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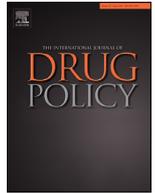
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Research paper

## Digital localisation in an illicit market space: interactional creation of a psychedelic assemblage in a darknet community of exchange

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## ABSTRACT

Sociology of drugs and digital sociology—albeit for different reasons—need the analysis of interactions, an approach underdeveloped in current scholarship. We address this gap by providing a specific analytical framework for the analysis of digital interactions which enables an ethnomethodological account of micro-interactional dynamics within a cryptomarket: an anonymous darknet market of illicit drugs. As a case study we chose the ‘Psych-ForumMarket’ which is unusual in that it operates as a forum based market space and explicitly rejects centralised technical market solutions such as escrow and encryption systems. Instead, it emphasises personal relationships between buyers and vendors as the basis of trust. Hence it forms a community of exchange, both material and cultural.

The data were collected through a process of manual scraping from the forum from 2017 to 2020. The data was purposefully sampled to construct a ‘thick data’ set, and analysed thematically to examine the micro interactional turn taking, sanctioning and norming processes by which the market culture is normalized and embedded.

This market is a laboratory to investigate the constitutive nature of digital group interactions. Due to the very nature of this market the disciplining process cannot lie with external authorities. Interactions between community members are permeated with mutual monitoring and policing. We find that in and through digital communication a particular culture emerges to which individuals who wish to join this community have to ascribe. We refer to this particular culture as a ‘psychedelic assemblage,’ i.e., a local constellation of cultural constructs which frames the experience of drug using and trading. Our investigation reveals the constitutive methods which enable the norming of members’ practices and underpin the emergence of a shared lifeworld which in turn ensures the operability of this cryptomarket.

## Introduction

Illicit drug markets are increasingly mediated through digital means (Moyle et al., 2019). The bulk of drug exchange in Western societies is facilitated by social media platforms and dedicated web pages (Winstock et al., 2020). Cryptomarkets are an unusual subset of digitally mediated exchange as they provide a dedicated set of platforms for drug dealing, designed to facilitate the whole wicket from advertising, contact, payment, delivery and product review (Martin, 2014). A range of cryptomarkets are hosted using the Tor (‘The Onion Router’) darknet, a hosting and communication system that allows for anonymous interaction using encryption. Users are attracted by practical and non-material benefits such as the pleasures of transgression and the opportunity to participate in a gentrified drug culture (Martin et al., 2020). Some cryptomarkets are more commercialised and polished, others rough and

ready by design. Across all the different forms of cryptomarkets they all provide three crucial affordances: they create a space for dealer and buyer to meet on relatively open and equal terms; they allow the behaviour of both parties to be publicly evaluated; they permit administrative power to rest with a third party who runs the market space itself (Barratt & Aldridge, 2016).

The aim of this paper is to understand the interactional construction of a community of exchange in a context of a darknet hosted illicit drug market. We demonstrate the specific process of constitution through interaction in a technically sparse environment which lacks many of the cues critical to face to face interaction. The process helps us explain a puzzle: these communities function effectively without many of the cues that underpin trust in face to face markets (see Richman, 2006). To explain how operability of the market is achieved in anonymized interactions we turn to the way in

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which the community is held together through emotional regulation and sanctioning.

Our starting point is that these spaces should be understood as intentional communities which evolve specific localised cultural constructs (Sandberg, 2012). We look into processes such as emotional investment, reciprocity, trust and interaction to understand each market space as a workable social entity (Tzanetakis et al., 2016). Social network analysis of cryptomarkets indicates that dyadic interactions matter more than public reputation when establishing trusting relationships between buyers and sellers (Norbutas et al., 2020). Buyers and sellers mutually reward each other over repeated interactions. Each market therefore presents as something acted towards, as well as on and within, which is made operable through interaction and users' self-positioning as interactive, competent subjects (Kowalski, Hooker, & Barratt, 2019).

We posit this process as critical to the creation of drugs as usable, culturally meaningful objects (Hunt, Mihet, & Bergeron, 2011). With the development of the digital society and of online dealing they become mediated socio-technical constructs. The terms in which they are made real for users and sellers is critical to understanding how they are used and for what purpose. As objects they may be more or less commodified, normalised, stigmatised, sacralised depending on the context. This affects how they circulate within drug markets as objects of value to those involved. Therefore this paper contributes to the growing theorising and analysis of illicit drugs in these terms: as objects that are embedded in an economic, social, cultural and technical infrastructure that are made tangible through interaction. We conceptualise cryptomarkets as communities of exchange in order to place the emphasis on these qualities beyond the embedded rationalities that underpin their existence as markets. We reveal that a particular digital culture of drug taking which emerges from interactions within such communities makes darknet illicit drug markets operational.

In this respect this study takes as a point of departure the approach of ethnography of digital infrastructures (Collier, 2020; van Dijk, 2013) which focuses on interaction mediated by specific digital platforms. As two key features of the cryptomarket and forum under investigation we perceive, first, its location in the darknet: one cannot enter this forum if one does not possess a specific technological know-how and related competences. Such location is a first filtering through which only individuals of certain socio-demographic features can get through. Secondly, pseudonymity of the users. They act under a name of their own choice which allows them to hide their real identities in the outside world and yet to develop an identity within the collective emerging during the process of interacting with other market users.

Our focus within the field of ethnography of digital infrastructures is on what happens between people whose actions are framed by the social world of the exchange community once they have managed to enter this market. Following ethnomethodological and symbolic interactional premises we aim to explore whether interactional mechanisms embedded in digital interactions differ from interactional dynamics operating in off-line face-to-face milieus. In order to do so we use a specific analytical and methodological framework rooted in ethnomethodology and social constructivist perspectives. We selected as our case a psychedelic focused market forum we have dubbed 'PsychForumMarket (PFM).' We refer to a particular culture which emerges from the interactions between this community members with the notion of 'psychedelic assemblage.' This notion points to a local constellation of cultural constructs (the purposes and uses of drugs, values underpinning the practices of drug using) which frames the experience of drug trading in this community.

The paper is structured in two distinct sections. In the first we present the analytical and methodological framework which will underpin the ethnographic investigation into the empirical data developed in the second section. With this analysis we aim to reveal not only how interactions are constitutive of the local psychedelic assemblage, but also—crucially—how operability of such illicit darknet communities of exchange is ensured.

