

# “I read the rules and know what is expected of me”: The performance of competence and expertise in ‘newbie’ offenders’ membership requests to dark web child abuse communities

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## ABSTRACT

Community-building among groups of child abusers on the ‘dark web’ facilitates the large-scale distribution of indecent imagery and supports individuals in becoming more skilled, more dangerous offenders. Undercover police are tasked with posing as offenders to gather intelligence; however, we know little about the nature of these groups, and especially how one might approach them linguistically as an ‘authentically’ interested outsider. This study analyses rhetorical moves (Swales, 1990) in forum posts from child abuse-related dark web fora by self-identifying ‘newbies’ hoping to join established abuse communities. It identifies 12 distinct moves used in the pursuit to join online abuse communities and finds that expressions of competence and expertise are central to newbies’ attempts to gain community membership. ‘De-lurking’ is identified as a useful strategy in the performance of competence in online forums. These findings can support online undercover policing tasks as well as offender prioritisation.

## 1. Introduction

In February 2018, UK university researcher Matthew Falder was sentenced to 32 years’ imprisonment following a guilty plea to 137 charges relating to online child sexual exploitation and abuse (CSEA) and blackmail (BBC 2018). The National Crime Agency cited the case as their first ever “hurt-core” prosecution, referring to the involvement of “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). Falder’s case, and others like his (see, e.g. Safi, 2016), not only represent some of the most abhorrent and extreme forms of sexual abuse, but also demonstrate the emerging phenomenon of CSEA communities; large groups of child sexual offenders who regularly interact in online spaces dedicated to sharing indecent images of children (IIOC), advice and support, and methods of abuse (Westlake and Bouchard, 2016; Kloess and van der Bruggen, 2021; Woodhams et al., 2021). As such, it can be said that the ‘dark web’ - a portion of the internet unindexed by mainstream internet browsers - hosts a number of child-abuse related ‘communities of practice’ (Lave and Wenger, 1991; Eckert and McConnell-Ginet, 1992) that facilitate both the abuse of children and the development of offenders on the path to becoming more dangerous and prolific.

The scale of CSEA-related dark web forum use is such that police forces (in the UK and globally) are simply not equipped to investigate every user. This has led to the prioritisation of offenders that pose the greatest threat to society becoming a key activity for law-enforcement (Woodhams et al., 2021). One way this is done is by gathering intelligence on suspected offenders through the deployment of undercover police officers (UCOs) in online spaces (Gillespie, 2008; Grant and MacLeod, 2016). UCOs must endeavour to emulate the language of a targeted offender (or victim) in an ‘account takeover’ scenario, or of a generic, anonymous member of a specified CSEA-related forum in a community infiltration task (Grant and MacLeod, 2020). Successful undercover work in either context necessarily requires some linguistic awareness, and this is especially true of dark web CSEA fora which constitute low-trust environments in which everybody is suspicious of potential law-enforcement infiltration, and are governed by strict codes of conduct designed to protect users’ anonymity as far as possible (Grant and MacLeod, 2016). Thus far in online CSEA research, grooming interactions have received the bulk of scholarly attention (see, e.g. O’Connell, 2003; Lorenzo-Dus and Izura, 2017; Joleby et al., 2021), leaving the discourse of offending communities relatively poorly understood, despite the devastating implications of offender-offender interactions for victims. In particular, little is understood about the nature

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of CSEA communities, how individuals go about gaining membership, and how UCOs might approach the task of entering these groups as ‘authentic’ potential members. This study attends to these gaps by pursuing two central aims:

- (1) To describe dark web CSEA communities in terms of purposes, norms and practices.
- (2) To explore the linguistic identity performances of self-identifying ‘newbies’ in their attempts to join these communities.

From a constructionist perspective common to sociolinguistic identity theory (e.g. Bucholtz and Hall, 2005) and drawing on Lave and Wenger’s (1991) ‘communities of practice’ framework, these issues are addressed through a rhetorical move analysis (Swales, 1990) of 71 forum posts from six dark web CSEA-related fora. In describing dark web CSEA communities and the rhetorical moves associated with the newbie identity, this paper offers an empirical account of an under-explored online communicative context, broadening our understanding of interactions that facilitate child sexual abuse, as well as the methods that individuals employ when seeking like-minded communities. Practically, this research seeks to support law-enforcement with community infiltration tasks by offering a linguistic model that can inform UCOs’ own online performances as newcomers to dark web CSEA communities. As an indirect, secondary benefit, it also offers support in the task of offender prioritisation in that a better understanding of the linguistic patterns of new and inexperienced individuals may provide a useful contextual basis for the determination of CSEA offenders’ levels of domain experience and expertise.

