you get ma addy from" "why did uu add me?"
		Acknowledging potential for identity deception	"who ever your picture is, is cute but i know your like 75..."

	Inquiring about age of interlocutor/ referencing age gap	"how old are you" "okaay, your way older than me"
	Mitigating negative responses	"im busy atm lol im always busy soz x"
	Justifying/excusing negative responses	"cam not working" "Canrtt lil kidss in thee room"
	Questioning/ denying claims of illicit material possession	"ahah fukin funny..."
	Questioning/ denying 'deals' made previously	"...wat deal??"
	Complying with requests/ demands (includes accepting webcam/image requests)	O: "ill fuck u around" V: "ima see if i can find my cam"
	Counter-offers	O: "put ur cam on" V: "it wnt work. Ill meet you instead and do whatever"
	Checking actions will ensure cessation of abuse	"Will u leave me alone after this ?"
	Warning of police involvement	"im going to the police by perve"
	Expressing shock/fear at threats	"Im scared for my life here. literally."
	Expressing vulnerability	"im fuking 12 ffs :(
	Begging	"PLEASE IM BEGGING YOU!"
Initiating sexual topics	To (re)introduce sexual topics into conversation	
Maintaining/ escalating sexual content	To maintain or escalate level of sexual content	Inquiring about/sharing sexual history, preferences, practices, etc.
		"how often you do it then?" "ever been with a girl?" "u a cam tease?"
	Sexual requests/offers	"show me ur tmmy then?" "did u wnt a rude pic of me..."
	Sexual compliments/ flattery (and positive responses)	O: "nice tits" V: "thanks"
	Inquiring about previously shared illicit material	"how old are these [images] ?"
	Webcam/image requests and cooperation (sexual context) (often in-client function)	"You have invited *username* to start sending/viewing webcam" " "*username has accepted your invitation to start sending/viewing webcam"
	Extending interest to friends and family	"loli fink u and ya mom shud let me come take sum photos?"

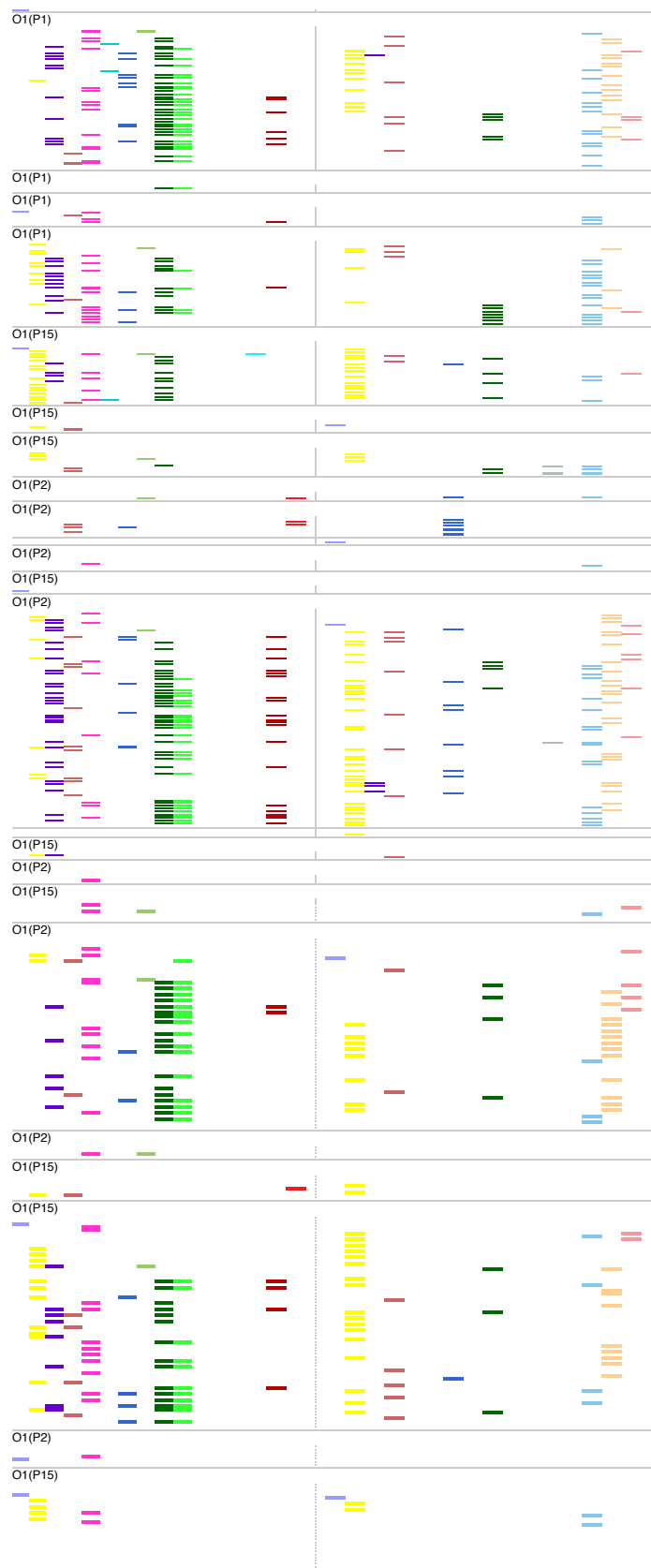
		Normalising sexual topics/ requested acts	"would you like to speak to a girl who has recently started modelling with us?"
Immediate sexual gratification	To achieve or satiate immediate sexual arousal	Sexual suggestions/ requests/commands	"u shud snog each other" "lift ya top up..."
		Webcam/image requests and cooperation (sexual context) (often in-client function)	"You have invited *username* to start sending/viewing webcam" " "*username has accepted your invitation to start sending/viewing webcam"
		Inquiring about/sharing sexual history, preferences, practices, etc.	"how often you do it then?" "ever been with a girl?" "u a cam tease?"
Meeting planning	To organise offline meeting	Suggesting/requesting offline meeting	"gonna let me come see u on ya bday then?" "wanna link?"
		Practical suggestions regarding meeting details	"what about wednesday" "...can put it in ya bank account few days before we meet..." "what yu wanna do"
		Pre-meeting negotiations	"...tell me hw much u wnt and wht for...see wot we can work out"
		Requesting/sharing location and contact details	
Reprimanding	To denounce/scold/ criticise	Forceful commands (with or without expletives)	"fuk off! go oncam!!!!!!!!!" "go away!"
		Complaints/criticisms	V: "hold on im on the phone" O: "u sed tht 4 times b4" "...yr jst fnna hav excuse afta excuse..."
		Challenging questions/ statements/actions	"wtf was u playing at" "why ddiid u doo tht"
		Insults	"you some sick pedo" "you're funny and pathetic."
		Accusations	"fuckin fake" "...ur just pissin me about :(
Sign off	To signal conversation departure	Sign off terms	"bye" "night"
Assessing own role (offender-only)	To determine the persona(s) most likely to interest/attract target victim	Inquiring about preferences (ethnic origin, sexual orientation, etc.)	"are u bi?" "u like black boys?"
		Inquiring about sexual practices	"u a camtease?" "...clean cam later?"
		Inquiring about financial needs	"wanna earn some money?"

Overt persuasion (offender-only)	To explicitly influence victim's decision-making and actions	Invoking guilt	V: "yu du [make me suspicious]" O: "... sorry for being nothing but genuine"
		Challenging suspicions	"dont trust me? block me now. ..."
		Seeking sympathy	"trust is possibly the biggest thing in my life been fucked over by too many people"
		Retracting interest in relationship	"reckon its best if we stay just as mates"
		Threatening to leave conversation	"ill leave u to it then cya"
		Offers in exchange for sexual interaction	"interested in earning some money?"
		Direct commands	"accept [webcam request]"
		Normalising sexual behaviours	"girly friends do it alot"
		Diminshing significance of requested sexual act	"lol its only girly fun"
Extortion (offender-only)	To coerce target victim into providing illicit material (imagery, videos) by means of force	Presenting opportunities as scarce	"im moving to america in 3 weeks :(
		Explicit threats to disseminate imagery of victim	"looooo k ill just send the pics/vid to all ya contacts"
		Implicit threats to disseminate imagery of victim	"got the video"
		Presenting images of victim (purportedly)	" :) its u"
		Non-specific threats	"ill fuck u around"
		Stating conditions of 'deal'	"u got 30seconds [to start webcam]"
Negative response (victim-only)	To reject sexual topics/advances and general interaction To express disbelief in O's claims and purported identity To express disbelief in authenticity of threat To achieve cessation of immediate or general interaction	Blaming	"just remember u caused this..."
		Rejecting/dismissing advances/suggestions/offers (sexual or non-sexual)	"fuk off i dont like lesbian" O: "I work for an agency, but not a normal one so probably won't interest you?" V: "naa. Im sick of people saying that & nothing happens so uno."
		Explaining rejection	O: "hwcome?" V: "because i dont [want to]"

		Doubting authenticity/claims	"tbqh i dont believe u" "this is such a set up :D"
		Signalling leaving conversation/leaving conversation	"... goingg now byee" "*name* is now offline"
		Ending webcam function (in-client function)	"*name* has canceled the video call"
		Declining/avoiding/dismissing webcam requests (sometimes in-client function)	O: "cams?" V: "later" "*username* has declined your invitation to start sending/viewing webcam"
		Mentioning boyfriend/partner	O: "wuu2 (what you up to?)" V: "with the boyfriend watching tv"
		Refusing/denying information	O: "what u dun?" V: "nuffin to doo with you"
		Questioning/challenging motives and actions	"why did uu add me?" "why wud u want nude pics ov teenagers? :D"
		Threatening police contact	"im going to the police by perve"
		Blocking interlocutor (in-chat function)	
		Justifying/excusing non-compliance with requests/demands	"Well Im in *county* So yah knw sorry"
		Ridiculing	V: "its liike your talkin to your voice's" O: "thanks for that" O: "Cya" V: "you talkin to me or the voices's"
		Obtuse answers	O: "wot u wearin? :P" V: "clothes"
Mixed response (victim-only)	To convey neither strongly positive or negative attitudes or both simultaneously, or uncertainty	Self-deprecation	O: "show me ur tummy then?" V: "itss not very nice"
		Non-committal responses	O: "lemme see :p" V: "hmm"
		Ambiguous/evasive responses	O: "u luk like u want summet in ur mouth" V: "ha"
		Justifying/excusing non-compliance with requests/demands	V: "carntt acept it yet in ma pjs :L"
		Conditional offers	O: "its a shame u en tup for fun" V: ".Lgo on cam :L xxxthen i might be ."
		Challenging/questioning request	O: "cud yu pull ya bra dwn a bit?" V: "why"

		Negotiating 'deal' terms	O: "£800?" V: "each#"
		Doubting authenticity / claims	"cuz im not convinced its gonn'happen."
		Inquiring about offer	O: "What we do is different to what you've been offered before, im sure." V: "how is it different?explain."
		Questioning/challenging offer/motivations	O: "ill pay u jst to meet the first time..." V: "why would u do that :s"
		Requesting meaning clarification	"wat do u mean ?"
Positive response (victim-only)	To convey acceptance/approval/uptake of sexual topics/requests/demands etc.	Complying with demands/requests/suggestions etc.	O: "ill fuck u around" V: "ima see if i can find my cam"
	To convey acceptance of claims and threats as authentic		
		Positive response to sexual compliments	O: "nice tits" V: "thanks"
		Webcam/image requests and compliance (often in-client function)	"You have invited *username* to start sending/viewing webcam" "*username has accepted your invitation to start sending/viewing webcam"
		Friendly insults/arguing/'banter'	O: "u perv :P" V: "haha # yourr rhte pervv :)"
		Returning sexual question/compliment	O: "okay but you gotta wear the nurse outfit" V: ":L xxand wat will u wear :L xx"
		Accepting offers	O: "did u wnt a rude pic of me..." V: "yh"
		Sending material (in-client function)	"Initiated a file transfer"
		Expressing shock/fear at threats	O: "still think im bluffin?" V: "nowhat do u want ??where did u get them?"
		Expressing willingness to engage/comply	V: "Hmm, ok then.. listening"
		Pleading/begging	V: "PLEASE IM BEGGING YOU"
		Counter-offers	O: "put ur cam on" V: "it wnt work. Ill meet you instead and do whatever"

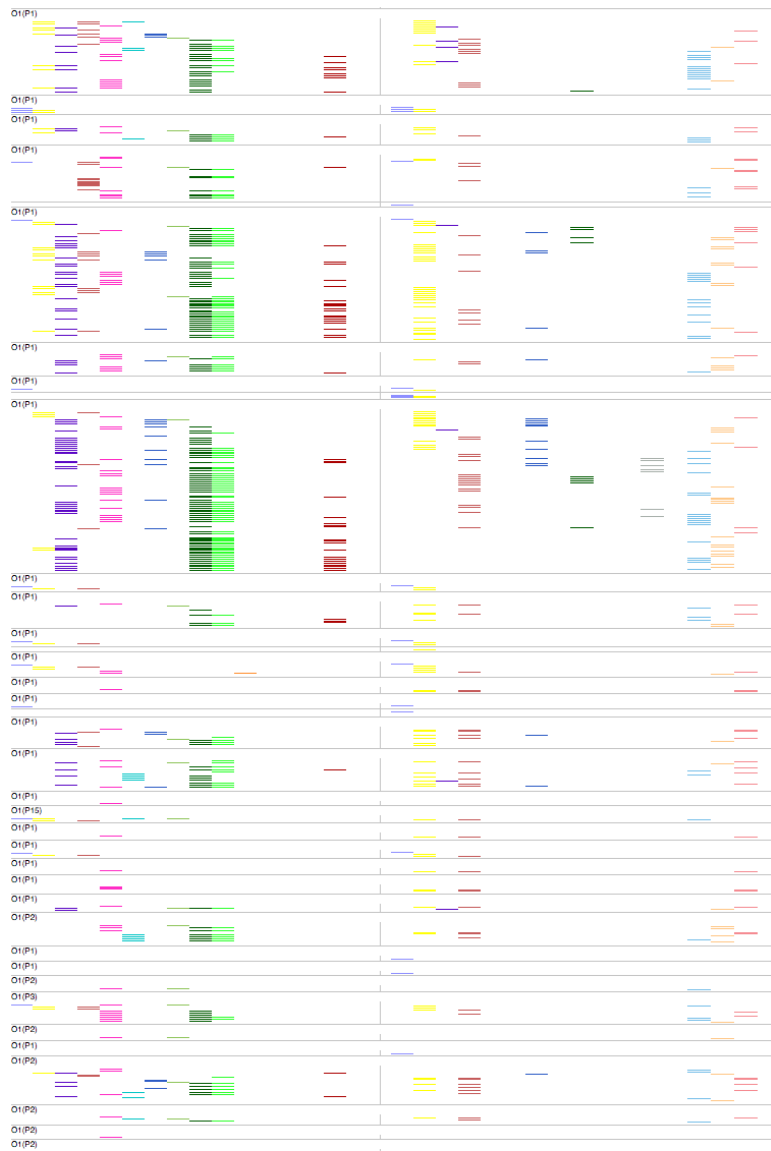
Appendix F: Study 1 move-maps



Transcript 1

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response



Transcript 2

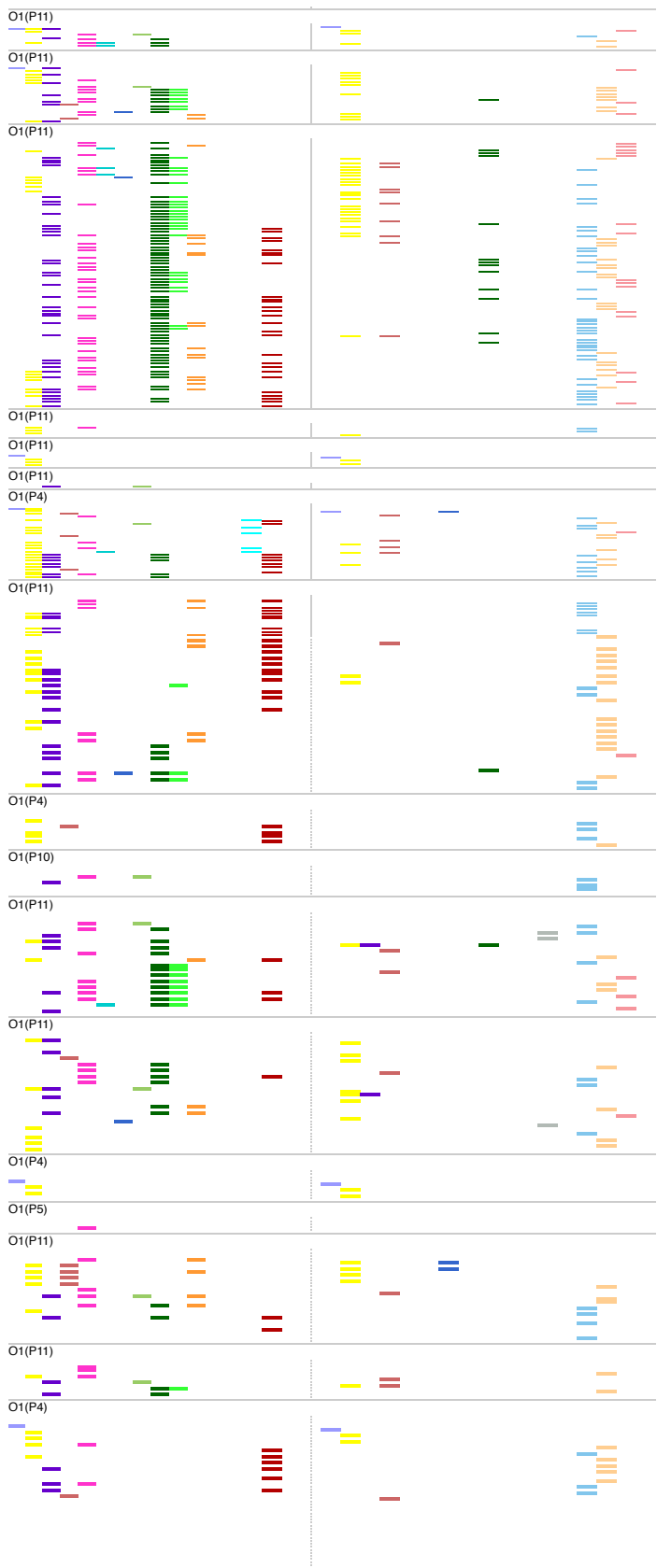
Key

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- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response