## Analytical and methodological framework

The ethnography of this space aims to highlight the constitutive power of social interactions through which a particular subculture of drug use and trade emerges and contributes to its operability. We draw from an analytical framework which combines constructivist and ethnomethodological elements (Rafanell, 2013; Rafanell & Sawicka, 2020). It is constructivist in that it explores how a particular constellation of cultural constructs, objects and meanings emerges from interactional processes mediated by this forum. It is ethnomethodological as it highlights the nature of these processes, that is, the 'methods' (Garfinkel, 1999[1967]) understood as shared practices, procedures and techniques—actions—which members of the PFM community deploy to understand, produce and maintain a subculture which reshapes individuals' lived experience of drug use, and simultaneously ensures operability to the market.

The analytical framework we use is based on the following premises. Firstly, by harnessing and expanding on the claim of symbolic interactionism that social order is maintained by social interactions (Blumer, 1986; Goffman, 1983), we posit that social phenomena—in this case meanings pertaining to drugs and the norms and values regulating drug taking and trading—are *actually* constituted in and through social interactions. These emerge when individuals, with similar interests and aims, i.e., clients and vendors of the market, learn, share, confirm, and negotiate their personal experiences with other members of their collective (Barnes, 1983, 1992). Secondly, the construction (emergence) of social phenomena must be seen as a collective process in so far individuals are mutually susceptible to each other's evaluations (Barnes, 1992; Bloor, 1997). This means that in and through interactions initially heterogeneous individuals who enter this market realign with others in the frames of a shared culture, thus constituting what we call a psychedelic assemblage. By psychedelic assemblage we mean a local constellation of cultural constructs, such as the notions of 'good' and 'bad' drugs, norms and practices of drug taking and trading, and meanings attributed to the experience of drug use. Thirdly, and as a corollary of the above, we argue that social life is collective in nature: immediate collectives effect a compelling force upon individuals' beliefs and practices via dynamics of exclusion and inclusion, thus constituting a particular subjectivity shared by the PFM community members.

Our methodological focus is informed by the ethnomethodological premise that we must identify the methods used by members of localized collectives which generate collectively agreed phenomena and which are to be found, specifically, operating among individuals engaged in interactions. Accordingly, the aim guiding our analysis is to identify those inter-evaluative methods employed by the PFM community members which carry the social constitutive power underpinning the emergence this community's psychedelic assemblage. Harnessing work by sociologists of emotions which shows that humans are hardwired to respond emotionally to social situations (Goffman, 1967; Scheff, 1988; Shott, 1979; Smith-Lovin, 1990; Turner & Stets 2008) we claim that a key inter-evaluative method is a type of sanctioning mechanism which Scheff has labelled 'the deference-emotion system' (Scheff 1988). The deference emotion system operates based on two key emotions: shame and pride. Shame arises as a result of self-monitoring from the standpoint of others when the individual notes signs of disapproval (Goffman, 1967; Scheff, 1988). Pride is the result of the approval of others, enhancing feelings of self-esteem (Scheff, 1988; Shott 1979). Affective sanctioning carries constitutive power due to the fact that individuals are mutually susceptible and constantly monitor signs of approval and disapproval from others with whom they interact, with the intention to avoid shame and obtain pride.

Although affective sanctioning permeates all sorts of human interactions, its effectiveness in patterning individual actions must be linked with the fact that all humans operate within collectives. The more individuals strive to belong to a given collective, the stronger the effects of affective sanctioning might be. This is a crucial aspect of the analy-

sis presented here because it focuses on a community to which members strive to belong as it offers access to goods which are illegal and difficult to obtain in the outside world. For this reason, the PFM collective can exercise a compelling force upon its members based on granting or withdrawing the right to poses the collective's 'club goods' (Richman, 2006). Such goods are those that can be accessed only by the insiders of a collective, that is, only through belonging. We claim that as a consequence of this will to belong, affective sanctioning within this community will result in the alignment of community members in the frames of their local psychedelic assemblage, generating shared affective and cognitive categories. Thus, it will override the effect of anonymity provided by the digital infrastructure of the forum.

#### *Digital ethnography of PFM community*

Our analysis is ethnographic in the sense that we developed a naturalistic approach to the empirical data collected characterized by two aspects. The first is the fact that the activity observed was not disturbed or distorted by the presence of a researcher—researchers who collected data were neither visible to the community members, nor they entered in any kind of contact within the community. The second is the naturally occurring character of the data itself—it was not generated to meet any specific research aim (as would be in the case of interviews) but rather it was data produced by community members who, participating in interactions, left the record of their conversations in the form of posts which the research team subsequently scrapped.

In this sense our approach fits into existing research in digital ethnography (e.g., Billett & Sawyer, 2019; Pink et al., 2015). Our analysis, however, goes beyond traditional descriptive ethnography. The focus on interactional dynamics and its constitutive effects allowed us not only to present the 'thick description' (Geertz, 1973) of the digital culture under study but also to analyse the interactional mechanisms through which this culture emerged. In other words we accounted for the 'how' of cultural specificity of this community, rather than merely the 'what.' Thus, our approach is what may be seen as an analytical ethnography of a digital culture.

The focus on interactions is particularly suited to the study of the PFM community. It is a medium-sized market with at least several thousand users. Unlike centralised cryptomarkets, PFM does not record or display information about transactions, and nor does it have a public review system which researchers use to estimate the size of these markets. Therefore to give a sense of the size of PFM we have to estimate the numbers of users from posts on threads and the read count. At any one time we estimate there are several thousand users involved. That makes the market larger than more exclusive invitation only markets but smaller than the centralised cryptomarkets such as Wall Street. In common with other illicit markets it operates in unfavourable conditions in terms of limits on its ability to control of antisocial behaviours of its members, i.e., those deviating from internal norms. Participants in exchanges carried out in this market cannot refer to external authorities in case of unreliability of exchange partners (both vendors and clients) due to the fact that their activity is illegal and persecuted by international law. Informal organisation sanctioning such as removing miscreants is relatively weak as a bad actor can rejoin under another identity. Simultaneously, the marketplace operates under high external pressure exercised by law enforcement agents acting with the aim of dissolving it and others like it, and may also be targeted by predatory actors due to the somewhat anarchic nature of the cryptomarket ecosystem.