## 2. Literature

### 2.1. CSEA communities of practice

While research on CSEA communities is scarce, a small body of work is emerging. Westlake and Bouchard (2016) used automated techniques to map networks of over 4 million CSEA website users. They found that two large ‘core’ communities emerged, as well as 3–5 small communities of varying stability in terms of group membership. Psychological research, on the other hand, has pointed to the various functions of online CSEA communities for offenders, including the normalisation and validation of sexual interests in children, and access to advice and abusive material (Kloess and van der Bruggen, 2021). Other work has detailed the behaviours of CSEA forum users, such as the self-reporting of sexual acts against children and the cautioning against posting behaviour that might threaten users’ anonymity (Woodhams et al., 2021). Linguistic research has observed common patterns of rhetorical moves, i.e. segments of language that perform a specific communicative function (see Swales, 1990) such as rapport-building and offering indecent images by CSEA forum users of various types (Chiang et al., 2020). Arguably the fullest treatment to date comes from Grant and MacLeod (2016; 2018; 2020) and MacLeod and Grant (2017), whose work involved the development of a training program for UCOs designed to increase general linguistic awareness and offer specific strategies for assuming target linguistic identities online.

Central to Grant and MacLeod’s work is the notion of ‘communities of practice’ (CoPs) (Lave and Wenger, 1991), or “... collection[s] of people who engage on an ongoing basis in some common endeavor.” (Eckert, 2006: 683). This idea arose from education research in the 1990s (see Lave and Wenger; 1991; Wenger, 1998) as a social system for learning, and has since been co-opted into sociolinguistics due to its focus on the shared interests, norms and practices of communities, over geographical and other demographic boundaries. With a primary focus on the shared interests of group members, CoPs are not rigid and pre-defined, but emergent through continued negotiation and interaction between members who claim and reject membership (Angouri, 2016). As Wenger (2010) explains, meanings are negotiated and organized

amongst CoP members through an interplay of two processes: first, *participation* in community endeavours, activities, and with other members; and secondly, *reification* via the creation and use of products, e.g. words, concepts, stories, guidebooks, rules etc. (Wenger, 1998). It is through these dual processes that community participants create “a set of criteria and expectations by which they recognize membership” (Wenger, 2010: 180). These criteria are crucial for the development of CoPs and include the following:

- (1) Mutual engagement: the establishment of community norms, expectations and relationships.
- (2) Joint enterprise: 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.

These criteria are used to establish an individual’s status in relation to a CoP as “a competent participant, an outsider, or somewhere in between” (Wenger, 2010: 137). As demonstrated by Grant and MacLeod (2016; 2018; 2020) it is a particularly apt concept for dark web CSEA groups who are characterised by a shared sexual interest in children (joint enterprise), strict rules that govern online behaviour (mutual engagement) and the development of shared domain-specific vocabulary and documentation around common CSEA practices (shared repertoire). Grant and MacLeod (2020) provide examples of CoP members demonstrating specific domain knowledge associated with child sexual abuse (e.g. the currency value of IIOC as a commodity) and technical expertise, evidence of shared community norms such as greetings that promote in-group solidarity, and a number of common abuse practices (e.g. abusive story-telling, IIOC exchange, live-streaming abuse activity). Regarding the current study, Wenger’s CoP criteria provide a useful framework for establishing the interests, practices and norms that characterise the groups of interest, which help in the contextualisation and evaluation of the new users’ attempts to gain membership.

### 2.2. Identity performance in the online undercover context

This work largely explores identity from a constructionist perspective, focusing on the ways that identity emerges through interaction, rather than any ostensibly fixed characteristics or traits within the individual (Bucholtz and Hall, 2005). The notion of identity as a performance was first proposed by Goffman (1956), whose dramaturgical model likened the on-stage performances of actors to the everyday identity work of social actors. For Goffman, the various roles we perform are situated within specific social contexts. This idea has become prominent in sociolinguistic identity scholarship (e.g. Rellstab, 2007; Tse and Hyland, 2008; Newon, 2011), with language being considered one of the “most flexible and pervasive” resources available for identity expression (Bucholtz and Hall, 2004: 369). Sociolinguists have shown how language works to index (or signal) different identity positions as we shift between interactional contexts and roles, including broad social identity categories like gender (Ochs, 1992; Rellstab, 2007), ethnicity (Le Page and Tabouret-Keller, 1985; Harris, 2011) and age (Nini, 2014) as well as situationally specific ‘micro-level’ identity positions (Bucholtz and Hall, 2005) including friendship (Green, 1998), professional identities (Tse and Hyland, 2008) and expertise (Newon, 2011; Vásquez, 2014).