Transcript 3

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response

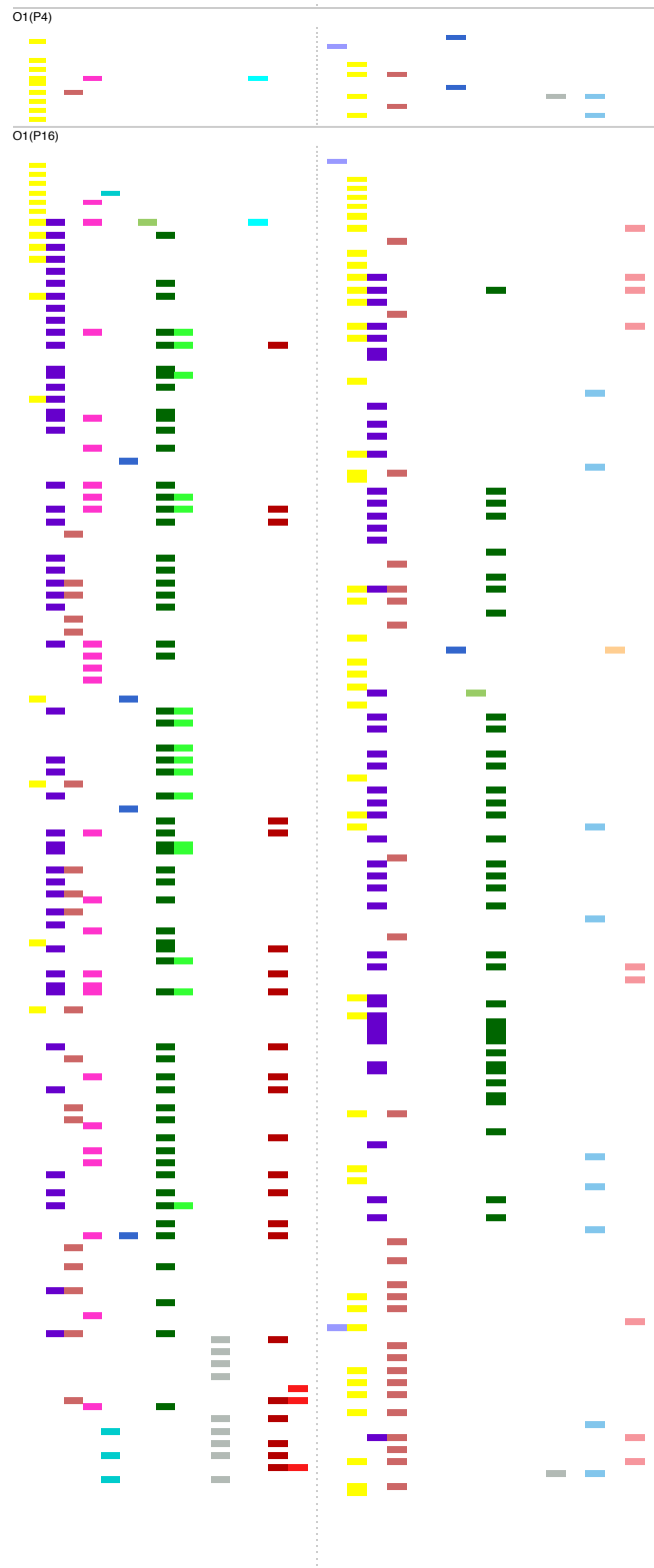


Transcript 4

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
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- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response

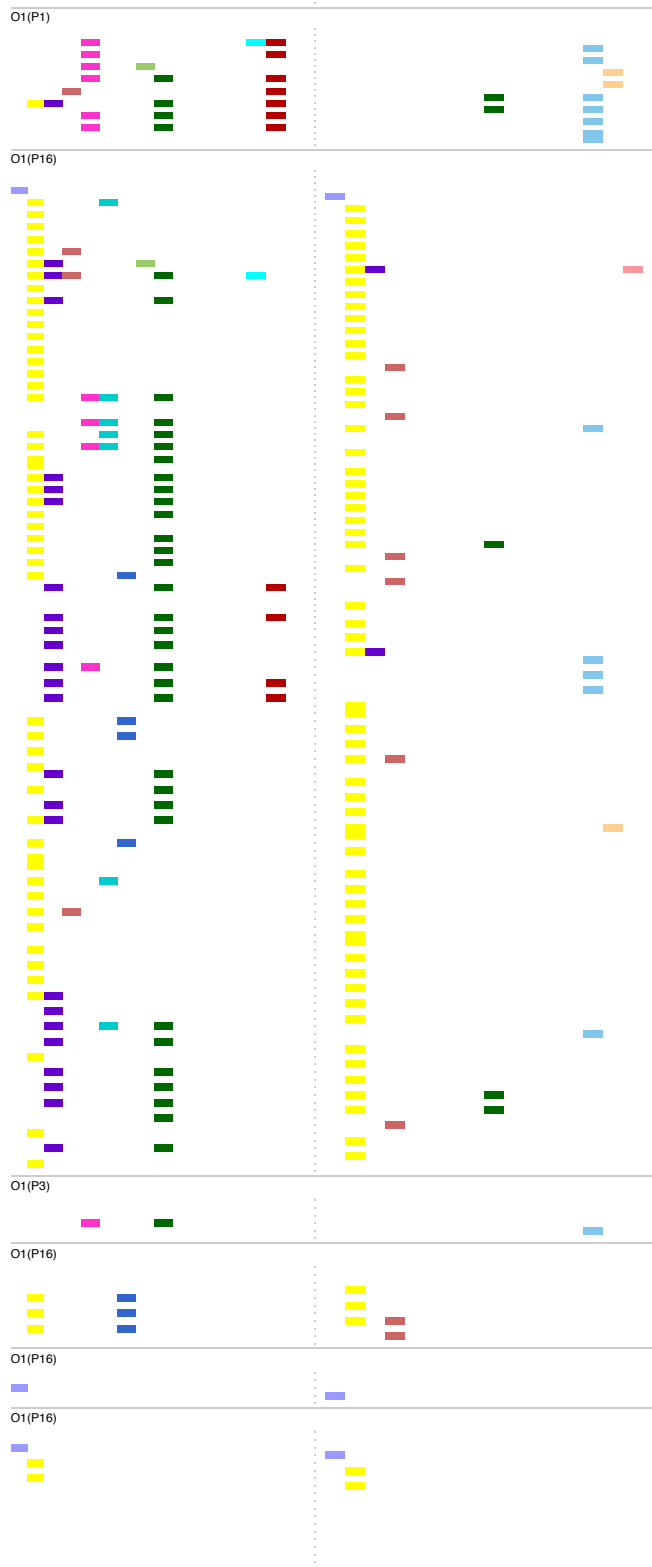




Transcript 5

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response



Transcript 6

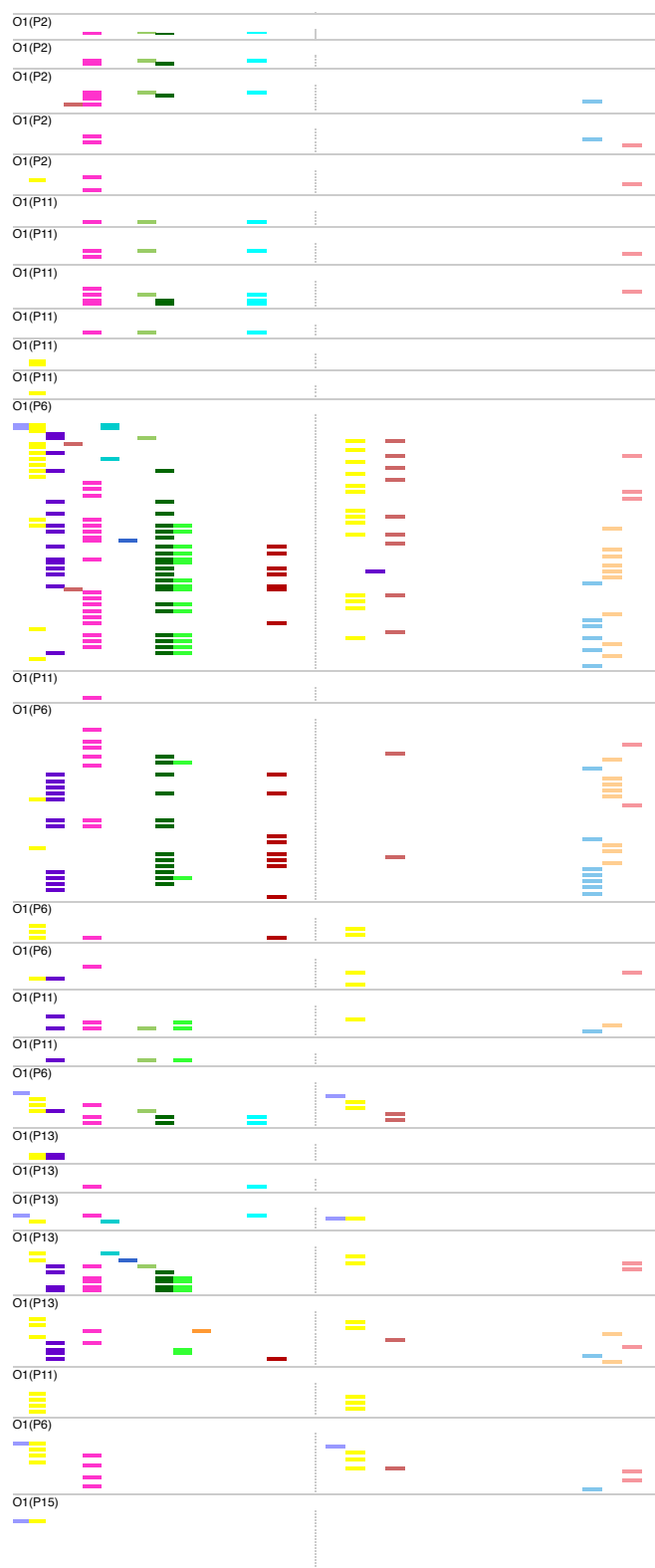
Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response

Transcript 7

Key

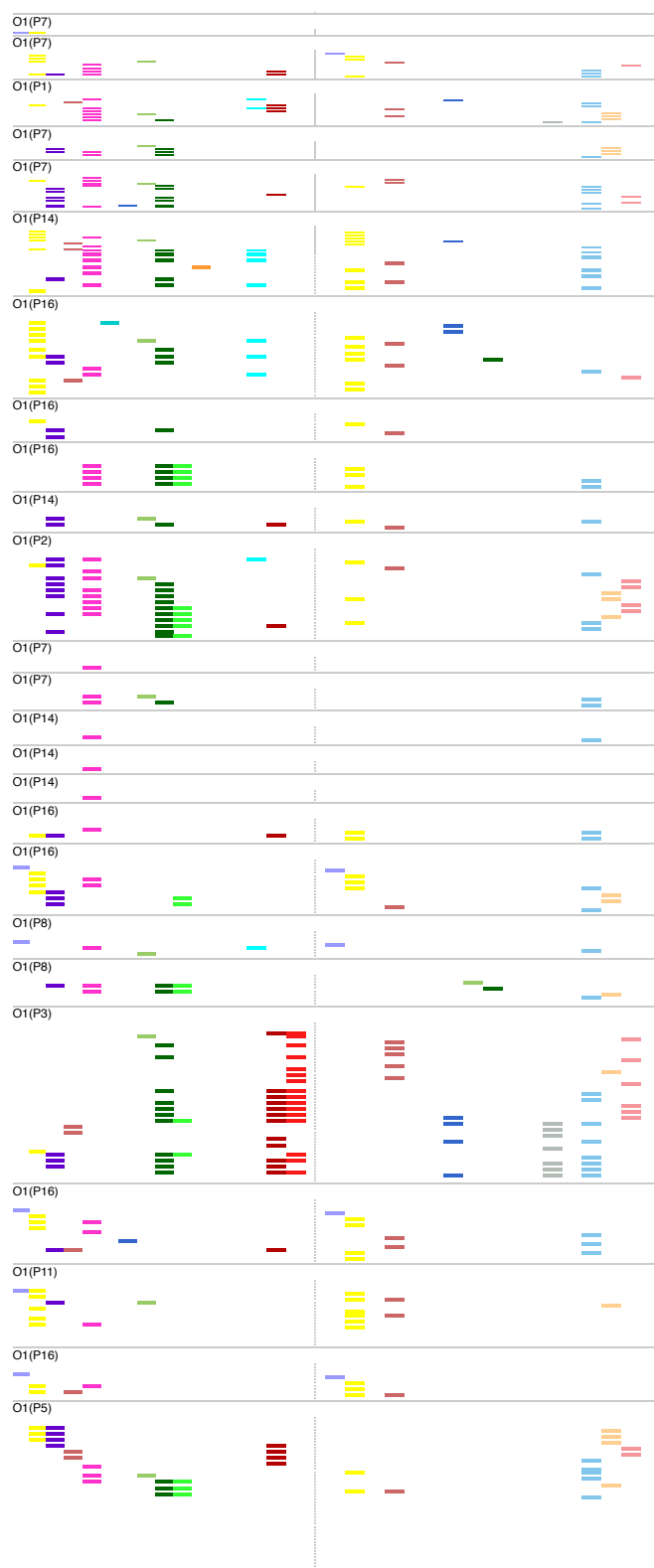
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- Sexual rapport
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- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response