PFM itself is unusual among other cryptomarkets in that it operates as a forum based market where users meet and discuss a variety of issues between themselves. The market's design encourages and, in fact, enforces participation in interactions mediated by the forum: the users who want to trade need to interact with each other via the forum. The forum serves as a 'front stage' of the market—the users cannot access the actual trading space (the deals are made through private messaging) unless they enter into interactions on the forum where they observe other

people and let themselves be observed. It explicitly rejects centralised technical market solutions such as escrow and encryption systems. Instead it emphasises personal relationships between buyers and vendors as the basis of trust: security of the market is decentralised in the sense that all the users are expected to be technologically competent and able to care themselves for the security of the transactions, and the market as such (Bancroft et al., 2019). We argue that this idiosyncratic nature of the community sets in motion specific interactional mechanisms through which this market acquires operability which were the focus of our analysis. Our constructivist approach allowed us to go beyond the description of simple regulation of participants by administrators which may occur in such community. We aimed to reveal processes which are both community constitutive and ensure operability of this marketplace. This study focuses, thus, on two specific collective processes which we term 'structuring' and 'embedding,' following Barnes' (1992) methodological suggestions regarding the need to identify collective constitutive processes underpinning individuals' actions. Structuring and embedding are conceived in this work as generated by specific methods like affective sanctioning, and, in turn, are constitutive of the PFM community.

The former refers to the dynamics through which the community produces its own structures. We focused in particular on the creation and maintenance of the community boundary. First, this involved analysing how potential members become legitimate members of the community and how the individuals in the group operationalise evaluations of each other, either granting or withdrawing the right to belong to the community. Second, structuring encompasses the shaping of internal hierarchies which in turn are crucial in ensuring the effective and secure operability of this space.

By embedding we refer to the process of cognitive and affective attunement of members of this collective which underpin the emergence of a shared life-world. We focus in particular on two key processes. The first is the creation of the social constructs which become shared collective, club goods key to the constitution of the community and its idiosyncratic culture. The second embedding process is the cognitive and affective attunement that underpins the norming of psychedelic drug use and attitudes towards it. Through the norming, heterogenous members of the collective, having different personal experiences, expectations, interests, and sensibilities towards drug use and drug culture, become homogenized in the frames of this particular subculture.

We analysed structuring and embedding under the light of the ethnomethodological focus on the methods underpinning the constitution of social life and group dynamics. A key method in this sense, as noted above, are the inter-evaluative dynamics permeated by affective sanctioning. This approach guided the data analysis: we identified how individuals who meet in PFM sanction each other through negative and positive evaluations permeated by particular kind of emotions—shaming and priding.

#### *Data collection and analysis*

The dataset was scrapped from the forum by a research assistant from 2017 to 2020. The forum's design archived discussion threads automatically and this feature was used to ensure that the data covered the entire period from the forum's founding in 2014. Threads were revisited to examine updated interactions. Some threads had a very long live, being added to and dissected over a period of years. Others, primarily those concerned with specific vendors, had a shorter life and lasted only as long as the vendor did in the market. In total, the dataset consisted of 61 individual threads, that is, anchoring posts and interactions (conversations) they generated. The lengths of the threads varied—the longest generated 479 responses, the shortest generated no responses. In total, 2,394 comments were included in the dataset. The topics discussed encompassed specific drugs and their characteristics, other online drug markets, relations between clients and vendors and vendor reviews, specific problems (e.g., connected with shipping, delivery or payment—cryptocurrencies), security, and meta-discussions about the

PFM market and its specificity. It is worth noting that the longest thread belonged to this last category.

The dataset consisting of recorded interactions was purposefully sampled following the analytical and methodological frameworks presented above in order to construct a ‘thick data’ set (Wang, 2013). We treated structuring, embedding, and affective sanctioning as key themes in agreement with ‘top-down’ qualitative thematic content analysis (TCA) approach. This approach aims at providing an in-depth, detailed account and interpretation of themes selected based on theoretical premises (in opposition to TCA guided by grounded theory approach) (Braun & Clarke, 2006; Clarke & Kitzinger, 2004). By doing so, we considered interactional processes present in the data rather than the topical content. In the next step we analysed data extracts encompassed by these themes, and interactions in which these themes were identified, to reveal sub-themes, which were in turn coded for emerging meanings and interpreted (Boyatzis, 1998). Our focus was on conversations between community members seen as interactions: anchoring posts were regarded actions which generate reactions in the form of comments (replies). Such an analytical procedure and approach enabled us to investigate in-depth what individuals do when they share and negotiate their personal experiences and opinions, and to reveal methods through which this group’s structure and culture is constituted.

The research project had been evaluated and accepted by the Research Ethics Committee of the University of Edinburgh prior to the initiation of the data collection process. PFM and the darknet cryptomarkets are semi-public in the sense that users operate with the knowledge that discussions are open and can be observed. They employ pseudonymous usernames and rely on the infrastructure of the darknet to disguise their identities. As there were no restrictions placed by the forum on research we considered it was in line with the forum norms to use the data as a public discussion<sup>1</sup>. In order that users could not be identified from their posts we have replaced their usernames<sup>2</sup>. The research lead approached the forum administrators to inform about the research, but did not receive a reply. As indicated above, the data was scraped by a research assistant who did not engage in interactions with community members in order not to disturb the community dynamics.

### Analysis and results: constitutive mechanisms within the collective

The analysis of the data builds upon both the analytical and methodological framework described above. We highlighted the importance of the processes of community constitution, identifying two distinct constitutive dynamics of collective patterning: structuring and embedding. In doing so, we aim not only to reveal the processes by which social phenomena are constituted in the digital environment as collective achievements of individuals involved in communicative interactions, but also provide insights into how specifically the PFM community manages to function as a successful illicit market space.

In the analysis which follows we break up the dynamics of structuring and embedding into thematic areas emerging and identified in the data. We begin by presenting several structuring processes present in the interactions among members of the collective: boundary creation and maintenance, internal stratification and belonging dynamics. In the next step we proceed to show how embedding is achieved by the collective constitution of an ontological object—the psychedelic good drug—which underpins a shared life-world of this particular community.

<sup>1</sup> Further considerations of the private-public distinction in the context of cryptomarkets can be found in Bancroft et al. (2019).