Whilst appealing in its explanatory power, the notion of identity as a situated performance is not unchallenged; tensions between linguistic structure and agency, or the extent to which individuals can be whoever they wish in any given moment, has been heavily debated (see, e.g. Le Page and Tabouret-Keller, 1985; Bucholtz and Hall, 2005; Block, 2013). This tension is directly addressed in Grant and MacLeod’s (2018) ‘resource-constraint’ model, which conceives of identity performance as simultaneously enabled and constrained by the particular resources

available to individuals in a given moment of interaction. According to the authors, the types of resources individuals can draw upon to perform different identity positions include cognitive and physical resources, sociolinguistic histories (the sum of an individual's geographical, historical, educational, and socio-economic experiences), and the speech event itself. Importantly, the limits of these resources impact the repertoire of available identities. For example, part of a dark web CSEA offender's sociolinguistic history is their experience of abusing children, and of participating in online abuse-related communities of practice, and these experiences provide a resource that is drawn upon routinely in their online interactions (Grant and MacLeod, 2020). Because UCOs are not equipped with this resource, they must consciously acquire some version of it in order to emulate the interactional identities of offenders, by familiarising themselves with relevant source material (usually online chat logs involving the target offender). Not only must the UCO acquire the best approximation of the target's experiential resources possible, but they must work to suppress aspects of their own professional identities that may 'leak' through, to avoid arousing suspicion (Grant and MacLeod, 2020).

### 2.3. Rhetorical moves and identity

Linguistic identity performance occurs at various levels of language production (Bucholtz, 1999). Bucholtz (1999) illustrates this by describing how a community of 'nerd girls' in a US high school aligned with their social group through specific phonological, syntactical, lexical and discursal choices, while distancing themselves from other social groups in the school by rejecting other linguistic constructions. More recently, identity performance has been examined through rhetorical moves (Chiang and Grant, 2019; Chiang, 2021) referring to segments of language associated with specific communicative functions that may comprise lower-level strategies which work to achieve those functions (Swales, 1990). Move analysis was originally developed for pedagogical purposes and used to describe the discourse structures of texts within specific genres such as research articles. Moves have also proven a useful analytical unit for the investigation of linguistic identity that sit roughly between the discursal and syntactical levels of linguistic production, and can loosely be thought of as linguistic behaviours (Chiang and Grant, 2019; Chiang, 2021). For example, a move commonly observed in online sexual grooming conversations is rapport-building, which can be achieved through several optional strategies including giving compliments, inquiring about hobbies, and eliciting sympathy (Chiang and Grant, 2019). Chiang and Grant (2019) investigation of a child sexual offender's linguistic performance of multiple online identities describes the various moves used by the offender in conversations with victims, demonstrating how different move combinations worked towards the performance of different identity positions. For instance, moves involving rapport-building and the general maintenance of conversation were associated with the performance of friendship. Through the introduction of sexual moves, the performance became closer to that of 'boyfriend', and where highly sexual moves were combined with efforts to extort, the offender clearly shifted into the role of 'sexual aggressor'.

The current work adopts this same approach, but by deductively starting from the identity position of newbie (as determined through self-labelling by forum users) and examining the rhetorical moves that work towards this performance. Identifying rhetorical moves in this context enables the description of the communicative building blocks used by newbies in the attempt to join existing communities of dark web offenders. These building blocks represent chunks of textual action which, combined, can constitute a linguistic model for use by UCOs tasked with CSEA-related community infiltration.

## 3. Methods

### 3.1. Data collection

Forum posts authored by self-identifying 'newbies' were collected using an online database and tool suite called Avatar, a dark web scraper developed for law-enforcement that enables the user to search through tens of thousands of forum posts, IM chat conversations and private messages from a variety of dark web CSEA platforms. Forum post titles were searched for the terms 'newbie' and 'new member'. These terms were selected because they explicitly expressed the forum users' self-identification as newcomers and yielded a dataset of a manageable size for a manual analysis of rhetorical moves, which is notoriously labour intensive. 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. Posts deemed inappropriate for analysis and thus rejected include those ostensibly written by non-offenders attempting to troll genuine forum users, and posts in which substantial content appeared to be missing. This left a total of 71 forum posts from six different fora. Each post appears to be authored by a different user, except for two posts from accounts with the same username in two different fora, which are remarkably similar in content. Importantly, any individual user 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.

### 3.2. Data description

Table 1 illustrates the dataset characteristics. Actual forum names have been replaced with descriptive labels encapsulating the main interests of users, i.e.: CG (computer-generated) IIOC, IIOC (Babies), IIOC (Young boys), IIOC (Pre-teens), IIOC General, and Support network.

The posts are unevenly distributed throughout the six fora. Eight newbie posts were found in the CG IIOC forum (11 % of the dataset), six from the Support network forum (8 %), five posts from the IIOC (Young boys) forum (7 %), three from the IIOC (Babies) forum (4 %), and only one from the IIOC (Pre-teens) forum (1.5 %). The large majority of posts (48) come from the IIOC (General) forum and comprise 68 % of the dataset, creating a clear imbalance which limits the potential for generalisability of findings from this study. Each individual forum represents a unique online environment with its own set of functions and parameters which will affect users' contributions, but the over-representation of the IIOC (General) forum means that the extent of this effect cannot be rigorously investigated here. Despite this, it was deemed important 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. Posts are on the whole quite short, mean averages ranging between 20 and 132 words. All texts were posted between March 2014 and October 2016.