Transcript 8

Key

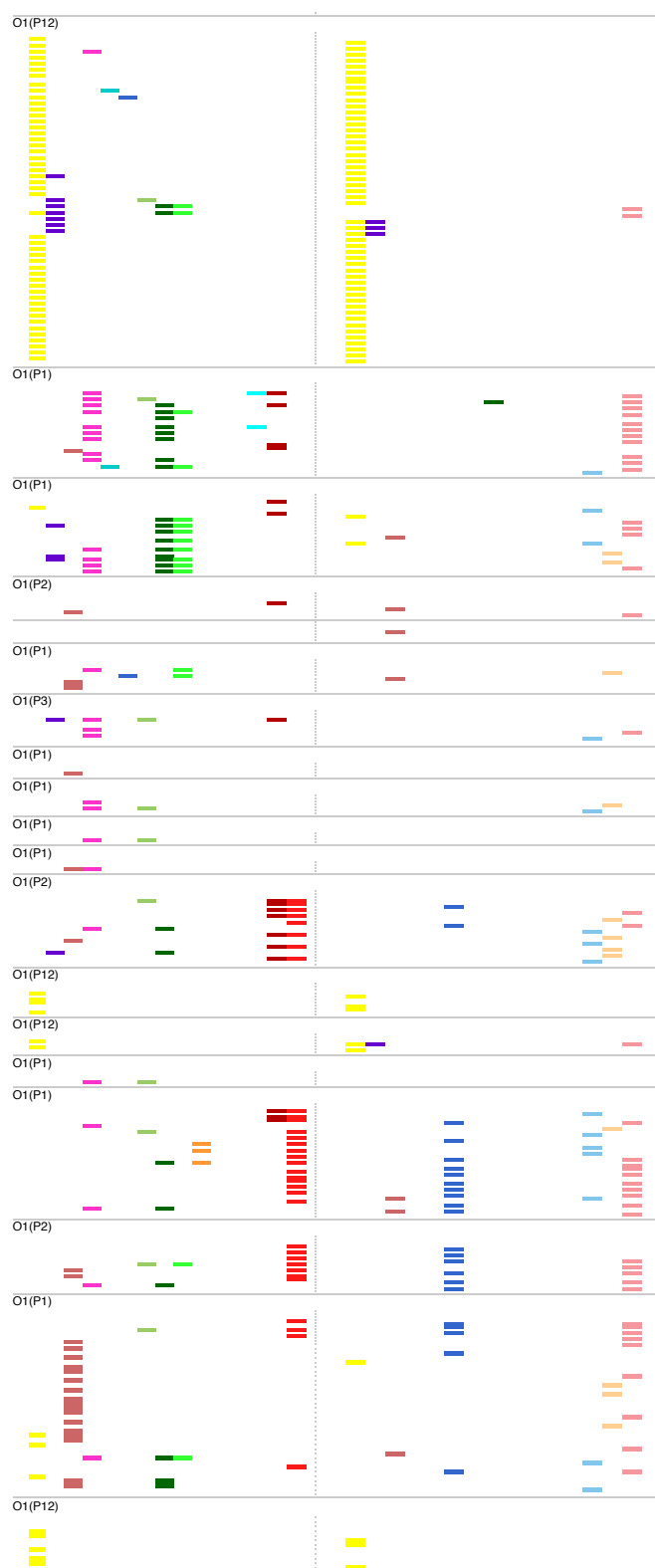
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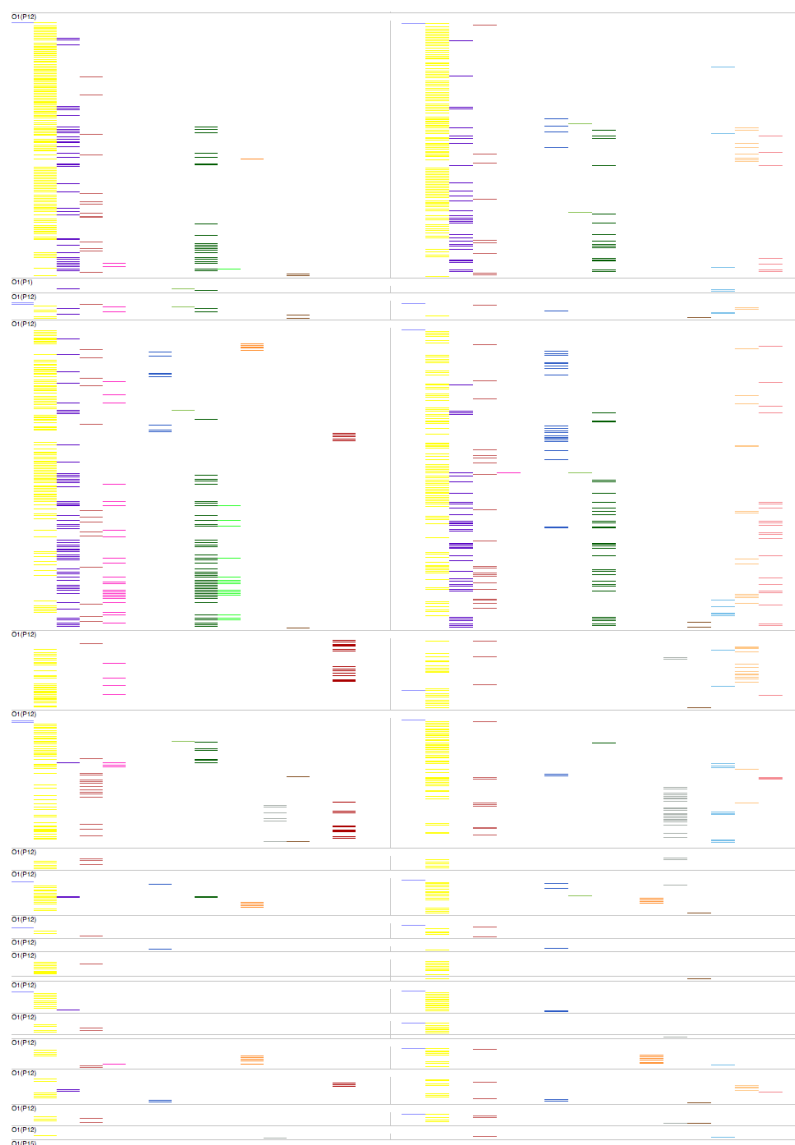


Transcript 9

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Negative response
- Mixed response
- Positive response



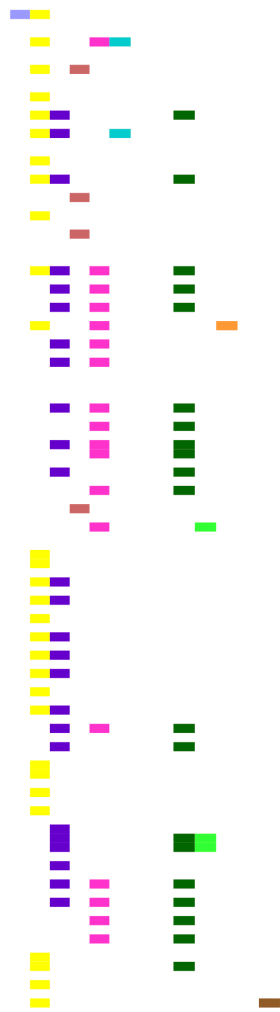


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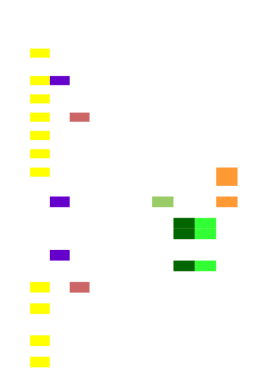
Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
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- Undesired response
- Mixed response
- Desired response

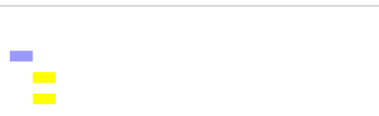
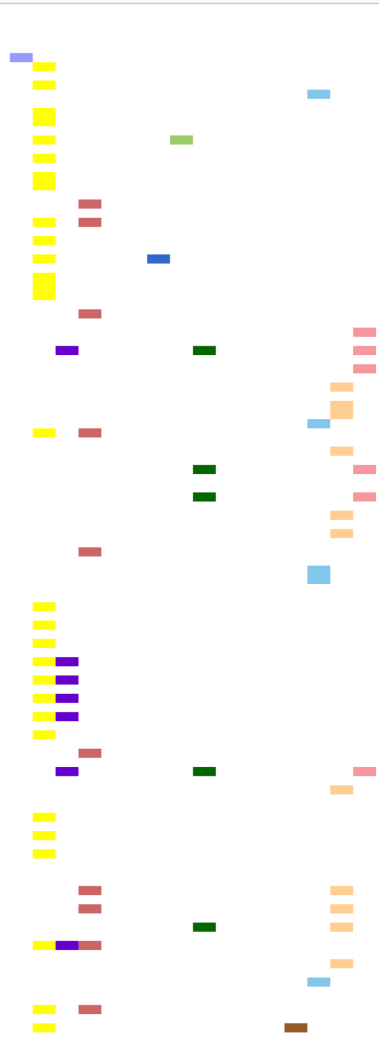
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O1(P6)



O1(P6)