<sup>2</sup> Especially in the case of this community the pseudonyms originally chosen by the users correspond with a very particular local subculture of this market, and, thus, have important ethnographic value. In an attempt to preserve this added value and ‘poetics’ of the forum we anonymized the data with the use of pseudonyms echoing the style of original ones.

### Structuring: boundary creation and boundary work

Boundary creation and boundary work is the structuring mechanism that ensures the operability of this cryptomarket. The data reveals two types of structuring process. First a formal one, through which an external boundary is created and maintained, and which demarcates the space of this cryptomarket with very clear admission rules to which all aspiring members must abide. We present the interactional dynamics which underpin the management of this initial formal boundary in the first section.

The structuring of this cryptomarket, however, goes beyond the maintenance of such a formal external boundary, as we reveal in the second section. Data proves that through a diffuse informal process based on monitoring and policing members who have been admitted to the collective, a second internal boundary is constituted. We claim that this second structuring dynamic is essential for the emergence of this community’s shared life-world.

#### External boundary management

An established—official—procedure which is used to manage the admission of potential members of PFM is to locate them in a ‘liminal zone,’ as it were, where aspiring members are closely observed and monitored by community ‘elders.’ They can leave the liminal zone and advance to the actual cryptomarket space through a particular rite of passage: posting 50 meaningful posts in the conversations on the forum. This requirement has important functions from the point of view of the community’s operability. First, an overt and openly discussed rationale for the 50 posts rule is that the newcomers must demonstrate key technical competences in terms of for example, adeptness and rigour when encrypting their communication for security purposes. However, a second—less manifest—aim of this rule, with significant ethnographic value, is that the obligation to post as much as 50 messages exposes newcomers to the culture of the community. This sets in motion a process of acculturation which is also key in ensuring the operability of this illegal digital platform.

Both these aspects are evident in the interaction started by Spreadthelove. This user is an aspiring member who wishes to enter the actual community space but has yet not posted 50 messages, and thus is remaining in the liminal space called ‘newbie corner.’ Spreadthelove expresses sadness for “being blocked in the newbie zone” as they do not perceive themselves as a ‘newbie.’ They state: “I’m not a newbie, I just don’t post often,” and:

*I understand the security reasons for this situation, but it’s really hard for me to post a lot of messages just because I’m forced to do it, for me it’s lying, and I never lie. I’m an honest person, I say only what I truly want to say. Can you give me my freedom, please? :)*

This constitutes a contestation of the 50 post rule. As a result, it sets in motion the process of boundary protection and maintenance. This boundary work is performed by established community members in the interaction which follows Spreadthelove’s challenge and their implicit threat of spamming (“Ok no problems, I will post... Don’t blame me if my posts are not pertinent, please!”). Two types of sanctioning mechanisms permeate this interaction. The first is clearly negative:

*this thread could have been about a subject you’re seriously interested in which would’ve helped your cause more than grovelling” (Catman); and:*

*Yes, please don’t [post not pertinent messages], like many other newbies here. It’s disrupting, and it’s simply not cool. (Phosphor)*

The choice of words such as ‘grovelling’ and ‘simply not cool’ conveys clear disapproval of Spreadthelove’s attitude towards the community. More importantly, such a negative evaluation carries a strong shaming intentionality, questioning Spreadthelove’s intentional self. Spreadthelove’s attitude is considered ‘immoral’ as it is perceived by the members of the community as violating what we will call the ‘sacredness’ of the

community in the Durkheimian understanding, further analysed in the next section. In this sense, such sanctioning has an affective character.

The second sanctioning mechanism takes the form of positive nudges encouraging Spreadthelove to engage with the 50 posts requirement:

*It is not hard to reach the 50 post count. We have seen several newbies who were actually able to contribute to the community within their posts on Newbie Corner and successfully pull it off in less than a few hours. It just takes a little work. (Hazy)*

*There are some good thread's in noobville, or you can always start a new interesting thread if there's something you want to talk about... You're also like halfway to 50 posts, lol (Socialchange)*

Positive self-reinforcement is another way in which potential new members are motivated to accept the rules of the community. Spreadthelove's eventual acceptance of the rule, and modification of their attitude from challenging to complimentary, illustrates how aspiring members are susceptible to the dynamics of sanctioning in interactive exchanges, and thus, how such affective sanctioning dynamics are key to boundary work:

*I will not spam, sorry if you understood that was my intentions! (...) I really wasn't expecting so much people here in the newbie zone! Thanks a lot for coming, now I feel a lot of good vibes here ! :D (...)*

Such boundary maintenance is proved by the response provided by Bomos who provides a testimony of their own experience of moving from the liminal zone to the actual community space:

*It took me like a month to get out and at first I didn't like it, but it allowed me to adapt and get a feel for the forum. It seems you know how to use PGP [encryption] which is great, but there's a few things to learn before being a part of the community. Take it easy, come by once or twice a week and you'll be a free man. (...)*

This comment makes evident that the 50 posts rule is crucial for operability of this community. It allows the established members to verify if the newcomers have sufficient technical abilities allowing for secure communication. As we indicated above, however, the formal boundary is also intended to provide opportunity for adaptation and 'getting a feel for the forum.' In this sense the obligation to post 50 messages should be understood as a de facto rite of passage serving as a means of acculturation to the forum's culture, specificity and its security needs.

#### *Internal boundary constitution: monitoring and policing of the members of the collective*

The 50 post rule is the most evident manifestation of a general logic through which PFM cryptomarket is formally stratified. Once the users are allowed into the actual market space, they can advance to more protected inner spaces of the forum based on the number of messages they post. This arrangement sets in motion the interactional structuring mechanisms operating in the collective as it stimulates, encourages and even enforces active participation in communicative exchanges where further monitoring and policing of members of the collective can take place. Thus, an internal boundary is constituted and separates the collective from the actual community. It contributes to defining the apparently open forum as a striated, uneven space where as one moves towards the social centre of the space there is a steeper requirement to prove oneself as a legitimate actor. We present two cases in which the process of internal boundary creation is revealed.

The thread started by Crawfish exemplifies policing of an inept individual as it eventually results in their expulsion as a member who has been deemed unworthy of belonging to the community. This is done through a twofold evaluation of Crawfish: their lack of technical competence, and lack of understanding of internal norms.