**Table 1**  
Data characteristics.

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

### 3.3. Procedure

To describe the various characteristics of each community, the shared interests, norms and practices, sourced from the sites' home pages, navigation pages, and forum posts were observed. The move analysis was conducted loosely following the procedure outlined in Biber et al. (2007), that is, an iterative process was followed by which the forum posts were read numerous times to determine the most likely communicative functions of text segments within the posts. Functional and semantic themes were derived and provided the basis for grouping text segments into higher level moves and lower level strategies. Notably, there can be overlap in the strategies serving the moves, as a single utterance may fulfil more than one function at once. For example, an utterance such as "I like boys" might work to demonstrate a user's motivation for requesting community membership, and to align the user with the interests and values of that group by foregrounding a shared interest. In these cases, the utterance was coded as belonging to a particular move according to its apparent primary function within the context of the entire post. A reliability test was conducted by which 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 determining the primary moves used in ten randomly selected forum posts (over 10 % of the dataset). Results fell within the acceptable range for reliability at 85 % overall agreement between the first and second coder (Stemler 2004), and although no major changes were made to the original move set, discussions between coders led to refinements of move definitions and boundaries. Due to their relatively short length, posts were coded for move presence, absence and position rather than in-text frequency. The total number of posts featuring each move was then calculated. Finally, moves and move combinations were considered in terms of their capacity to index the two prominent and closely related identity positions of competence and expertise, and the strategy of 'de-lurking' was examined as a salient expression of these positions.

## 4. Ethics

The research was approved by Aston University ethics committee. Data for the study were collected by security research company Hyperion Gray (<https://www.hyperiongray.com/>), and access to the Avatar database was approved by a UK police force. Importantly, Hyperion Gray strip all material of illegal content (i.e. images, videos and gifs), ensuring it is purely textual by the time it reaches the researcher. All transcripts were anonymised, and where textual examples are provided, identifying items such as forum names have been replaced with descriptive labels, e.g. \*forum name\*, \*screen name\* etc. Psychological support was available to the researcher for the duration of the study.

## 5. Analysis and discussion

### 5.1. Describing dark web CSEA communities

Many of the groups studied here explicitly identify as communities. While individuals might frequent any number of these fora, and practices and cultural norms often overlap, each forum has the potential to represent a distinct online CoP. To demonstrate how they meet Wenger's (2010) criteria (see section 2.1), Table 2 provides examples of some of the shared interests, norms, rules and practices observed in each forum.

Several common themes arise across the six fora, for example, users are typically banned from selling or trading IIOC, are discouraged from posting personally identifying information, and commonly share advice and support. Other practices 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. Similarly, the Support network forum bans IIOC altogether, maintaining that all images posted must be "legal and unsuggestive". As demonstrated though, each forum brings

**Table 2**

Interests, norms and practices shared by users of six dark web CSEA fora.

	Central interest	Example rules, norms and practices
CG IIOC	Computer-generated fantasy images and stories depicting young boys	<ul style="list-style-type: none"> <li>– Users must self-introduce and contribute regular discussion to retain membership.</li> <li>– Imagery must be computer-generated and must not depict extreme violence or death.</li> <li>– Users produce content collaboratively.</li> </ul>
IIOC (Babies)	IIOC featuring babies and toddlers	<ul style="list-style-type: none"> <li>– Users hold ranks enabling access to various site 'zones'.</li> <li>– Sale and trade of IIOC is banned.</li> <li>– Banned topics include rape, torture and necrophilia.</li> <li>– Official moderators create rules for site use and conduct gatekeeping practices.</li> </ul>
IIOC (Young boys)	IIOC featuring boys	<ul style="list-style-type: none"> <li>– Revealing personal information is banned.</li> <li>– Discussion should emphasise praise and appreciation over criticism.</li> <li>– Website tutorials are shared amongst users.</li> </ul>
IIOC (Pre-teens)	IIOC featuring pre-teen children	<ul style="list-style-type: none"> <li>– Entry requires users to post IIOC.</li> <li>– Hurtcore and adult-only images are banned.</li> <li>– Users produce and share 'fantasy literature' as well as images.</li> </ul>
IIOC (General)	Non-specific IIOC	<ul style="list-style-type: none"> <li>– IIOC subjects must be 3–17 years old.</li> <li>– Uploaded files must be encrypted.</li> <li>– Users discuss forum posts and other aspects of CSEA.</li> </ul>
Support network	Support for self-identifying paedophiles	<ul style="list-style-type: none"> <li>– Usernames must be respectful of children.</li> <li>– Posted images must be 'legal and unsuggestive'.</li> <li>– Users are ranked according to participation levels.</li> <li>– Users engage in paedophilic storytelling and share advice and support.</li> </ul>

together a group of people who engage in a range of common practices in the pursuit of shared interests and endeavours, roundly satisfying Wenger's criteria for communities of practice.