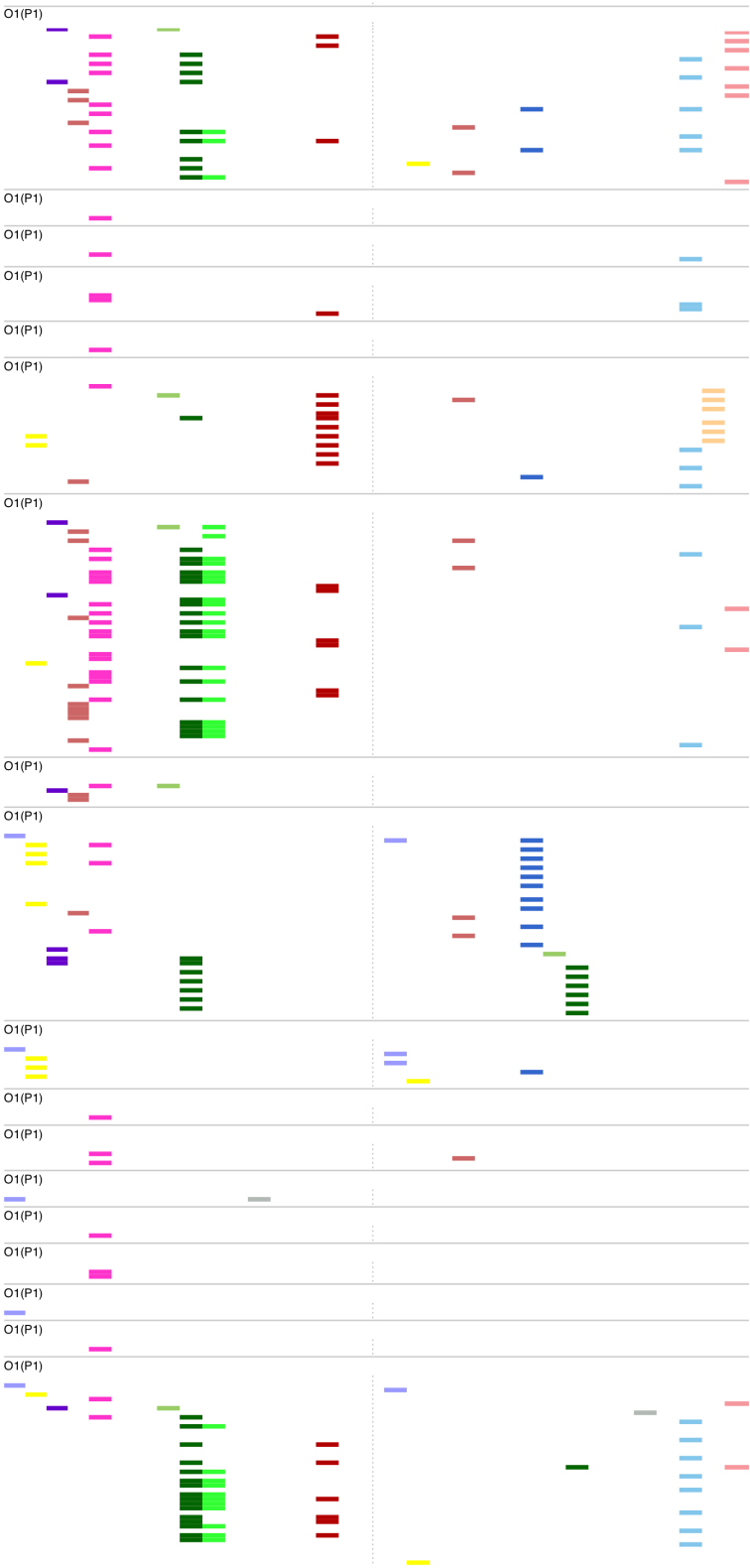


Transcript 11

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response

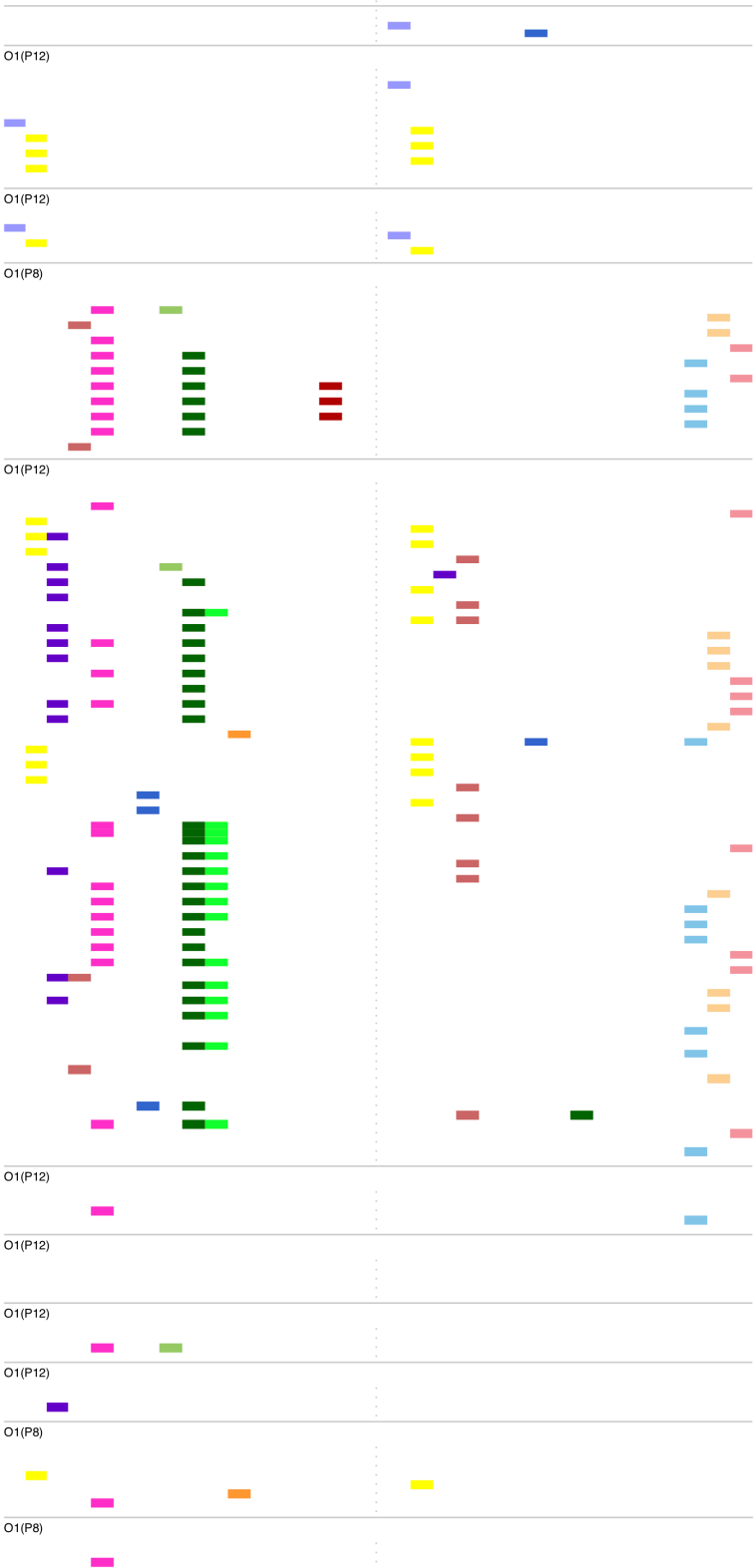
Transcript 12



Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response

Transcript 13



Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response

Transcript 14

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response



Transcript 15

Key

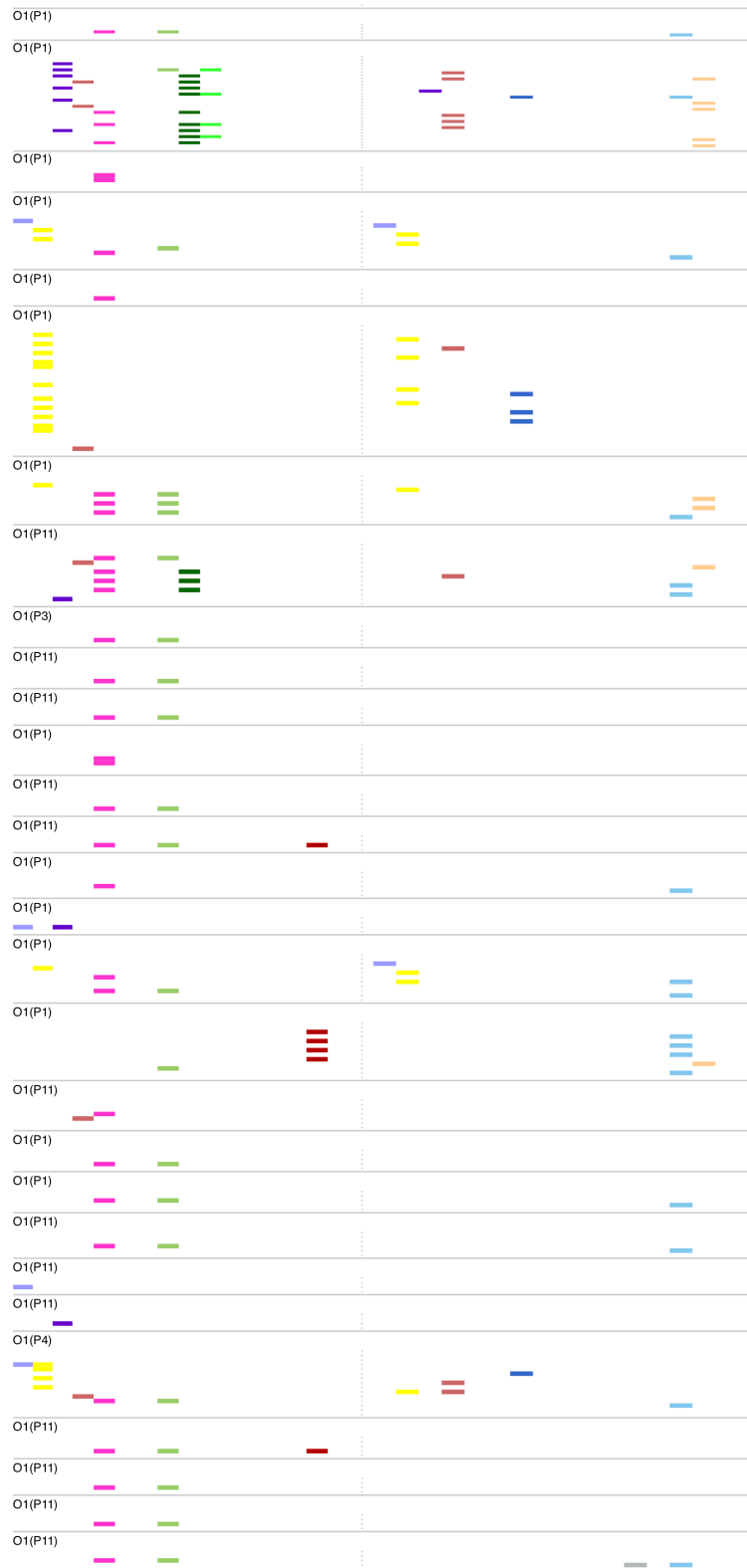
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- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
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- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response



Transcript 16

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
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- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response



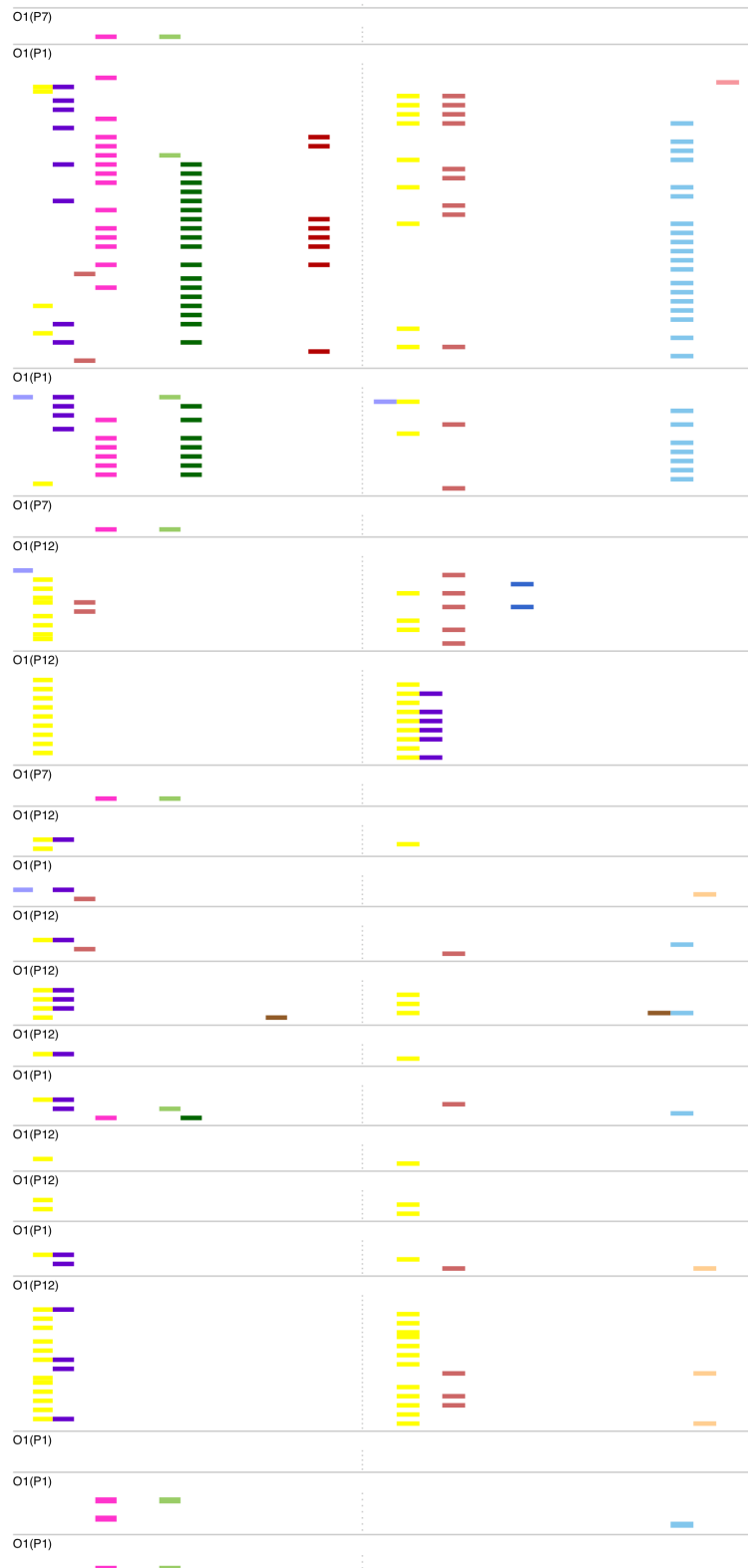
Key



Transcript 18

Key

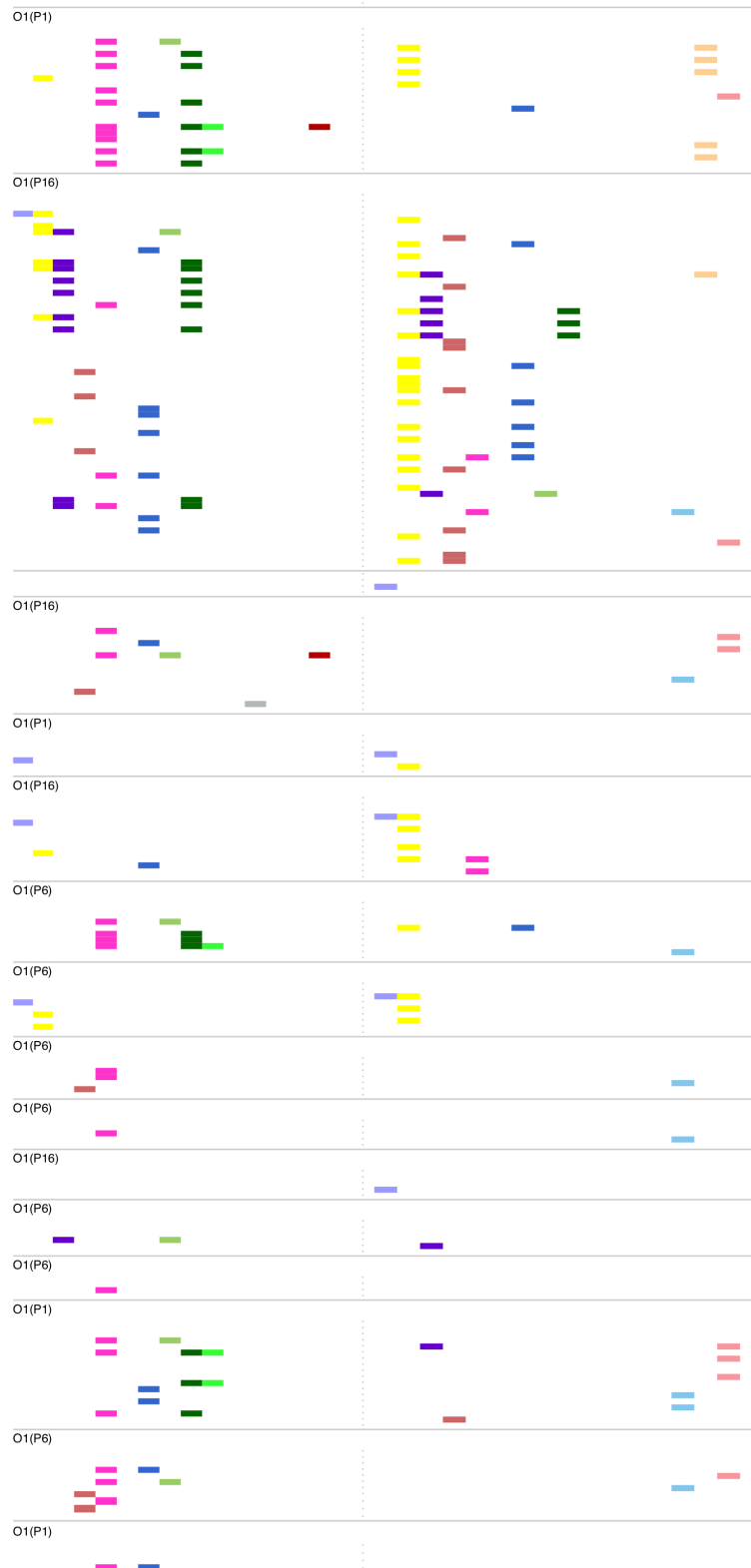
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- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
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- Initiating sexual topics
- Maintaining/escalating sexual content
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- Assessing role
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- Mixed response
- Desired response

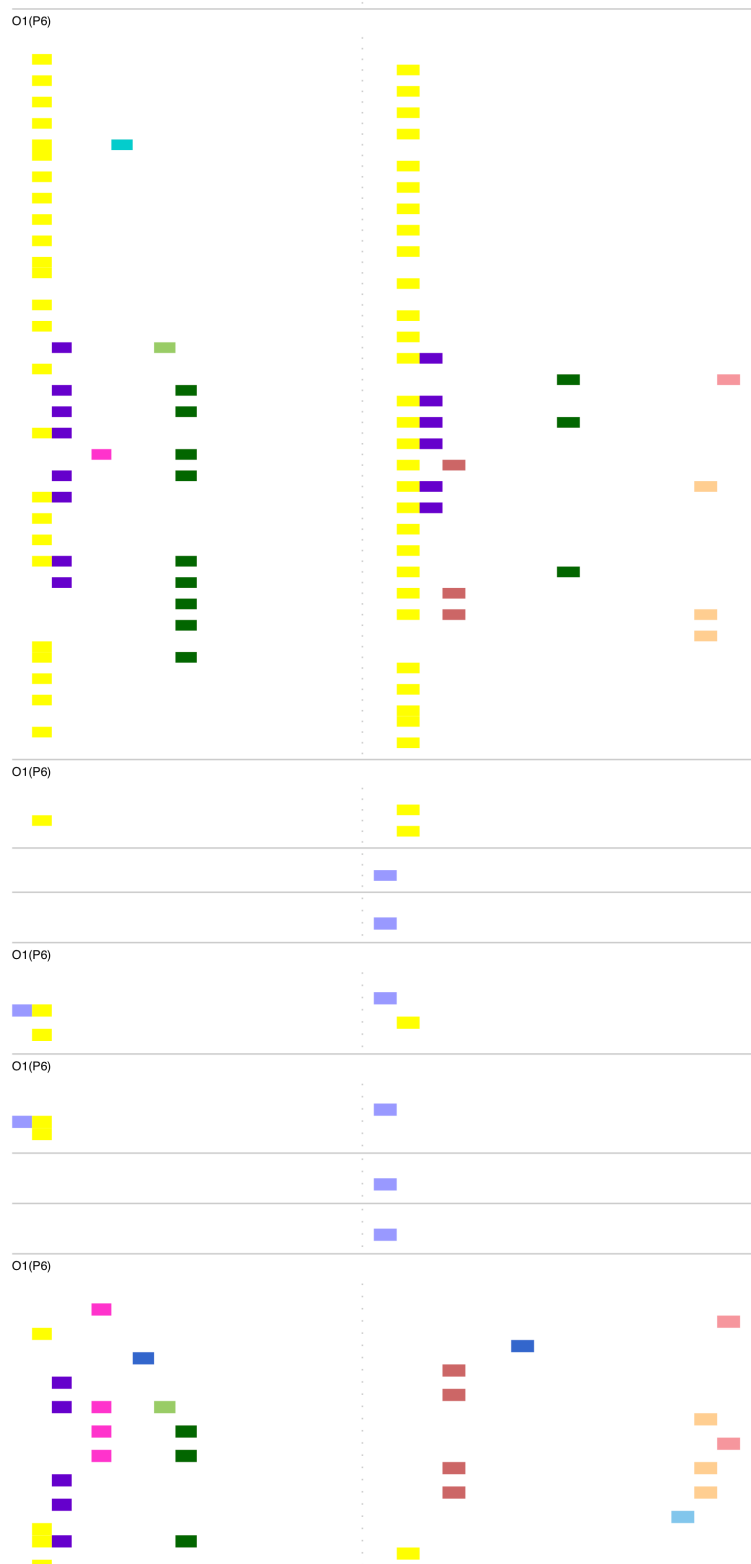


Transcript 19

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response





Transcript 20

Key

- Greeting
- Rapport
- Sexual rapport
- Maintaining conversation
- Assessing likelihood and extent of engagement
- Assessing criteria fulfilment
- Assessing and managing risk
- Initiating sexual topics
- Maintaining/escalating sexual content
- Immediate sexual gratification
- Meeting planning
- Reprimanding
- Sign off
- Assessing role
- Overt persuasion
- Extortion
- Undesired response
- Mixed response
- Desired response

Appendix G: Study 2 moves and strategies

Global move	Function(s)	Move	Function(s)	Strategies	Examples
Establishing/ maintaining relationship	To establish and maintain friendships/relationships	Greeting	To initiate conversation	Greeting terms	"hi" "hey"
		Maintaining conversation	To enable continuation of the current conversation and facilitate future contact	Inquiring about alternative communication methods/tools	"you not online on giga now?"
				Excusing self from conversation	"back in 5"
				Backchanneling/minimal responses	"oh right" "i see"
				Explaining absence in conversation	"sorry had to answer phone brb"
				Explaining technological difficulties	"sorry tried to put a link in and its gone barmy"
				Reporting availability	"ok i'm on here most days"
				Self-corrections	"...usual" "usually*"
				Giving contact details	"if not my email is *****"
				Checking interlocutor presence	"u there?"
				Requesting meaning clarification	"in what sense ;)" "pardon?"
		Rapport	To establish and maintain a positive relationship with interlocutor	Inquiring about personal information (name, location, vocation, contact info. Etc.)	"you from uk?" "so what do you do for a living"
				Pleasantries	"nice talking to you..."