Crawfish describes the difficulties they encountered with managing cryptocurrencies and asks for advice regarding the technical aspects of a

transaction in which they lost around \$400. Instead of advice, Crawfish's request is—revealingly—met with severe negative sanctioning:

*This makes absolutely no sense at all Crawfish. May I suggest the darknet isn't for you. (Strap)*

*(...) you are NOT cut out for this. (...) The best advice any of us can give you would be to simply walk away. (...) (Witcher)*

*Either You are at An Idiotic point in your life OR you are an AMAZING TROLL OR you have been designed by a Higher Intelligence with exact specifications to annoy the shit out of ME and about 25 other people on the forums. (Pickapack)*

This is shaming in an exemplary form: Crawfish's self-worth is directly questioned. It is made clear that they are not good enough to stay in the community. Sanctioning through shaming serves to separate Crawfish from the "we" community, and, thus, is a means of boundary work through which an internal boundary is constituted. Crawfish is located outside the community on the grounds that they are seen as being unable to follow basic OPSEC (operational security) measures essential for the survival of this cryptomarket. To Crawfish's complaints about not being judged fairly, the responses are merciless:

*Don't play the victim Crawfish. (...) What we do care about is your level of proficiency when it comes to ordering drugs over the darknet. The truth is that you're simply not equipped with the relevant skills and / or knowledge to protect yourself and your anonymity. (...) (Strap)*

*Not at all, this is not how this community works (...) I do see a pattern in your posts, (...) in what seems to be a large list of OPSEC fails. (...) (Reflexion)*

Such severe boundary work must be seen, in the case of PFM, as a key response to the external pressure—operating in the conditions of the constant threat of formal sanctions for engaging in illegal activity:

*(...) The best advice any of us can give you would be to simply walk away. If you do not, one of these days you will screw-up so badly that you will end up behind bars (Witcher)*

*(...) how will you fare in prison in your country? if you don't think you will thrive there, (...) Seriously, you annoy a lot of us to tears, but we would still be sad to see you go to jail. (...) (Pickapack)*

The interaction closes with Crawfish being banned from the community. The fact that Crawfish managed to enter this market space makes it evident, however, that the external—formal—boundary is still permeable to individuals who do not quite fit in the community. Thus, the activity of members must still be monitored with the aim of excluding unreliable individuals. The market culture produces a specific socio-technical culture around PGP encryption which treats it as a useful, picky and risky technology that is prone to lull inexperienced users into a false sense of security. Without technically competent market actors the forum will fail. Members who engage in such policing are praised for their effort:

*@Witcher, you are doing an incredible job vetting the keys posted here and saving people from their own OpSec disasters. (...) This community owes you a debt of gratitude that will never be repaid in full but if you can save even just one person from making a life changing mistake it will all be worth it. (Horn)*

*I concur. Witcher, you have been a blessing on here. Thank you (Epiphany)*

In these interactions we see how through mutual evaluations, especially in the form of affective sanctioning—both ridiculing of inadequate actions and priding of proper ones—an internal boundary work is performed. It results in the constitution of a distinction between the 'collective' and the 'community.' By the notion of the 'collective' we refer to the group of individuals who crossed the formal boundary but who

still need to be monitored if security of the market is to be ensured. The fact that monitoring is performed within the collective is 'community' constitutive: it results in the creation of a group of established members bound by a shared understanding of the market specificity and position, and a shared attitude towards the market itself.

The constitution of this community, however, goes beyond the understanding of security issues. What we see in the extensive communicative interactions which take place in this cryptomarket space is also the emergence of a specific culture of drug use and a shared life-world resulting from it. It is this culture which we proceed to analyse in the following section.

#### *Embedding: the constitution of a psychedelic assemblage*

Embedding is an interactional process through which the life-world of a community is constituted. We refer to the constellation of different elements central to the idiosyncratic nature of this community resulting from the embedding process as a psychedelic assemblage. This particular subculture of drug use is, as we will argue, key to the operability and efficient functioning of PFM. For analytical clarity, we divide this section into presentation and analysis of two essential operations: first, the constitution of what we term the key ontological object (the good drug) central to this subculture, and second a more epistemologically oriented process through which a shared life-world emerges. Both these processes are inextricably interconnected, operate in and through interactions and are constitutive in nature. The community norms a specific ontological stance that informs the psychedelic assemblage.

#### *The construction of the key ontological object: the good drug*

While much discussion in more commercialized cryptomarkets focuses around the qualities of drugs as commodities, such as potency and consistency, PFM emphasises the norming of a specific ontological stance that informs the psychedelic assemblage. Psychedelics move from being objects traded in the community to objects through which the community is constructed as an intentional space. An exemplary illustration of the constitutive nature of interactions is found in the discussion about ketamine. In this tread Smallworld questions the exclusion of ketamine from this marketplace. In this interaction we can perceive the process of constitution of an object which becomes the shared collective good of this community, in this case, their conception of a good drug. Smallworld states:

*I realize that this has been discussed at length on PFM. (...) I can report for myself and a lot of other people, that [taking ketamine] it's literally the difference between misery, a life living in a numbed out pseudo life (traditional anti depressants), and a life that is completely devoid of any sign of depression. It's a miracle medicine that should be the first line defence for treating depression (...) given the mission of PFM, it seems a shame to ban one of the substances that has been pretty categorically proven to be a miracle in the treatment of depression (...)*

This starts a discussion in which the users refer to their personal experiences with ketamine, generating some negative and some positive evaluations:

*(...) I've seen what Ketamine can do (...) I've just experienced spiritual bliss on another level.(...) (Highspirit)*

*It can very much connect you with the spirit in a similar way that DMT does. I treat ketamine (and other dissociatives) like a psychedelic drug. (...) (Socialchange)*

Positive evaluations point out the fact that ketamine has psychedelic potential. As such, it is categorized by these users as the psychedelic drug, that is, one that not only alters perception and feeling, but also offers a spiritual reconstitution of the self. In this sense, these evaluations are coherent with the community subculture, as we will demonstrate in the next section.