Notably, high-status contributors often hold administrator roles and tend to do the 'welcoming' of new members along with other forms of gatekeeping like issuing rules and providing instructions. It seems likely that forum administrators would assume the role of 'expert offender' (see Tener et al., 2015) within online CSEA communities, representing the opposite end of the scale to newer members regarding levels of abusing experience, technological ability, or history of participation in online CSEA communities. Quayle et al. (2014) point out that technological prowess can serve to make up for a user's lack of historical offending experience in online contexts, and Chiang and Grant (2019) suggested that offenders in IIOC-sharing forums offered narratives of abusive experience in part to compensate for their lack of indecent material. The overriding observation is that these sorts of online communities typically demand some form of user contribution, which might take the form of abusive material or regular conversational input (Chiang and Grant, 2019).

### 5.2. Rhetorical moves in newbie forum posts

Across the 71 forum posts, 12 moves collectively encompassing 82 strategies were identified. Posts were found to comprise between two and eight distinct moves. The following section describes each move in

terms of its primary function(s) and, due to space restrictions, its most prominent strategies. While there was no fixed move structure, they are presented here in the order that they are typically first introduced in the posts. Textual examples are left unedited, i.e. original typos and non-standard forms have been preserved.

*Greetings* serve to introduce the newbie, typically involving a standard greeting term followed by a collective address term, as in the following:

“Hi everyone!”

*Demonstrating newness* indicates a user’s newbie status either in relation to the immediate forum or to CSEA more generally. Prominent strategies include explicitly stating newcomer status, expressing discomfort about using the forum and indicating a lack of offending or forum experience:

“I am new to the forums...”

“First, I have to confess it’s seems weird to me to be here...”

“When I know for sure [...] what I’m doing...”

That *Demonstrating newness* (where used) is typically found in the first or second move position suggests users prefer to openly address their newcomer status from the outset, before moving on to other areas of discussion.

*Expressing motivations* indicates the user’s reasons for wanting to join a community. The main strategies include stating hopes or intentions within the community and expressing general or specific domain interests:

“I am looking for friends on here to wank with and chat to.”

“I prefer ages 12-16...”

Other strategies include explaining the purpose of a specific post, and some users professed a dependency on CSEA material:

“I just wanted to say hi...”

“I then got hooked...”

*Demonstrating alignment* indicates a user’s existing alignment or affiliation with either the specific community being addressed or with CSEA interests more generally. It encompasses the largest number of strategies of any move (19), most prominently accentuating likeness/familiarity between the user and the community, stating the user’s historical or existing membership of the immediate or similar communities, and demonstrating a sexual interest in children and/or historical offending experience:

“Hello fellow pedos.”

“I used to belong to this board under another name”

“I spent ages just looking at her little legs...”

Other prominent strategies include demonstrating an understanding of community norms and practices, explaining the origin of the user’s CSEA interests, and professing (or disposing of) the ‘lurker’ status:

“I read the rules and know what is expected of me.”

“... a friend of mine [...] left his computer accidentally on...”

“I’ve always been a lurker, but thought I would get involved...”

Alignment can also be demonstrated through self-labelling using deviant terms, expressing acceptance of others’ preferences, and the othering of non-offenders or wider society:

“I’m a pedo”

“...I personally don’t care for younger girls really but each to their own:D”

“I wish the world were a more understanding and open, non-judgemental one...”

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, the common practice of

uploading IIOC in the IIOC (General) forum is not accepted in the Support network forum. On rare occasions, users are seen to misalign entirely with the community being addressed, for example, one post involves a request for IIOC in the Support network forum which specifically bans this, resulting in the user being explicitly rejected. Notably there is some overlap in strategies with *Expressing motivations*, as some individual utterances, e.g. “I prefer ages 12–16...” can simultaneously serve both moves.

*Demonstrating value* is a move of self-promotion, conveying the value that the newbie might offer the community if granted membership. The main strategies include expressing the intent to provide IIOC (or actually providing a link to material), offering/demonstrating community-specific skills or services, and opining on the value of the post itself:

“...I will post alot more stuff!”

“...would love to [...] serve as a muse...”

“This short post is small but good quality and probably worth downloading.”

*Stating limitations* is in some ways opposite to *Demonstrating value*, in that it serves to explain ways that the user is unable to meet the perceived expectations or requirements of the CoP. The main strategies are stating a lack of (perceived) expected skills, and stating an inability to offer IIOC:

“...i’m not artist...”

“...have no videos or stuff to share.”

The move also includes justifying limited community participation and seeking understanding or forgiveness for these limitations:

“I’m here on a mobile so cant post stuff...”

“... I hope youll give me some understanding.”

*Stating limitations* might seem an unusual move in texts whose principal purpose is to persuade, but its use here allows newbie users to display their understanding of what is expected of them as potential community members, while demonstrating what they can offer and potentially negating face threats (Brown and Levinson, 1987) from existing members. Similar forms of self-deprecation were observed in dating advertisements by Coupland (1996: 201), who reasoned that this might cause potential suitors to attribute qualities of “openness” and “a mature ability to self-criticize”, which may also be true for the newbies here.