	Reporting personal information (name, location, contact info., etc.)	“me too midlands”
	Inquiring/ reporting about home life and states of affairs	“ah does the wife know about your other adult interests?”
	Reporting hobbies, interests, activities	“...been camping in south a few times...”
	Expressing opinions and emotions	“...i couldn't put up with living with a woman... they piss me off too much!”
	Praise	“hadn't thought of that nice idea”
	Compliments/ flattery	“your english is good ”
	Apologising	“sorry i dont have more to offer”
	Thanking	“thanks much appreciated”
	Endearment terms	“hi mate...”
	Reporting difficulties associated with CSA offending	“ its difficult to get hands on in uk everyones really paranoid about their kids”
	Agreeing/ reporting similar interests/ preferences/ stances to interlocutor	“ i would too...”
	Positive emoticons	“:)”
	Laughter terms	“lol”
	Giving reassurance	“it was the first time for me with someone off the net so was worried but all was fine...”
	Expressing approval	“nice”

			Expressing sympathy	"pity"
			Admitting/ confessing	"i came way too quickly"
			Reporting availability	"ok i'm on here most days"
			Expressing romantic/sexual interest in interlocutor	"cool - i'm bi.....and I'm a bottom for older men usually" "what a pity you're in another continent. lol"
			Othering different types of offender and practices, or non offenders	"...just fantasy role play rubbish it annoys me" "good to talk to a brit for a change"
			Deflecting responsibility	"...its all stirred up by the media"
			Expressing positive wish for interlocutor	"hope you get in there!"
			Expressing concern for boundaries	"I hope I didn't offend you.."
		Sign off	To signal conversation departure	Sign off terms "speak soon my friend" "bye"
Character Assessment	To determine the nature of offender and offending practices	Identifying interests/ experience	To determine interlocutor's sexual interests, desires and preferences, level of previous and current sexual and criminal experience and practices, and likely nature/extent of ongoing/ future offences	Inquiring about sexual interests and preferences "what are you into?" "what sort of ages u into?" "... is it just the vids and pics that you like?"
				Inquiring about nature/extent of current and historical offending events/ practices "u mainly just look at stuff these days then?" "how young u had ?"

		Inquiring about immediate actions	"what [illicit media] u looking at?"
		Inquiring about current/past victim(s)	"he's a good boy then"
		Inquiring about likely nature/ extent of future offending events/ practices	"whats your next dare"
		Inquiring about technological practices/web use	"what other sites you use? " "do u keep the web cam footage"
		Inquiring about contact with other offenders	"you chat to anyone in the UK? i'm looking for new friends"
		Inquiring about potential co-abuse	"you ever get down to london?"
		Inquiring about home and family circumstances	"do you have any daughters ?"
		Inquiring about veracity of claims	"sounds pretty far fetched>"
		Inquiring about details of illicit imagery possession	"is your collection any good?"
		Testing offending boundaries	"so you don't think they are too young for those things?"
	Reporting interests/ experience	To report/ describe sexual interests, desires and preferences, level of previous and current sexual and criminal experience and practices, and likely nature/extent of ongoing/ future offences	"iam bi" ""younger the better""

				Reporting/ describing nature/extent of current and historical offending events/ practices	"I like to make my boys bending over the bowl" "do my son since his birth"
				Describing current/past victim(s)	"8 year old..." "son of a friend"
				Reporting likely nature/extent of future offending events/practices	"... i'm always open to opportunities should they come along ;-)" "i would do it again..."
				Reporting technological practices/web use	"cam on omegele when i want to cum"
				Reporting immediate/future desires	"good, very horny, need some kiddie cunt or cock" "i want to get the end of my cock in at least..."
				Reporting details of illicit imagery possession	"unfortunately not enough, you?"
				Reporting home and family circumstances	"i dont live with her mother which makes is easier"
Fantasy Narrative	To share stories/ fantasise about past, current and future sexual experiences. Often for sexual gratification, immediate or future.	Eliciting narrative	To elicit interlocutor's previous, current or planned sexual encounters and experiences	Inquiring about sexual activities	"mmm did he sucked you good ?"
				Inquiring about access methods/ circumstances of abuse	"how it happened the last times"
				Eliciting victim/ child descriptions	"how old was he?" "May i ask what your niece is like.."

		Inquiring about victim's perspective	"he liked your sperm ?"
		Continuation inquiries	"what happened then?" "what she say?"
	Reporting event/plans	To report/ describe previous, current or planned sexual encounters and experiences	Reporting/ describing sexual activities "he sucked me off let me do the same..." "we are both bisexual so we will play with each other as well as the kids"
		Reporting access methods/ circumstances of abuse	"his dad went out and i sat with him and got him real horny"
		Reporting victim/ child descriptions	"8 year old..."
		Reporting victim's perspective	"loves it"
		Reporting current sexual behaviour	"...are you wanking like me?"
		Reporting planned events	"shes calling here after school to get her present :)"
		Reflecting on events	"it was good you're right though i was wary"
	Supporting narrative	To show engagement with and aid continuation of interlocutor's narrative	Expressing positive evaluations of narrative elements "wow hot"
		Expressing jealousy/desire for interlocutor's experience	"would love to be able to do that whenever I wanted"
		Contributing suggestions/new elements (to interlocutor's narrative)	"mmm hope than he cleaned it good after"

				Conjecture	"damn bet her little mouth looked incredible on your cock as she stared up at you"
				Contributing own experiences/ preferences (to interlocutor's narrative)	" i love to spank lil boys....hard"
Support	To share advice and support (personal and practical) and facilitate offending practices	Legitimising CSA	To frame CSA as normal and acceptable in the context of the immediate conversation, and validate interlocutor's sexual interests in children	Expressing positive evaluation/ encouragement of CSA topics/ descriptions and illicit media	"hot" "sweet....how far did u get?"
				Inquiring if victim views experience as positive	"he liked ?" "she was willing and curious, or..?"
				Reporting/ suggesting victim's perspective as positive	"... he's fully into it" "bet he loves it"
				Describing victim as dependent on offender relationship	"... make him addict to cum and orgams"
				Describing victims as wanting/ deserving of abuse/victim blaming	" its what most of them want. they do love to cocktease" "... I enjoy hurting the little whores"
				Reporting permission for CSA (victim or other)	"he let me do what i wanted to him so i did" "...he leaves the room and lets you do what you want..."
				Minimising victim's perspective	"he didnt like it but who cares"

		Minimising severity of abuse/ criminal behaviour	“nothing life threatening” “stuff like that” “just the normal stuff” “i take it she's completely unaware of your tastes”
		Praising reported CSA	“nicely done...”
		Praising victim behaviour	“wow good girl...” “she behaves really nicely”
		Expressing jealousy/desire for interlocutor's experience/ situation	“would love to be able to do that whenever I wanted”
		Expressing agreement with/ approval for interlocutor's experiences/ fantasies	i'm sure if i'd got that far i would have had my cock inside her too
		Reporting matching CSA preferences/ practices	“sounds similar to me...”
		Highlighting commonality of CSA	“u experienced or just like looking at pics like most?”
		Deflecting/ mitigating responsibility	“...its all stirred up by the media” “i dont know if i could have helped myself...”
		Euphemisms	“u having any fun with your 2?”
	Seeking support	To obtain help, advice or guidance regarding on and offline CSA-related practices	Inquiring about access methods/ circumstances of abuse “how it happened the last times” “how u make her agree?”
		Inquiring about access methods/ circumstances of abuse (implicit)	“wish i had better access to some kids”

	Requesting/ arranging access help	“does he have access to anyone younger would love it” “ok give him my tor id please”
	Inquiring about technological practices/web use	“...whats the score with this torchat im new to it” “where other sites do u use...”
	Inquiring about material sharing methods/ practices	“how do you share stuff normally?”
	Inquiring about risk of online CSA practices	“its supposed to be pretty safe isnt it” “i read the terms mainly legal isn't it?”
	Inquiring about risk of offline CSA practices	“how did you keep it [quiet] from him?”
	Requesting technological assistance/ passwords	“hey whats the pw”
	Reporting technological difficulties	“no instalation on that link u sent me”
	Inquiring about contact with other offenders	“you chat to anyone in the UK? i’m looking for new friends”
	Requesting moral guidance/ reassurance regarding CSA	“so you don't think they are too young for those things?”
	Requesting involvement in interlocutor’s abuse practices (implicit/explicit)	“would love to watch them getting dirty”
	Expressing worries about risks associated with CSA	“...as she gets older I fear i will have to stop...”
	Inquiring about/ suggesting potential co- offending	“easier with 2 of us”

		Expressing desire to abuse (general or specific scenario)	
	Giving Support	To offer or provide help/ advice/ assistance regarding online and offline offending (personal and practical)	Reporting access methods/ circumstances of abuse "his dad went out and i sat with him and got him real horny"
		Suggesting access methods/ opportunities	"...love forgotten publictoilets too"
		Recommending methods to access illicit material online	"... are you in the #picpaste channel on irc? worth looking at"
		Advising/ explaining about technological practices/web use	"it is just a simple chat client" " i look at pics on motherless.com sometimes but they are more legal"
		Providing links to online CSA networking/ illicit material sources	
		Advising about risk on online CSA practices	"u on torchat its very secure"
		Advising/warning about risks of offending practices	"dont keep writing in theere vget kicked for that as weel" "watch out for videos - get them to wave or hold up fingers or something" "...be careful though guessing the mum isn't likeminded"
		Advising about risk management strategies	"i threatened the little shit"

				Inquiring about general sexual interests and preferences	"what do you like watching?"
				Inquiring about current online CSA practices	"how do you share your stuff then?"
				Praising/ approving of abuse methods/ techniques	"best way"
				Offering/ arranging access help	"would i be ok to give him your torchat id and he could get intouch with you?"
				Assisting abuse-planning or co-offending	"have u got anywhere in mind?"
				Media blaming	"...its all stirred up by the media"
				Praising illicit/ abusive media	"its lovely"
				Expressing sympathy/ empathy	"I know where your coming from.."
Media Sharing	To share illicit media files	Negotiating	To achieve/ arrange deal with interlocutor	Offering/ accepting/ declining terms of media trade/deal	"u got anything i generally do like for like"
		Requesting illicit media	To determine interlocutor's possession of illicit media To obtain illicit media from interlocutor	Requesting/ inquiring about illicit material	"...you got any good pics?"
		Offering/ providing illicit media	To offer or provide illicit media files	Sending links to illicit chatj/media sites	
		Assessing and managing risk	To gauge and manage types and levels of risk associated with current interaction/ future offending	Inquiring about online IDs	"who are you on giga ?"

	Evading/refusing information requests/vague responses	"snatched him from a rural area" "not saying"
	Evading/refusing material share requests	"yes but not share with u "
	Inquiring about risk of access arrangements	"how well do you know him is he discreet?"
	Inquiring about access to online ID	"you get my id from giga ?" "where did u find me?"
	Justifying access to online ID	"got your id off giga"
	Requesting illicit material	"send a pic pls you like"
	Inquiring about identity	"who r u?"
	Justifying/ explaining questions	"i lived in zimbabwe for a while i just wandered if it was near"
	Testing offending boundaries	"so you don't think they are too young for those things?"
	Territorial warning	"you keep your hands off the kids I'm trying to pedo ;p"
	Justifying/ excusing difficulties associated with image trade	"pc is playing up njo doubt"
	Threatening to end interaction/ material trade	"sorry mate will have cancel your upload if your not playing by the rules"
	Challenging abuse claims	"sounds pretty far fetched?"