In the previous section we saw the community dealing with an 'alien' which must be assessed. In that case, it was the delinquent user, in this, the bad drug. In the negative evaluative responses to such understanding and practice of taking ketamine we can see a fierce protection of the community's internal conception of the good drug. This reveals one of the key features of what is to be considered as a good drug by this community: the good drug is one that not only has the psychedelic potential but also is safe to use. On these grounds Hazy—one of the 'elders'—strongly rejects ketamine:

*Despite the evidence in regards to being useful for depression, that still carries the risk of crippling addiction. (...) We have no intentions of ever allowing Ketamine here.*

*(...) I, myself, have had some profound experiences on ketamine. But I also had to fight through the crippling addiction and health problems that came with it. (...)*

As we see the rejection of ketamine is based on the conviction that ketamine is too addictive and physically harmful. This is emphasized in the rationale offered by Sprout, another of the elders, who closes the discussion by stating:

*(...) Our primary goal at PFM is harm reduction (...) I have never taken Ketamine and I don't think I will. (...) We do not have a low opinion of people who use, like and want things not offered here. But we do have an obligation to the community here and the communities we all live in.*

In the process of evaluating ketamine as not a proper psychedelic drug for this forum another key component of their conception of the good drug is revealed. Psychedelic drugs, if they are destructive for a community's social fabric do not count as good drugs. User Silverlining recalls:

*(...) Just look at Greenzone's old forum for psychedelics. They had decided to allow dissociative-anesthetics and now half the posts are about (...) people complaining about balder damage/ deviated septums from ketamine abuse. The mods that allowed dissociative-anesthetics devastated that forums appearance to normal people and hurt the reputation of psychedelic medicines by association. Why do you want that for our home PFM?*

In sum, psychedelic properties, safety, and community reinforcing potential have to be seen as essential components of the conception of the good drug central to this community. Smallworld submits to such articulation::

*Thank you for what you do. I completely understand the position of the Forum, especially once you spelled it out. (...) [Ketamine] it's dangerous and a dance on a razor's edge. Addiction is pretty brutal and the less of it that is encouraged, the better. Thanks for responding to this. This is a great place and you provided a more than ample response to my question, Sprout.*

Here we see the realignment of members of this collective with the understanding of what counts as a good psychedelic drug. Sharing this conception is the key binding force that underpins the idiosyncratic drug subculture of this cryptomarket and transforms the collective of heterogeneous users into the actual—and effective—culturally homogenised community. In the next section we highlight several elements of this subculture which we refer to as a psychedelic assemblage.

#### *Constructing PsychForumMarket's life-world*

In the context of this study, we conceive the notion of a life-world as a naturalistic setting in which individuals' immediate experiences and practices emerge in and through social interactions. Such understanding of life-world allows us to reveal that individual cognition, affect and praxis are open-ended in nature, and become shaped and constituted in what becomes the collective life-world of a community. We focus on two processes: the articulation of what counts for this community as the

'psychedelic' experience and the emergence of a distinctive subculture of belonging. For analytical purposes we present these processes separately, even though they must be seen as inextricably connected in being part and parcel of the same operation of constitution of this community's life-world.

The internal conception of what counts as the psychedelic experience for the members of this community emerges from the sharing and mutual evaluations of experiences with psychedelic drugs. This is evident in a thread where users discuss their individual conceptions of the so called 'ego death.' Randomnumber asks:

*I have taken LSD many many times, (...), but I have never felt even close to experience ego death. From various people I have talked to they seem to say ego death happens when you simply become too overwhelmed and resist the experience. With all of my trips, I always let the trip take me wherever it pleases, and I never try to resist. Is ego death something I shouldn't WANT to experience? Also excuse my lack of knowledge on the subject.*

This post generates a chain of responses in which participants share and evaluate their own but also each other's experiences:

*I have never experienced it, but I have felt the edges of myself dissolve .... for lack of a better way of putting it (Guest674)*

*Honestly those are all fancy words to explain something that is so subjective that it is difficult to truly word. (...) (Blackserpent)*

*Yeah... That's not "Ego Death". Resisting where LSD wants you to go will not get you to this place you are looking for. (...) (Hadogenes)*

*(...) To answer your question, ego death from my experience is very profound and beautiful thing (...) If you a looking to explore your spirituality via psychedelics, ego death is something to be sought after (Lagoon)*

The discussion about ego death evidences the under-determined nature of individual experiences. We see how differing individual understandings become homogenized in a commonly accepted conception of what counts as the real psychedelic experience. Such conception must be seen, thus, as a collective achievement of the community of individuals mutually susceptible to each other's opinions and evaluations.

For this community a key feature of a genuine psychedelic experience is its spiritual character, its ability to act upon the user's world. This is clearly evidenced by the language which is used to describe the practice of drug taking as a 'sacrament':

*I feel that these discussions [on the forum] are necessary to prevent repeating mistakes of the 1960's revolution. Leary was wrong thinking that everyone should take LSD. It should be a sacrament being given to others when they are deemed ready for the experience (Hadogenes)*

The conception of psychedelic experience as sacred and spiritual in nature not only further establishes the internal construct of what counts as the good drug, but also regulates membership in the community. Belonging to this community goes beyond access to the marketplace. It also offers membership in a particular subculture to which members aspire to belong. This is expressed in one of discussions pertaining to the forum itself:

*So not gonna lie, originally I came to PFM just to see if I could sell some bomb ass shrooms and make an extra buck. There was alot I had to learn in order to become a good vendor. This is when i discovered how helpful the fellow members here are. (...) It really is quite a friendly community. (...) (Rustlingswish)*

*I love how the community agrees that there is a side of "enlightenment" when it comes to learning about different psychedelics. (...) There is a deeper level to psychedelics than just laughing and enjoying open or closed eyed visuals and the members here understand that (Qwerty)*

These quotes illustrate that initial obvious desire to enter a respected marketplace is soon substituted by an ascription to the unique subcul-

ture of this community. The process of cognitive and emotional attunement evident in these users' comments results in a collectively shared attitude towards psychedelic drugs. It even sometimes acquires a proselyting character in tune with the spiritual nature of psychedelic experience as defined by this community:

*[I am] Here to meet like minded people who want to share the love and light this sacrament has to offer. (Donson)*

*Well it started as a way for me to connect directly with vendors. What it has turned into is spreading the love as far and wide as I can (...) (Secretclient)*

Such a proselyting attitude demonstrates that individuals admitted to this community are granted the special honour of being a member, which is key to the constitution of the shared life-world. Belonging to PFM community generates strong positive feelings which in turn foster attunement among the community members:

*Since I have been a part of this community I have made many good friends and feel a strong connection with some special individuals that reside here. I talk about things here that I don't talk about with many people in real life. I feel like collectively we are one conscious brain and this forum acts as a hardware for us to learn and grow together. (...) (Monsoonblower)*

Here we have seen different components of the psychedelic assemblage which characterizes the life-world of this community. A key component is the internal conception of the good drug as a community reinforcing entity. This shared construct of the good drug translates into collectively accepted standards and norms pertaining to drug taking and trading. The paramount commandment is that drug usage must be responsible and informed. It is also understood as serving beyond recreational aims. The genuine psychedelic experience, as well as being a technology of the self, is conceptualized by community members as spiritual in nature and sacred. Thus, belonging to this community must be considered a special honour granted to its members.