*Expressing appreciation* serves to demonstrate users’ appreciation for individual forum members and the forum/community as a whole. This move is mostly achieved through thanking, praise and compliments to the whole group or specific individuals, and by expressing gratitude towards the community:

“The work of \*screen name\* and \*screen name\* seem particularly interesting.”

“...i’m glad that i have found a community who loves all that i loves...”

Other strategies include showing deference to community members, expressing love for the group, and encouraging its continuation:

“Interested in art like \*screen name\* produces but by no mean not that adept yet.”

“I LOVE YOU ALL.”

“Let’s keep this going, people!”

This move is generally found towards the middle and ends of posts, and occasionally appears as the final move, as thanking can function simultaneously as a strategy of *Expressing appreciation* as well as a type of *Sign off*.

*Seeking support* is used in the attempt to obtain help, advice or guidance regarding some aspect of online or offline CSEA. The main strategies include providing context for the problem in question, stating a general need for help, and requesting specific advice to do with forum

use or contact offending:

“I am a dad of two daughters...”  
 “...i have a question.”  
 “I wanted to ask, how I can set a profile picture.”  
 “...how do you go about seducing him..”

Other strategies include requesting moral guidance and expressing worries or difficulties associated with having an interest in CSEA-related activity:

“I made this post also to hear [...] how [others] think [...] about this ‘younger Stuff’.”  
 “My problem with this ‘thing’ is you are very alone with this attraction!”

Whereas all posts are recognised essentially as membership requests, as a move in itself, *Requesting membership* accounts for overt expressions of this attempt. Strategies include direct and indirect requests, as well as seeking connections with individual members:

“Can i please join the gang???”  
 “I’m looking forward to be (hopefully) part of this community.”  
 “Please befriend me if you have similar interests.”

*Exerting authority* asserts a user’s authority or status as a CSEA offender or forum user. Prominent strategies include claiming a high level of experience or lengthy history of offending and forum use, minimizing others’ knowledge or experience, and using domain-specific terminology:

“I was in some of the pioneer web based boards”  
 “This forum is a quiet haven compared to what I’m accustomed too!:)”  
 “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\*...”.

Other strategies include alluding to personal acquaintances with high status offenders, and to the possession of ‘secret’ knowledge:

“You would never believe me if I told you who got me started...”  
 “But that is as much from that as i will say.”

*Othering* is used to highlight the differences between the newbie and those perceived to be somehow different or worse. The main strategies

include stating a lack of intent to hurt victims, as well as a lack of contact abuse experience:

“I am very kind and not the type to hurt, etc.”  
 “I’ve never done anything pedoish in real life...”

This move contributes towards the performance of morality, echoing Grant and MacLeod’s (2020) observation that different CSEA groups can have different standards and ideals regarding whether child sexual abuse is perceived as an act of love as opposed to sadistic violence.

*Sign offs* signal the end of a post and are mostly done through thanking or by using a screen name, as well as trailing off and well-wishing:

“So yeah...”  
 “Have a nice night everyone:)”

5.3. Move frequencies

Fig. 1 illustrates the prevalence of each move across the dataset.

As shown, the most common moves across the 71 forum posts are *Expressing motivations* (found in 82 % of posts), *Greetings* (75 %), and *Demonstrating alignment* (72 %), indicating that these moves represent important rhetorical functions. The high frequency of *Expressing motivations* and *Demonstrating alignment* may reflect that CSEA community members are often required to ‘prove’ themselves as genuine offenders, often through acts of self-incrimination (Grant and MacLeod, 2020), making explicit demonstrations of domain interest especially important in this context. The high use of *Demonstrating alignment* also indicates that the prevailing approach is to position oneself as already aligned with the practices and values of the community, rather than as an outsider expressing the desire to partake in something new.

*Expressing appreciation* and *Demonstrating newness* are also relatively common, each occurring in around 55 % of posts. *Demonstrating value*, *Seeking support*, and *Sign offs* are less common, featuring in 40 %, 31 % and 31 % of posts respectively. *Stating limitations* is somewhat 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 moves may be more to do with the individual communicative styles of the posters than fundamental to the pursuit of gaining community membership. The low frequencies of *Exerting authority* and *Othering* seem unsurprising for a