Appendix H: Study 2 move-maps



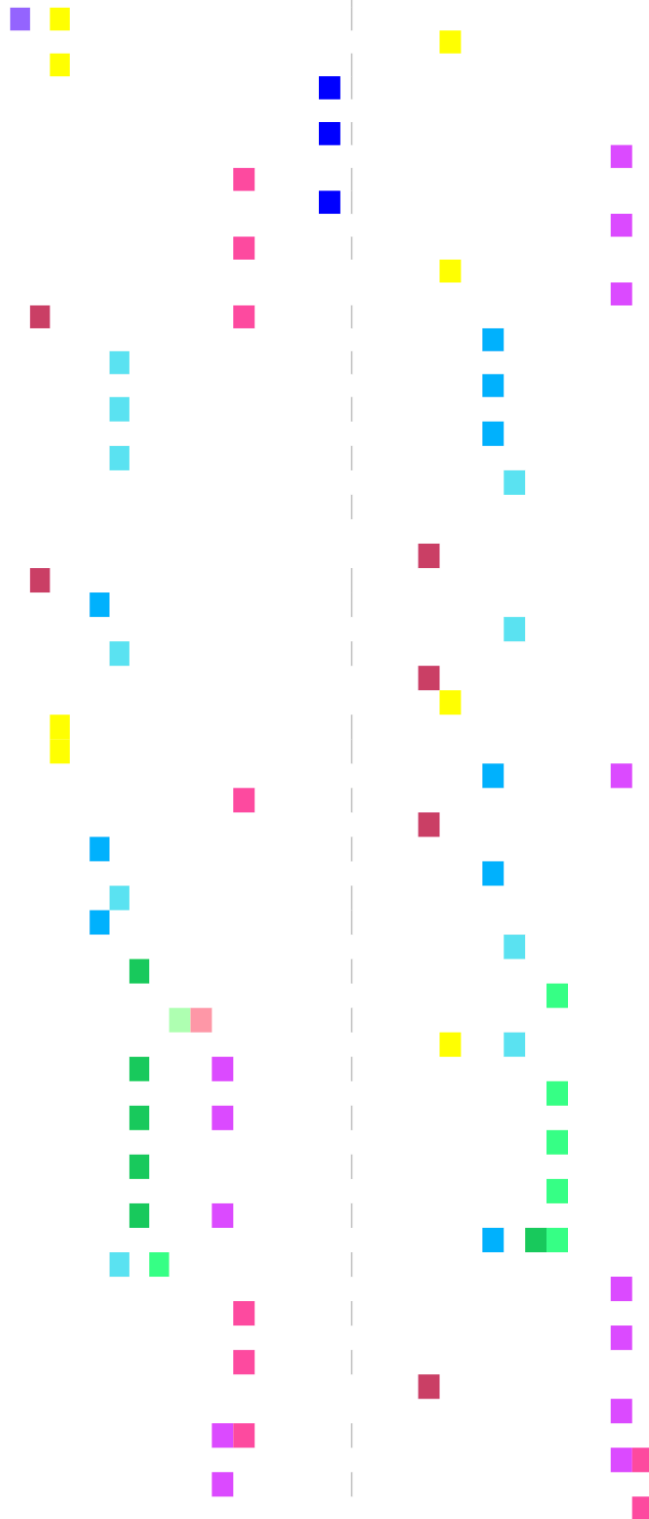
O2

UC1

Transcript 2

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



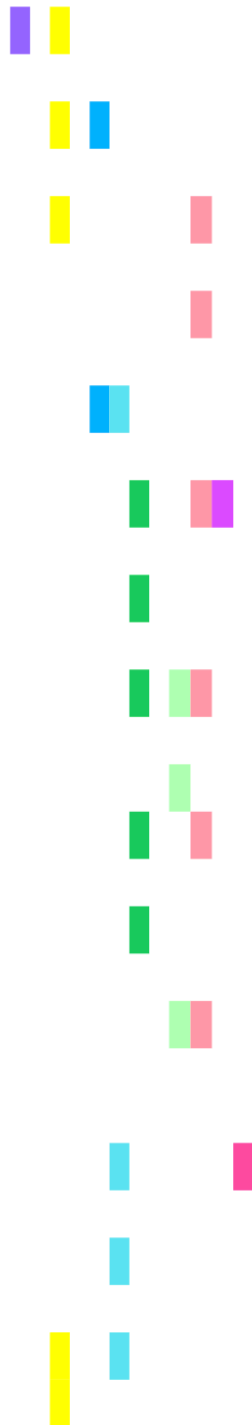
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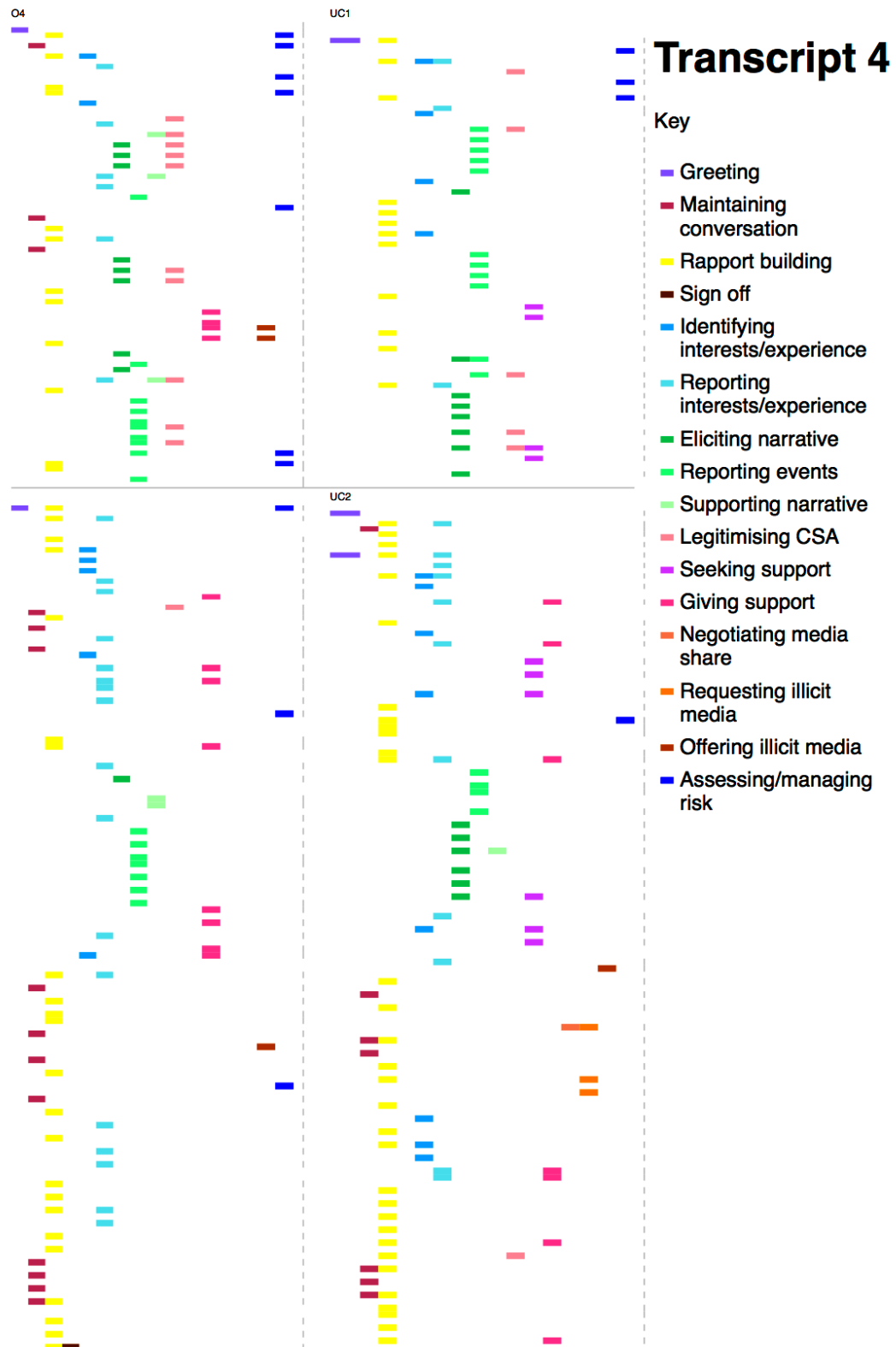
UC1

Transcript 3

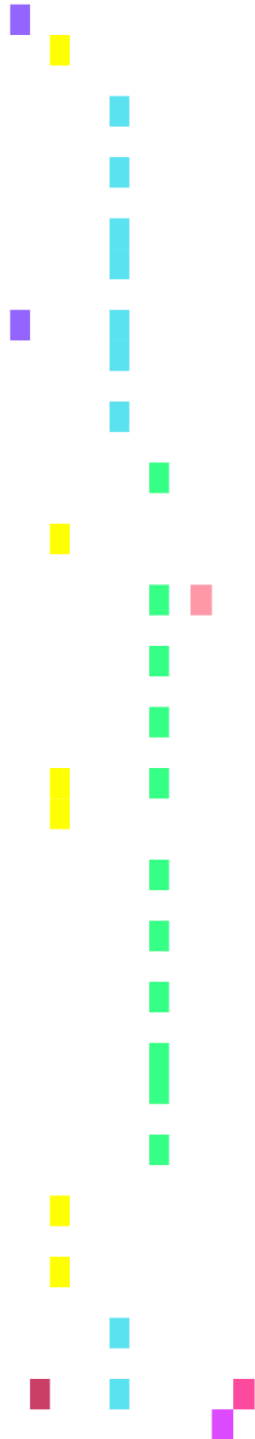
Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk





O5



UC1



Transcript 5

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

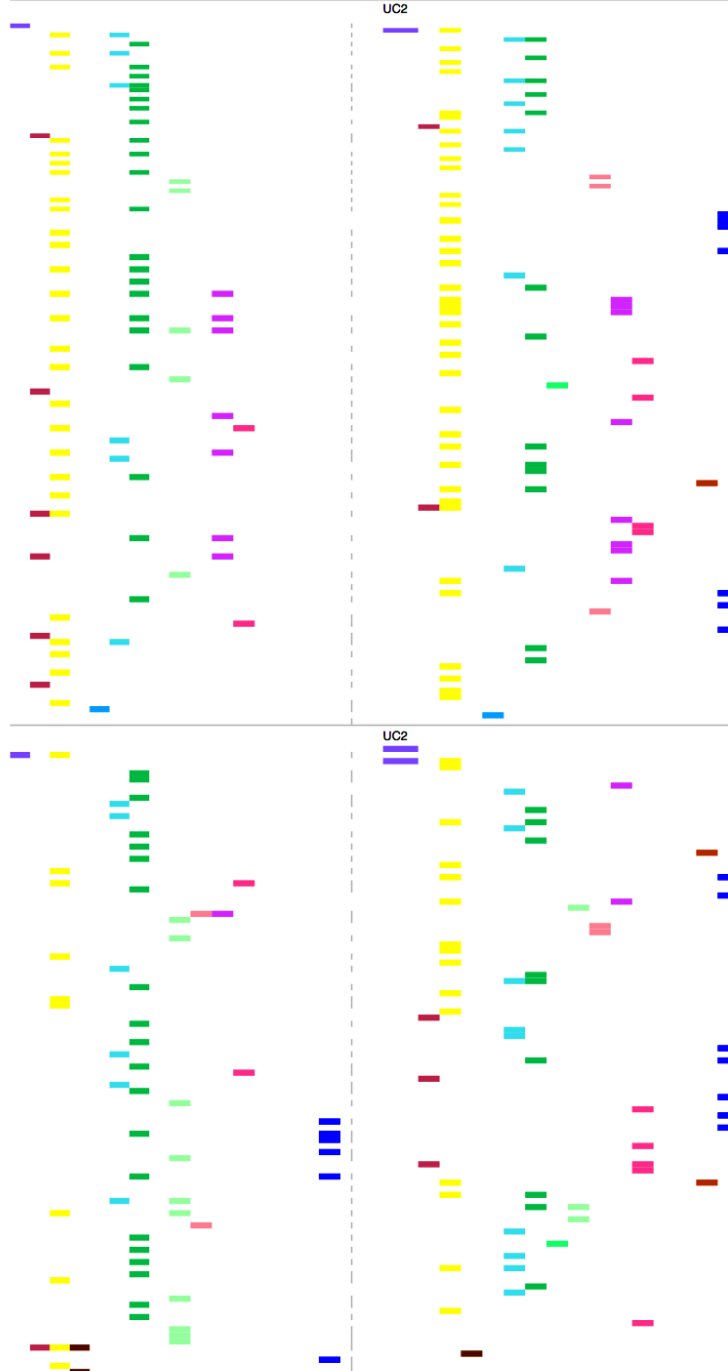
O6

UC1

Transcript 6

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



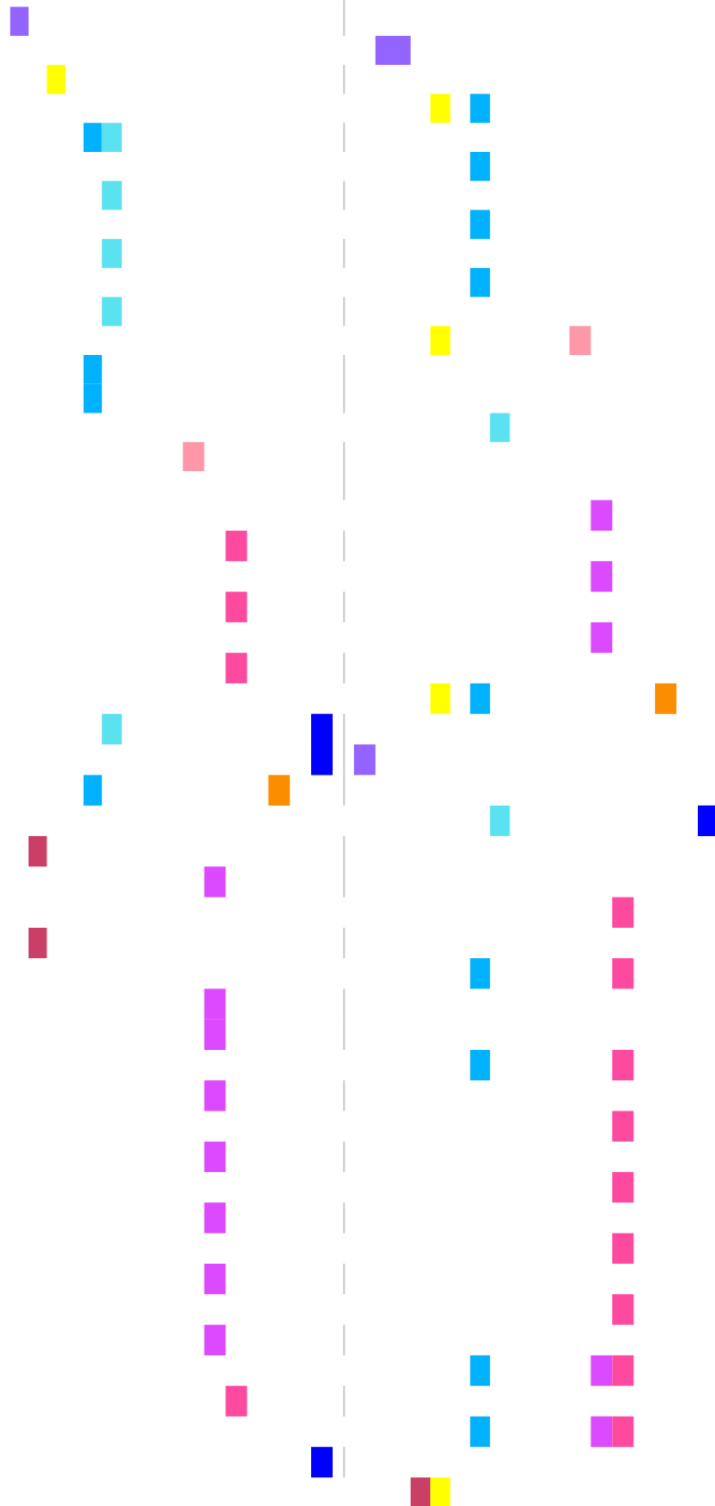
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UC1

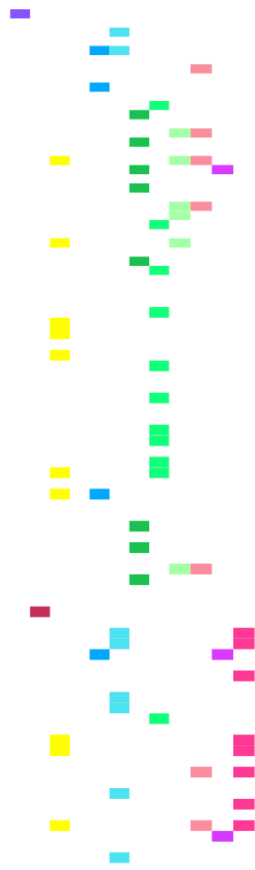
Transcript 7

Key

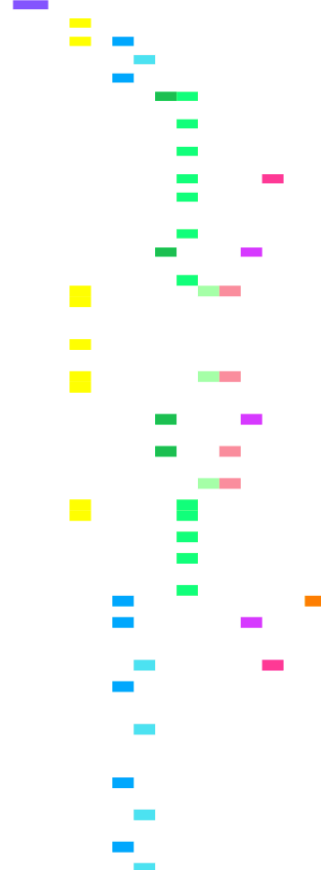
- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



O8



UC1

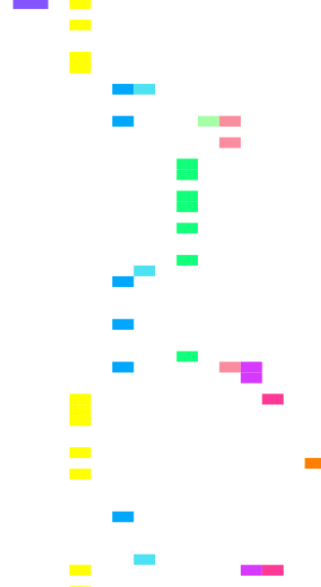


Transcript 8

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

UC3



UC1

Key

- Key**
- Greeting
 - Maintaining conversation
 - Rapport building
 - Sign off
 - Identifying interests/experience
 - Reporting interests/experience
 - Eliciting narrative
 - Reporting events
 - Supporting narrative
 - Legitimising CSA
 - Seeking support
 - Giving support
 - Negotiating media share
 - Requesting illicit media
 - Offering illicit media
 - Assessing/managing risk

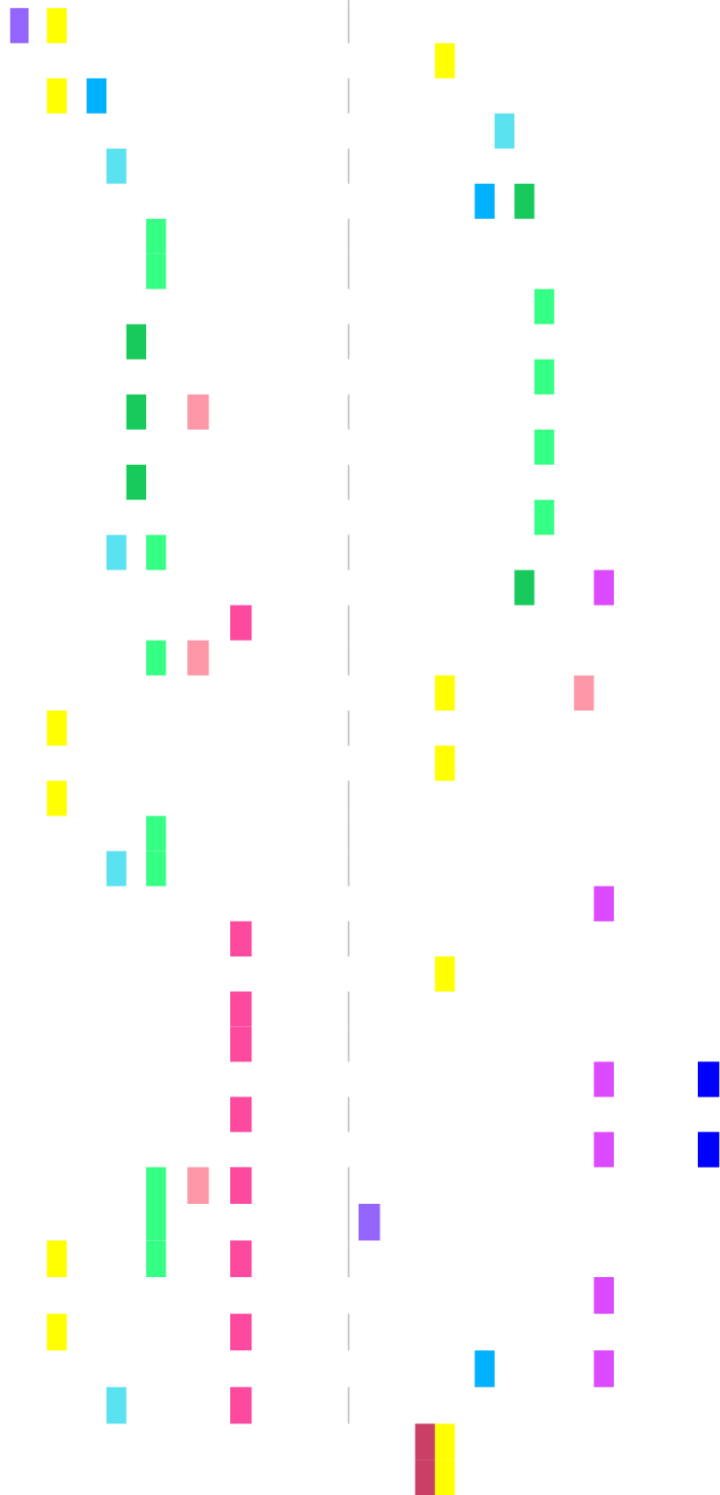
O10

UC1

Transcript 10

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



Category	Count
Purple	10
Blue	10
Yellow	10
Light Blue	10
Green	10
Light Green	10
Pink	10
Magenta	10
Red	10
Brown	10