## Discussion and Conclusions

We have described a snapshot of the emergence of a cryptomarket community of exchange. Through the analysis of interactions between community members we observe the process of the constitution of a digital culture. We argue that this particular localised digital culture of drug taking makes the darknet illicit drug market operational: due to the nature of this market the disciplining process cannot lie with external authorities, rather, it is internal to the community. We have revealed that the key disciplining operation takes the form of affective sanctioning which employs two key human hardwired but also deeply social emotions of shame and pride. This results in the alignment of community members which constitutes a particular subculture of drug use. Through structuring and embedding operations a particular socio-technical assemblage is constituted: a community with clearly demarcated boundaries centred around a constellation of social constructs which shape the members' practices and feelings. Also a hierarchy among members emerges. The experience of core of members is recognised and acknowledged by the community, and informs the local subculture which we label a psychedelic assemblage. Key is the collectively generated construct of a good psychedelic drug which in turn circumscribes the subjective experience of psychedelic drugs use as sacred and transforming the self.

From this case we can observe how this cryptomarket space is striated (Deleuze & Guattari, 1987) and curated by those involved. While in the mainstream internet boundaries are constructed by the systems employed and platform features (van Dijck, 2013), here the space is technically flat. The structure of it is produced by the shared cultural understandings constructed and reinforced through interaction, and the power of a core group to exclude recalcitrant participants. Members are inducted and those who do not demonstrate the right aptitude are encouraged to withdraw or directly excluded. We identified two embed-

ding dynamics which stabilise drug exchange and use in this community. Through constructing the ontological object of the good drug, a lifeworld emerges in the form of a particular ontology of the self within the psychedelic assemblage.

Our use of the concept of assemblage corresponds with the Deleuzian-Guatarian conceptualization of the relational character of the human and non-human elements that produce a material entity, in this case a community of exchange focused on psychedelic drugs. It also resonates with the effort of ANT to eradicate the 'logic of essences' which claims that there are no social forces outside a specific territory. However, our position differs from ANT in that we do employ a flat ontology between human agency and non-human actants. 'Things' (in our case material-technological aspects) mediate indeed what is possible in terms of human action within an assemblage, however, importantly, they have no agency in themselves (Bloor, 1999). Actions of individuals have a constitutive effect, including how material-technological artefacts are interpreted and used, thus generating a particular set of relations within a specific local assemblage. We conceive the material-technological infrastructure as having a causal and determining force in human action and organization (Star, 1999) but it is not conceived, in our account, as an 'actor' in itself with an independent agency from the collectively created human meaning attribution.

In this sense, cryptomarkets are digital territories in two ways. First, in the sense of a technical territory. In addition to the common challenges in cryptomarkets, PFM cannot fall back on the technical and administrative infrastructure of a more developed cryptomarket, where administrators, to some extent, duplicate the sanctioning role. Instead users of the PFM are schooled to exert lateral discipline over each other in a similar way to other global microstructures (Knorr, Cetina, & Bruegger, 2002). Technological components are the use of encryption and cryptocurrency payment systems to ensure material exchange. They require sophisticated levels of technical competence, particularly given the absence of centralized infrastructures common to some other cryptomarkets. They are still, however, permeable to non-genuine agents such as law enforcement. What we revealed in our analysis are all the social components which are essential in ensuring both security and effective trading on this market. Cryptomarkets are, second, socially bounded space. PFM is unusual in the sense that it provides a vast interactional space to the users. Other cryptomarkets may emphasise different elements, for example, one that sells commodified drugs could foreground the market as a place of rational calculation and individualisation of participants, in each case producing a territorial assemblage through its technical and interactive components. In the PFM case, however, the emphasis lies on active participation in interactions among community members. This should be seen as a mechanism through which both a successful acculturation is achieved, and also—importantly—tacit monitoring of members is performed.

The analysis informed by ethnomethodology and social constructionism has allowed us to present an account that reveals the essential constitutive role of the collective understood as an aggregate of interconnected individuals. Although the digital infrastructure of the PFM could be seen as a factor limiting the intensity of affective sanctioning, ubiquitous in all sorts of human interactions, the nature and organization of this collective renders the users even more susceptible to mutual evaluations, as the desire to belong outweighs deindividuation effects of pseudonymity. Thus, we not only reveal constitutive mechanisms embedded in digital interactions, but also how affective interactional dynamics are key in ensuring operability to this market.

## Declarations of 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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## References