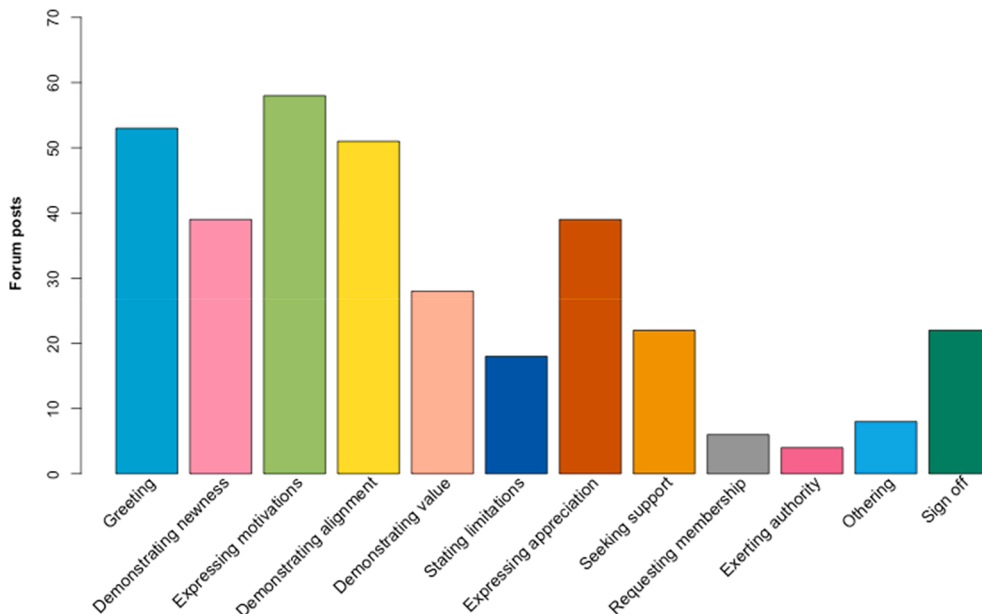


Fig. 1. Number of posts containing each move.

corpus of forum posts written by self-identifying newbies looking for approval by existing community members. The low frequency of *Requesting membership* is likely explained by the fact that having ‘newbie’ or ‘new member’ in the post titles does a lot of the request work implicitly, as do combinations of *Demonstrating newness*, *Expressing motivations* and *Demonstrating alignment* in the post contents. These three high-frequency moves appear to be the most characteristic of the posts generally and might be considered ‘core’ in relation to the task of requesting community membership. This more implicit approach could also work to minimize the potential for face threats (Brown & Levinson, 1987) as direct requests likely leave users more vulnerable to rejection.

It is worth mentioning that while the issue of whether particular moves indicate the success or failure of the posts was not investigated formally, nearly 70 % received some version of a ‘welcome’ response from administrators. This suggests that at least the high-use moves and strategies described contributed to the persuasive process of seeking community membership and largely resulted in successful attempts.

#### 5.4. Competence and expertise

As demonstrated, the posts exhibit a range of rhetorical moves that work towards the overall goal of attaining membership into various online CSEA communities. These moves in turn work to express certain aspects of identity that are foregrounded in the posts. Through close consideration of the moves, and move combinations, two related positions that emerge as being particularly important in this context are competence and expertise. These qualities contribute to the notoriety and respect of high-status offenders in online CSEA communities (Westlake et al., 2017) and are important for identifying experienced CSEA offenders, but are not necessarily expected of hopeful newcomers. 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.

*Exerting authority* is the move most directly associated with expertise; emphasis on the user’s own lengthy offending experience or time spent frequenting related fora positions the newbie as knowledgeable and experienced. Rather than contributing to an earnest performance of the ‘expert offender’, however, the move often works to compensate for a newbie’s perceived deficiencies regarding other aspects of online CSEA offending. One forum post, for example, involves a number of *Exerting authority* strategies including demonstrating historical experience of CSEA forum use, minimisation of others’ experience, and heavy use of domain-specific terminology, but only after the 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...”). In the wider pursuit to be accepted into the community, it is not surprising that a user would want to balance this sort of admission by performing expertise in other related areas (although it is possible that restricted internet access is a coded reference to prison time served by the user, which may in fact index a more experienced, higher-status offender). *Exerting authority* sometimes occurs through the demonstration of a user’s long offending history and works to highlight that their newbie status refers only to the use of dark web fora or online technologies. It can also signal a user’s return to CSEA fora after a period of non-use or non-offending. As such, the move often works as a compensatory tool similar to those reported in Quayle et al. (2014) and Chiang and Grant (2019).

*Demonstrating value* indexes various types of competence; first, by showing the newbie has some understanding of what is considered valuable to the community, and second, by showing the newbie’s willingness and/or capability to provide it. The provision of links to IIOC can be where the *Demonstrating value* move indexes a level of competence closer to expertise, showing the user has experience with obtaining such material either through similar channels to the forum in question or through their own contact abuse of children (IIOC producers carry a

particularly high status in CSEA communities, often having access to areas of fora restricted to others, as in the “Producers Zone” in the IIOC (Babies) forum). One post, for example, includes a link and password, alongside a remark expressing that the IIOC provided is of “good quality and probably worth downloading”. Competence is performed here first through the provision of the link and password, showing the user’s possession of and willingness to share IIOC, and second through the assessment of the IIOC as “good quality”, suggesting the user’s experience of IIOC of varying perceived ‘qualities’, and positioning the user as a competent evaluator. Finally, the assertion that it is “probably worth downloading” demonstrates an understanding of the risk-reward ratio of this material, i.e. were it not of “good quality” it may not be worth the risks associated with downloading it. This post therefore simultaneously demonstrates what the user is able to contribute as well as their desire to avoid risking the group’s online security.