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
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- Assessing/managing risk

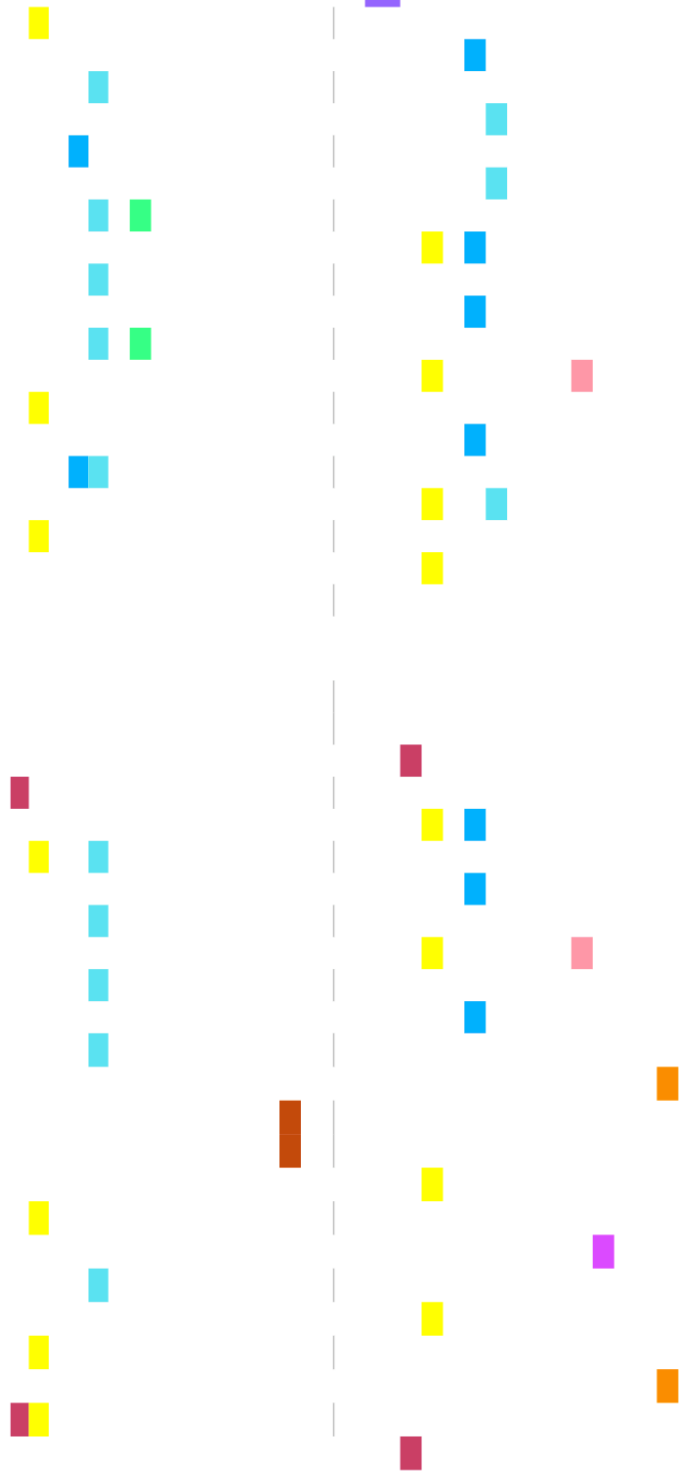
O12

UC1

Transcript 12

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk





O14



UC1



Transcript 14

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

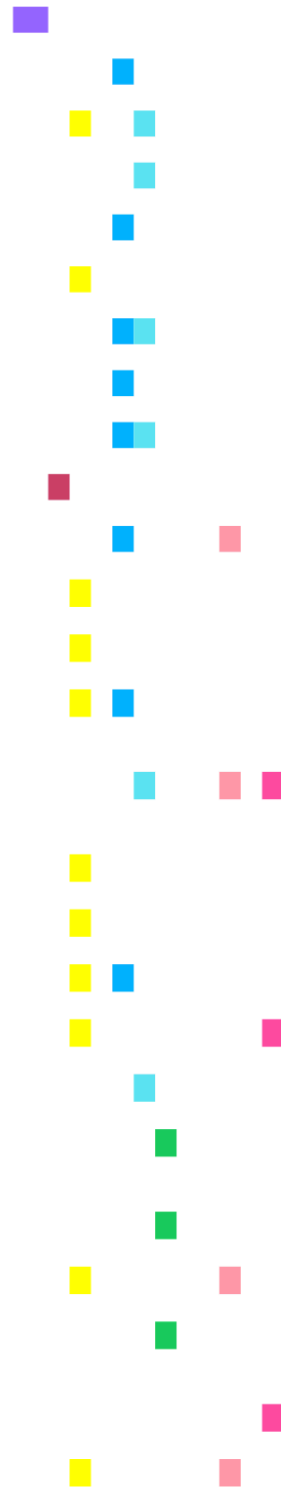
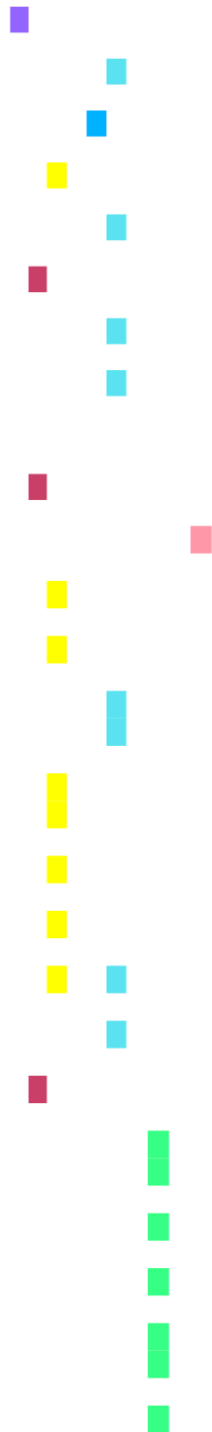
O15

UC1

Transcript 15

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



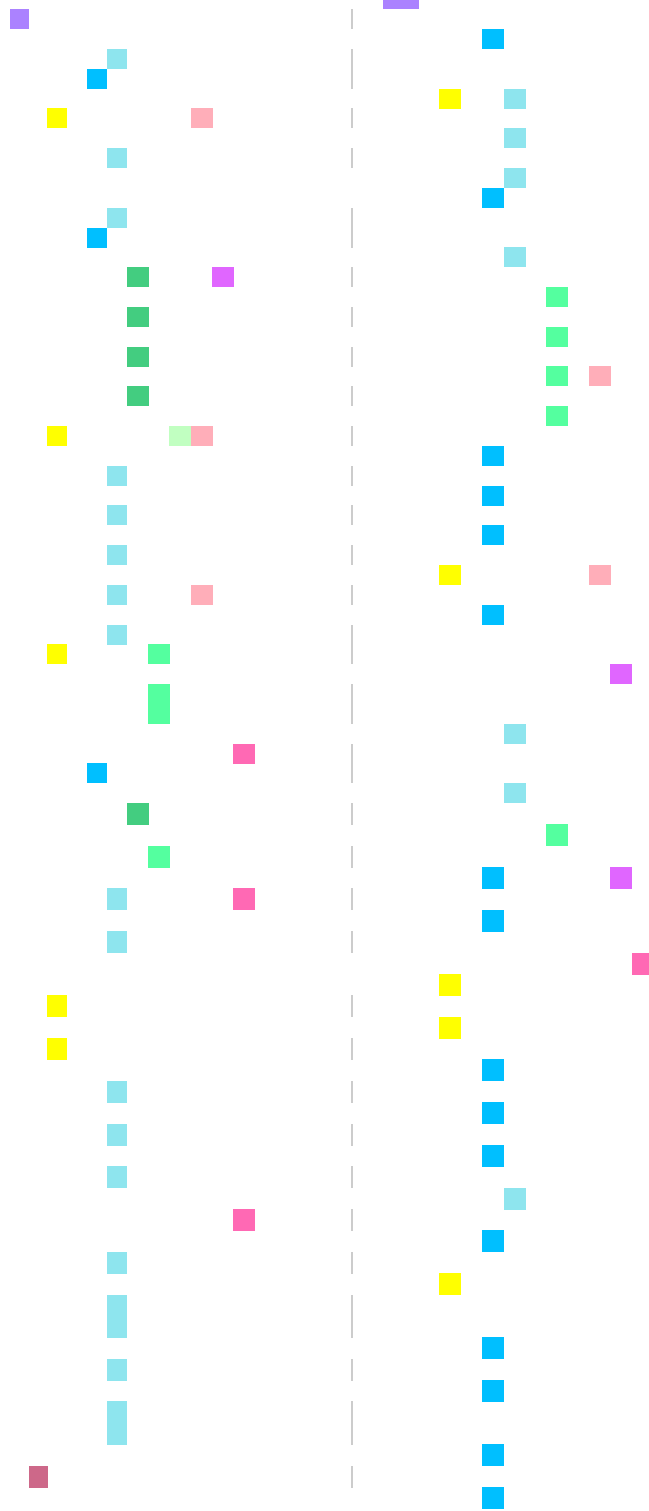
O16

UC1

Transcript 16

Key

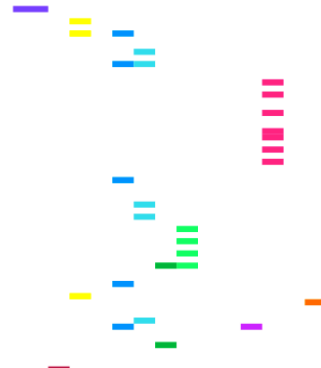
- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



O17



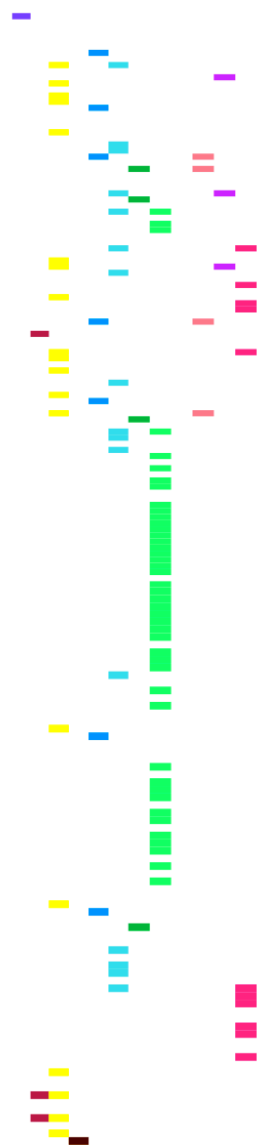
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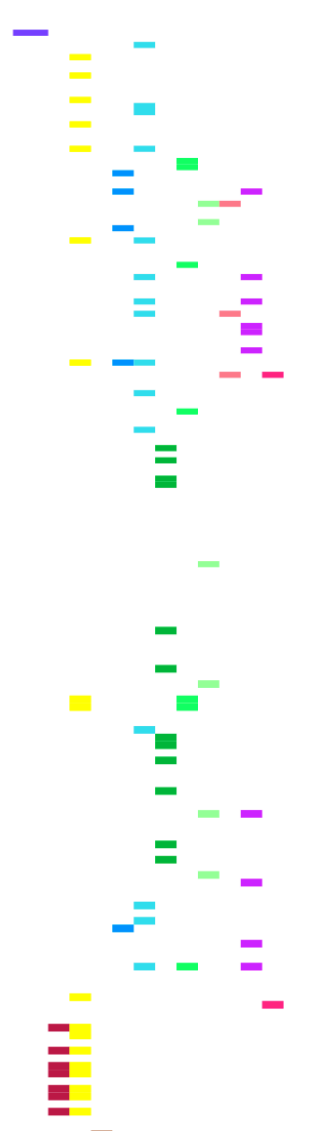
Transcript 17

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



UC3



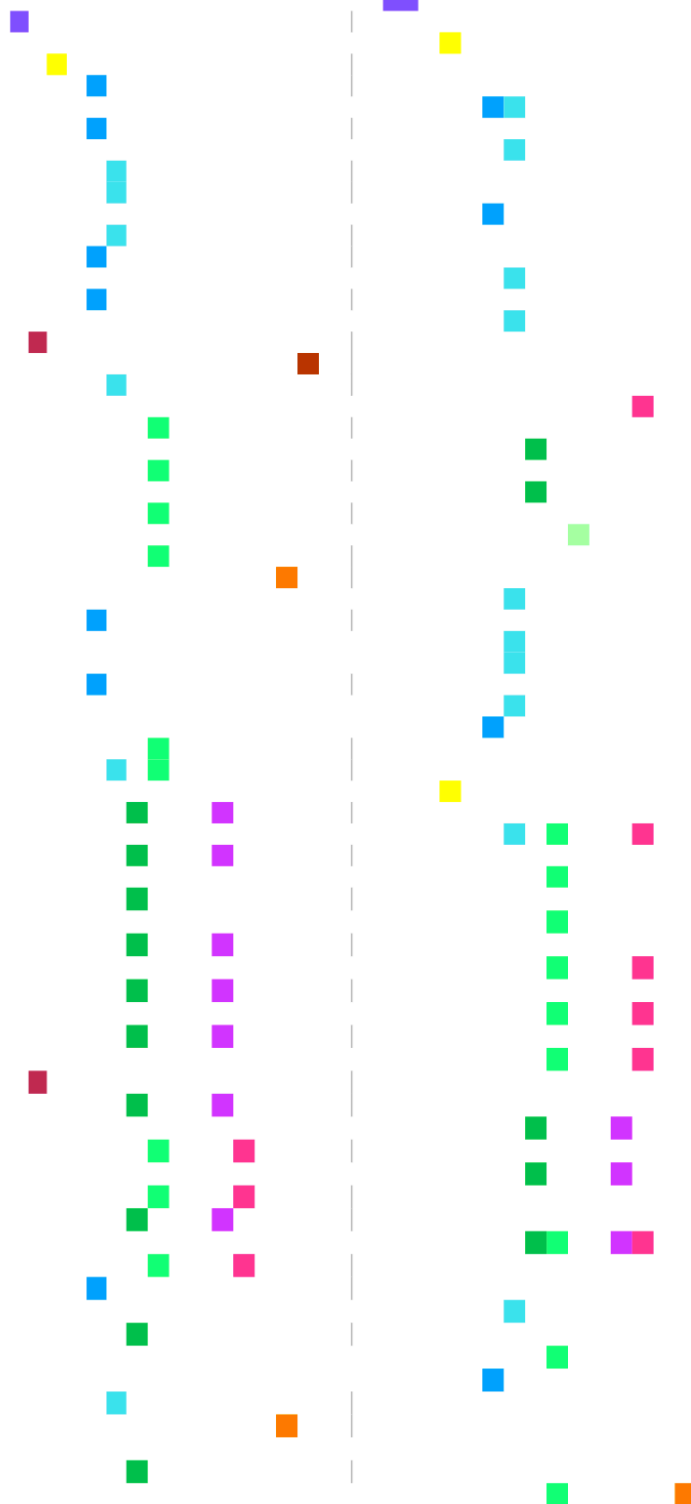
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UC1