- Bancroft, A., Squirrel, T., Zaunseder, A., & Rafanell, I. (2019). Producing trust among illicit actors: A techno-social approach to an online illicit market. *Sociological Research Online*, 25(3), 456–472. [10.1177/1360780419881158](https://doi.org/10.1177/1360780419881158).
- Barnes, B. (1983). Social Life as Bootstrapped Induction. *Sociology*, 17(4), 524–545. Retrieved from <https://www.jstor.org/stable/42852643>.
- Barnes, B. (1992). Status groups and collective action. *Sociology*, 26(2), 259–270. Retrieved from <https://www.jstor.org/stable/42855009>.
- Barratt, M. J., & Aldridge, J. (2016). Everything you always wanted to know about drug cryptomarkets\* (\*but were afraid to ask). *International Journal of Drug Policy*, 35, 1–6. [10.1016/j.drugpo.2016.07.005](https://doi.org/10.1016/j.drugpo.2016.07.005).
- Billett, P., & Sawyer, A.-M. (2019). *Infertility and Intimacy in an Online Community*. Palgrave Macmillan. 10.1057/978-1-137-44981-8.
- Bloor, D. (1997). *Wittgenstein, Rules and Institutions*. London, UK: Routledge.
- Bloor, D. (1999). Anti-Latour. *Studies in History and Philosophy of Science*, 30(1), 81–112. [10.1016/S0039-3681\(98\)00038-7](https://doi.org/10.1016/S0039-3681(98)00038-7).
- Blumer, H. (1986). *Symbolic Interactionism: Perspective and Method*. Berkeley, CA, Los Angeles, CA, London, UK: University of California Press.
- Boyatzi, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. [10.1191/1478088706qp0630a](https://doi.org/10.1191/1478088706qp0630a).
- Clarke, V., & Kitzinger, C. (2004). Lesbian and gay parents on talk shows: resistance or collusion in heterosexism. *Qualitative Research in Psychology*, 1, 195–217. [10.1191/1478088704qp0140a](https://doi.org/10.1191/1478088704qp0140a).
- Collier, B. (2020). The power to structure: exploring social worlds of privacy, technology and power in the Tor Project. *Information, Communication & Society*, 1–17. [10.1080/1369118X.2020.1732440](https://doi.org/10.1080/1369118X.2020.1732440).
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus, capitalism and schizophrenia*. London, UK: Continuum.
- Garfinkel, H. (1999[1967]). *Studies in Ethnomethodology*. Cambridge, UK: Polity Press.
- Geertz, C. (1973). *The interpretation of cultures: selected essays*. New York, NY: Basic Books.
- Goffman, E. (1967). *Interaction ritual: essays on face-to-face behavior*. Garden City, NY: Doubleday.
- Goffman, E. (1983). Presidential address: The interaction order. *American Sociological Review*, 48(1), 1–17. [10.2307/2095141](https://doi.org/10.2307/2095141).
- Hunt, G., Milhet, M., & Bergeron, H. (2011). *Drugs and Culture: Knowledge, Consumption, and Policy*. Avebury, UK: Ashgate.
- Knorr Cetina, K., & Bruegger, U. (2002). Global Microstructures: The Virtual Societies of Financial Markets. *American Journal of Sociology*, 107, 905–950. [10.1086/341045](https://doi.org/10.1086/341045).
- Kowalski, M., Hooker, C., & Barratt, M. J. (2019). Should we smoke it for you as well? An ethnographic analysis of a drug cryptomarket environment. *International Journal of Drug Policy*, 73, 245–254. [10.1016/j.drugpo.2019.03.011](https://doi.org/10.1016/j.drugpo.2019.03.011).
- Martin, J. (2014). Lost on the Silk Road: Online drug distribution and the 'cryptomarket'. *Criminology and Criminal Justice*, 14(3), 351–367. [10.1177/1748895813505234](https://doi.org/10.1177/1748895813505234).
- Martin, J., Munksgaard, R., Coomber, R., Demant, J., & Barratt, M. (2020). Selling Drugs on Darkweb Cryptomarkets: Differentiated Pathways, Risks and Rewards. *The British Journal of Criminology*, 60(3), 559–578. [10.1093/bjc/azz075](https://doi.org/10.1093/bjc/azz075).
- Norbutas, L., Ruiter, S., & Corten, R. (2020). Believe It When You See It: Dyadic Embeddedness and Reputation Effects on Trust in Cryptomarkets for Illegal Drugs. *Social Networks*, 63, 150–161. [10.1016/j.socnet.2020.07.003](https://doi.org/10.1016/j.socnet.2020.07.003).
- Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., & Tacchi, J. (2015). *Digital Ethnography. Principles and Practice*. Los Angeles, LA; London, UK; New Delhi, India; Singapore, Singapore; Washington DC: SAGE Publications.
- Rafanell, I. (2013). Micro-situational Foundations of Social Structure: An Interactionist Exploration of Affective Sanctioning. *Journal for the Theory of Social Behaviour*, 43(2), 181–204. [10.1111/jtsb.12012](https://doi.org/10.1111/jtsb.12012).
- Rafanell, I., & Sawicka, M. (2020). *Emotions in Digital Interactions: Ethnopsychologies of 'Angels' Mothers. Online Bereavement Communities*. Basingstoke, Hampshire: Palgrave.
- Richman, B. D. (2006). How Community Institutions Create Economic Advantage: Jewish Diamond Merchants in New York. *Law and Social Inquiry*, 31(2), 383–420. [10.2139/ssrn.349040](https://doi.org/10.2139/ssrn.349040).
- Sandberg, S. (2012). The Importance of Culture for Cannabis Markets: Towards an Economic Sociology of Illegal Drug Markets. *British Journal of Criminology*, 52(6), 1133–1151. [10.1093/bjc/azs031](https://doi.org/10.1093/bjc/azs031).
- Scheff, T. J. (1988). Shame and Conformity: The Deference-Emotion System. *American Sociological Review*, 53(6), 395–406. Retrieved from <https://www.jstor.org/stable/2095647>.
- Shott, S. (1979). Emotion and Social Life: A Symbolic Interactionist Analysis. *American Journal of Sociology*, 84(6), 1317–1334. Retrieved from <https://www.jstor.org/stable/2777894>.
- Smith-Lovin, L. (1990). Emotion as Confirmation and Disconfirmation of Identity: An Affect Control Model. In Kemper T. (Ed.), *Research Agendas for Sociology of Emotions* (pp. 238–270). New York, NY: SUNY Press.
- Star, S. L. (1999). The Ethnography of Infrastructure. *American Behavioral Scientist*, 43(3), 377–391.
- Turner, J., & Stets, J. (2008). *Handbook of the Sociology of Emotions* (pp. 544–566). New York, NY: Springer.

- Tzanetakis, M., Kamphausen, G., Werse, B., & von Laufenberg, R. (2016). The transparency paradox. Building trust, resolving disputes and optimising logistics on conventional and online drugs markets. *International Journal of Drug Policy*, 35, 58–68. [10.1016/j.drugpo.2015.12.010](https://doi.org/10.1016/j.drugpo.2015.12.010).
- van Dijck, J. (2013). *Culture of Connectivity. A Critical History of Social Media*. Oxford, UK: Oxford University Press.
- Wang, T., et al. (2013). Big Data Needs Thick Data. *Ethnography Matters*, May 2013 Retrieved from <http://ethnographymatters.net/blog/2013/05/13/big-data-needs-thick-data/>.
- Winstock, A. R., et al. (2020). Global Drug Survey 2020, Key Findings Report Retrieved from <https://www.globaldrugsurvey.com/>.