Competence is also indexed through *Demonstrating alignment*, as this move indicates newbies’ understanding of the rules, norms and practices central to the respective communities. Some posts clearly demonstrate newbies’ familiarity with specific community practices, for example, one individual’s stated intention to “get to level 2 sometime!” draws on their knowledge of the hierarchical system in place in this particular forum, and their understanding that reaching “level 2” involves a set of specific activities and achievements. The newbies who are able to demonstrate their alignment with a community in more specific ways demonstrate effort spent familiarizing themselves with the CoP in question and thus acquiring the experiential resources necessary to perform as competent community participants.

In addition to these moves, it is noteworthy that a subtle expression of community belonging is indexed at the very outset through the use of overt self-labelling in the post titles. By identifying as ‘newbies’ or ‘new members’, these users immediately signal their relative lack of experience in relation to established community members. But rather than positioning themselves as outsiders looking in on the group, the selected terms strategically situate newbies as already within the community, albeit in a low status position.

#### 5.5. De-lurking and the competent newbie

One particularly effective way of acquiring the necessary resources to participate competently in an online CoP is through the well-recognised practice of ‘lurking’ (see e.g. Nonnecke and Preece, 2001; Rafaeli et al., 2004; Radin, 2006). Lurkers are generally described as infrequent or passive participants in online communities (Nonnecke and Preece, 2001; Rafaeli et al., 2004). Lurking is thought to be largely encouraged precisely because it “allows a visitor to observe the group’s norms before participating” (Radin, 2006: 597), and this encouragement 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 as ‘de-lurking’ (Rafaeli et al., 2004; Radin, 2006), and this occurs in around 30 % of posts, in various forms. The clearest is through overt self-labels, e.g. “I’ve always been a lurker, but thought I would get involved...”. Mostly though it is done through reference to the process of de-lurking without using the term, e.g. “Hi, I’ve been here for a long time but this is the first introduction”. Occasionally, lurking is also implied e.g. “I guess I’ll finally introduce myself...”, where “finally” signifies a period of passive forum participation before this instance of de-lurking. Reported reasons for lurking in online communities include 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 and Preece, 2001; Nonnecke et al., 2004). It seems reasonable to assume, then, that de-lurking would 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 examined here, for example, one newbie’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...". Others describe the ways they have been learning about the community and forum environment, e.g. "I've seen some of the pictures, I read stories", "I've been [...] looking at the easy to access boards...". One reason for de-lurking characteristic of online CSEA communities in particular is that it is often stipulated that membership requires active participation. 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 one post: "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, this act allows the newbies to demonstrate their exposure to the community, their experience of watching and learning the appropriate ways to behave. It also demonstrates that these users are ready to commit to being a recognised as an active participant. De-lurking is therefore a subtle but potentially powerful strategy which works towards the performance of a kind of dual identity which might be referred to as the 'competent newbie'. By de-lurking, individuals can openly identify as newcomers of low status and possibly little offending or technological experience, while assuring the community of their familiarity with group norms and their ability to engage in its practices at a sufficiently competent level that will not threaten the security and safety of the group. It is easy to see how this approach might be a persuasive tool for individuals attempting to ingratiate themselves with communities for whom regulations around online security and identity concealment are critical to their existence.

## 6. Conclusion

This study has shown that dark web spaces host established communities of practice of CSEA offenders. 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 communities. It found that performances of competence and expertise through moves such as *Exerting authority*, *Demonstrating value* and *Demonstrating alignment*, are key aspects of the newbie identity in this context. In particular, the strategy of de-lurking is identified as a potentially powerful persuasive tool for demonstrating domain-specific competence while being forthcoming about a relative lack of experience. Empirically, this work contributes to an overall richer understanding of the interactional norms and practices of CSEA communities that reside in dark web spaces. While not a focus of this study, a comparative analysis looking at how newcomers approach other types of fora – in particular, clear web, non-criminal fora – would help contextualise the findings from this study and further enrich our understanding of individual and community-level identity specifically in crime-focused dark web environments.

Findings from this work may also contribute to policing strategy. First, it describes a set of communicative strategies which may inform community infiltration tasks; arguably the newbie offender would be the 'easiest' type of role for a UCO to assume in this scenario, and this work provides a way of understanding many of the communicative strategies that feed into this performance. Second, having established a clear set of rhetorical moves common to inexperienced, low-status forum users, this work provides something of a descriptive benchmark for future interpretation of users' experience and status levels, informing the important task of offender prioritisation. One area worthy of further investigation is whether the presence or absence of particular moves might indicate the relative success or failure of posts in aiding forum users' attempts to gain acceptance into specific communities of practice, offering further insight into the linguistic practices of communities that facilitate child abuse on a grand and global scale.

## CRedit authorship contribution statement

Emily Chiang: Writing – review & editing, Writing – original draft,

Visualization, Validation, Software, Resources, Project administration, Investigation, Formal analysis, Data curation, Conceptualization.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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