Transcript 18

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



O20



UC1



Transcript 20

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

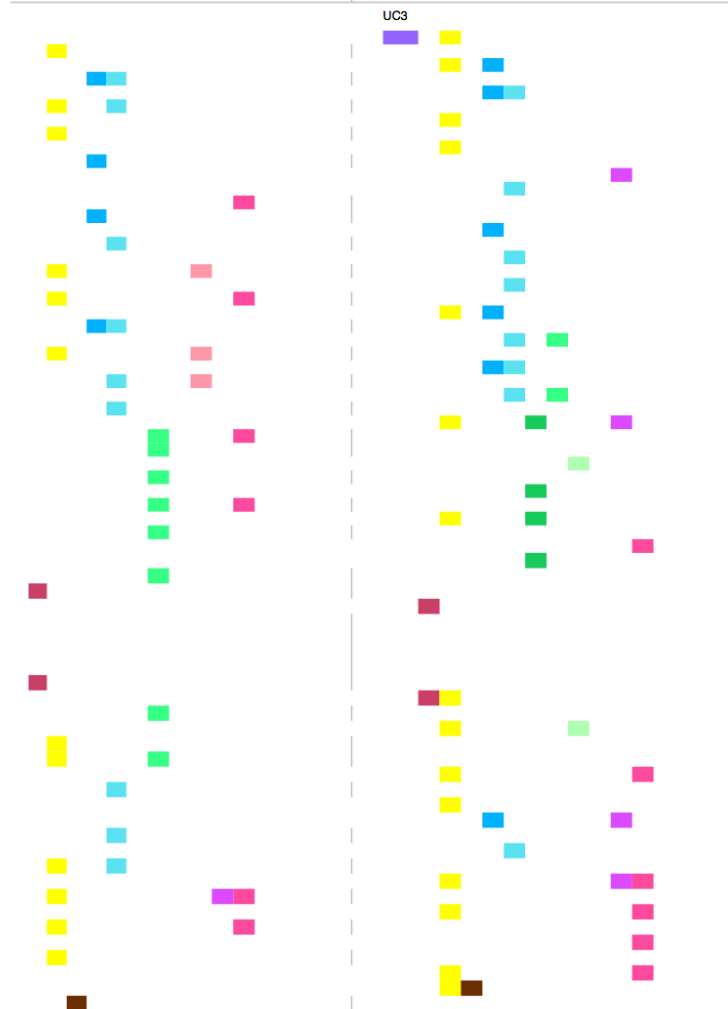
O21

UC1

Transcript 21

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



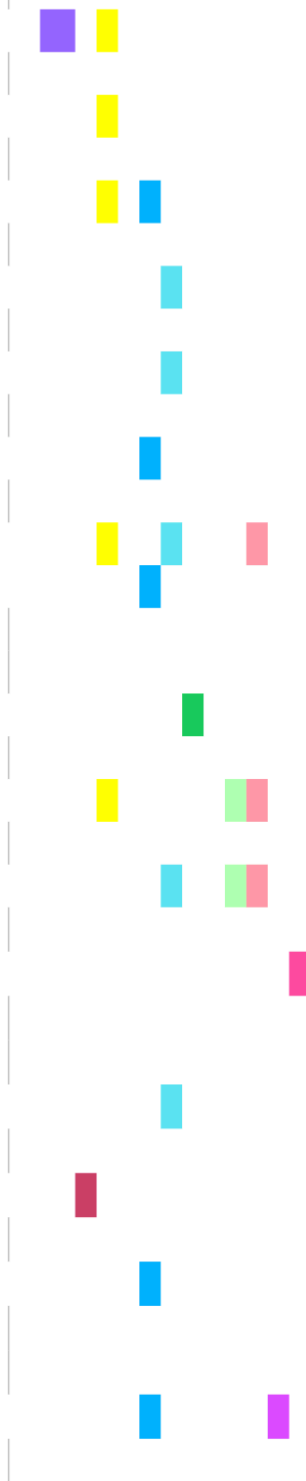
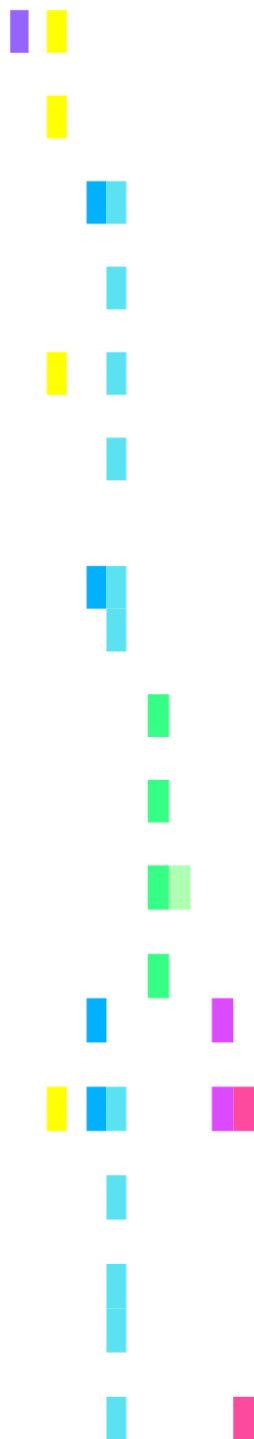
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UC1

Transcript 22

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



O23

UC1

Transcript 23

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

O24



UC1



Transcript 24

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk

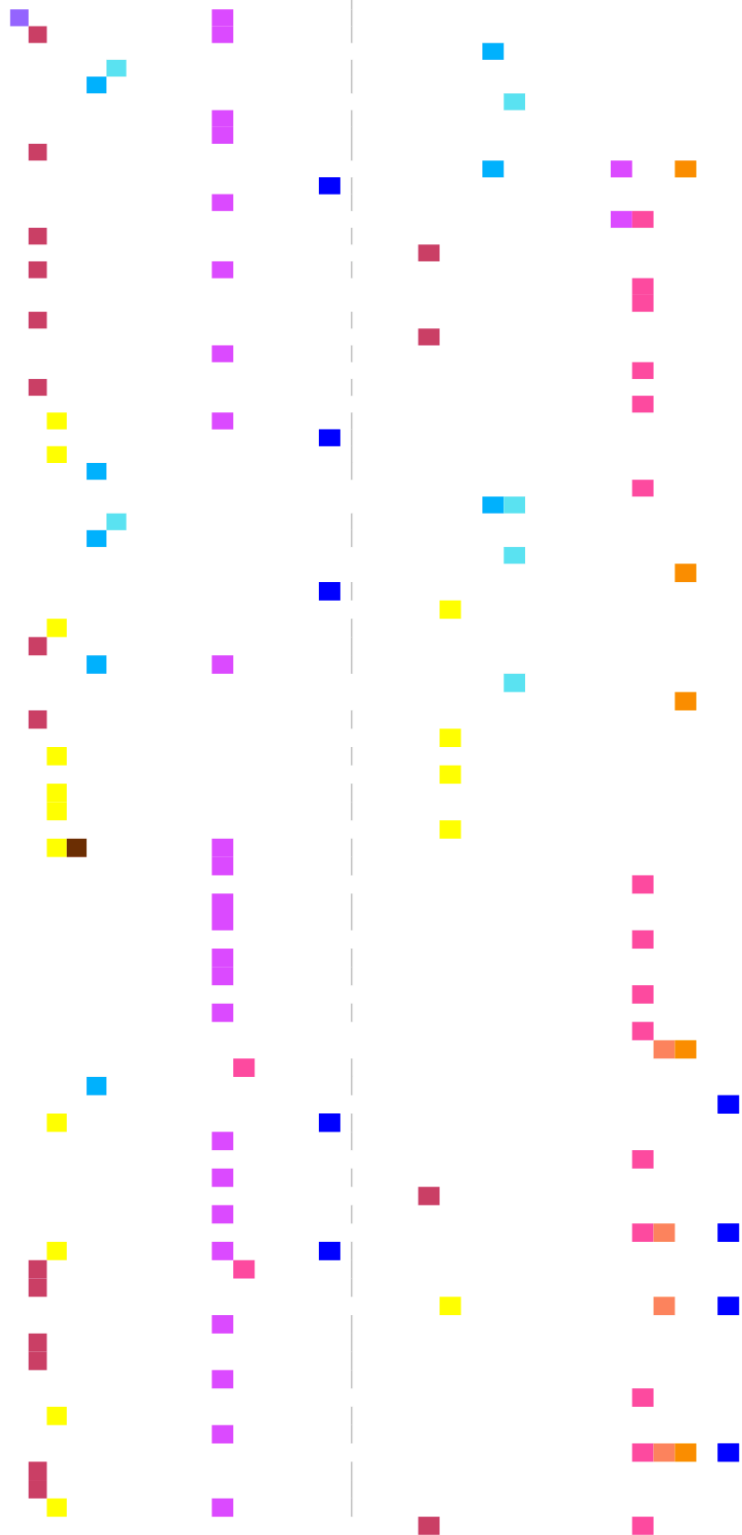
O25

UC1

Transcript 25

Key

- Greeting
- Maintaining conversation
- Rapport building
- Sign off
- Identifying interests/experience
- Reporting interests/experience
- Eliciting narrative
- Reporting events
- Supporting narrative
- Legitimising CSA
- Seeking support
- Giving support
- Negotiating media share
- Requesting illicit media
- Offering illicit media
- Assessing/managing risk



Appendix I: Study 3 moves and strategies

Move	Function(s)	Strategies	Textual examples
Greeting	To introduce the user, the post and address the community members	Greeting term (+self introduction and/or audience address)	"Hi everyone!!" "Hi all *screenname* here."
Demonstrating 'newness'	To indicate the user's status as 'newbie' to forum or CSA offending in general	Stating newcomer status	"I am new to the forums..."
		Indicating lack of experience with CSA fora or offending	"When I know for sure I know what Im doing, I will..."
		Stating user's differences to community members	"[I'm] Not a graphic artist..."
		Post 'testing'	"Test Post" (in post title)
		Seeking tolerance for lack of experience	"...please be patient if I dont get it all right."
		Expressing discomfort/nervousness/fear about using forum	"First, I have to confess it's seems weird to me to be here..."
Expressing motivations	To indicate user's reasons for wanting to join a particular community or the wider online offending community. To indicate user's reasons for contributing a post to the forum.	Stating hopes/intentions in community	"I am looking for friends on here to wank with and chat to."
		Expressing hopes for nature of community	"...I am looking for fun and stay in a good place with people with same love to "Babys"..."
		Expressing general or specific domain interests/experiences	"I like the kiddy porn..." "I prefer ages 12-16..."
		Explaining purpose of post	"I just wanted to say hi and introduce myself to you wonderful people."
		Professing dependency on CSA material	"I then got hooked..."
		Describing 'journey' to using CSA fora	"It's been a long journey to end up finding my self here. I stumbled upon cp about 8 years ago..."

Demonstrating alignment	To demonstrate user's existing alignment or affiliation with particular community or wider online offending community	Expressing sameness	"Hello fellow pedos." [emphasis added]
		Stating historical /existing membership of immediate or similar communities	"I used to belong to this board under another name" "...i am on other boards i will not mention here."
		Demonstrating a sexual interest in children	"I like Child Porn..."
		Stating offending experience	"I spent ages just looking at her little legs..."
		Demonstrating knowledge/ experience of risk management	"I put all of my passwords [...] on a[n] encrypted hard drive..."
		Stating commitment to community	"Here I am [...] hopefully for longer this time."
		Demonstrating knowledge / experience of community norms and practices	"I read the rules and know what is expected of me." "... will do what I can to hopefully get to level 2 sometime!"
		Stating/disposing of 'lurker' status	"I've always been a lurker, but thought I would get involved..."
		Familial terms	"Hello brothers and sisters..."
		Explaining origin of CSA interests	"... a friend of mine [...] left his computer accidentally on..."
		Minimising newbie status	"Im not that new..."
		Expressing general or specific domain interests/ experiences	"I like the kiddy porn..." "I prefer ages 12-16..."
		Self-othering (from wider society, non-offenders)	"...I am sure they would burn me at the stake of they knew my sexual predilection."
		Justifying/defending CSA interests/practices	"I know in some ways its wrong but a person is born this way i think."
		Describing difficulties of having CSA interests	"My problem [...] is you are very alone with this attraction..."

		Self-describing/labelling with deviant terms	"I'm a pedo..."
		Listing/stating credentials	"...I was in some of the pioneer web based boards..."
		Stating familiarity with forum	"Im not new to the board..."
		Showing acceptance of others' preferences/interests	"...I personally don't care for younger girls really but each to their own :D"
		Othering non-offenders	"I wish the world were a more understanding and open, non-judgemental one that was able to not make hasty-generalizations about such innocent interests!"
Demonstrating value (of individual)	To demonstrate the types of benefits the individual can offer to the community if granted membership	Providing link to illicit imagery	
		Expressing intention to provide illicit imagery	"... I will post alot more stuff!"
		Expressing intention to participate more in community	"I guarantee: I will come back. Many times ;)"
		Offering/demonstrating skills/services	"...would love to [...] serve as a muse with some small input here and there..."
		Describing value of post contents	"This short post is small but good quality and probably worth downloading."
		Promising to be 'good' member	"Just read the board rules, going to do my bet to contribute in a way that I don't make myself a total idiot."
		Self-complimenting (including reported compliments)	"I was called a white knight before when I complained about rape CP in that thread."
		Demonstrating knowledge of/willingness to follow rules	"...but am quite capable of clicking the thanks icon and not cluttering up the threads with misguided intentions."

		Gauging level of interest in offered services	"I have plans to start editing together some compilations [...] Is there any interest in content like that?"
Stating limitations	To explain the ways in which the individual is unable to meet the expectations or requirements of the community	Explaining/justifying lack of participation	"Im here on a mobile so cant post stuff ..."
		Seeking understanding/forgiveness	"...I hope youll give me some understanding."
		Stating lack of shared/general skills	"... i'm not artist..." "...i have verry verry VERRY bad english..."
		Stating lack of materials to offer	"...have no videos and stuff to share."
		Stating/explaining brevity/uncertainty of post	"Dont know what else to write here..."
Expressing appreciation	To show appreciation of fora, individual users and community at large	Praise/compliments to community	"Excellent work some great talent."
		Praise/complimenting individual members	"The work of *screen name* and *screen name* seem particularly interesting"
		Expressing gratitude for existence of community	"... i'm glad that i have found a community who loves all that i loves..."
		Showing deference to community members	"Interested in art like *screen name* produces but by no mean not that adept yet."
		Expressing positive feelings for community	"I LOVE YOU ALL."
		Encouraging continued efforts	"Let's keep this going, people!"
		Thanking community	"Thanks!"
Seeking support	To obtain help, advice or guidance regarding on and offline CSA-related practices	Providing context for help/problem	"I am a dad of two daughters. 1 less than 6mo, and 1 2yo."
		Stating general need for help	"need help..." "...i have a question."
		Requesting specific advice regarding fora	"...is there another board [...] for kids 5-10 years?"

		Requesting practical help regarding fora use	"I wanted to ask, how I can set a profile picture."
		Requesting guidance regarding contact offending	"Then how do you go about seducing him..."
		Requesting moral guidance/opinions	"I made this post also to hear a little bit from other users how they think at all about this "younger Stuff"."
		Expressing worries/difficulties associated with CSA interests	"My problem with this "thing" is you are very alone with this attraction!"
		Assuring no harm to child	"I am very kind and not the type to hurt, etc...."
		Requesting secrecy	"...hopefully i will stay safe with this."
		Seeking reassurance/sympathy/emnpathy	"... i tried to run from cp [...] but it finds me and i cant resist new stuff."
		Requesting contact from others	"It would be a pleasure for me to talk with people with same fetish as me :)"
		Requesting illicit imagery	"...now what I want is to see new little cuties!!!"
Requesting membership	To request membership into the community in question	Explicit request	"Can i please join the gang???"
		Implicit request	"I'm looking forward to be (hopefully) part of this community."
		Seeking connections with individuals	"Please befriend me if you have similar interests."
Exerting authority	To assert authority or promote status within group	Minimising others' knowledge/experience/offender status	"This forum is quiet haven compared to what I'm accustomed too!)"
		Demonstrating high level of experience/ lengthy offending history	"I was in some of the pioneer web based boards"
		Domain specific terminology	"It was the same feeling that led me to loiter around PedoU during the wild times of the p-t newsgroups and subscribe to FreshPetals..."
		Alluding to personal knowledge of experienced offenders/'big players'	"You would never believe me if I told you who got me started..."

		Alluding to secrets/ knowledge unable to share	"But that is as much from that as i will say."
Othering	To highlight differences between self and different perceived users	Stating lack of contact offending experience	"...have never acted on it. Don't know if I would even If I got the chance."
		Stating lack of intention to 'hurt' victims	"I am very kind and not the type to hurt, etc...." "Its just a fantasy though. I wouldnt touch a child. "
Sign off	To signal end of forum post	Thanking	"Cheers"
		Name	"*screen name*"
		Trailing off	"So yeah..."
		Well-wishing	"Have a nice night everyone :)"
		Topic phrase	"bisous les filles ;-) [kisses girls]"