Producing planned hedonism among opiate users in an online drug market

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Introduction: Markets embed a specific kind of illicit drug culture

The purpose of this chapter is to outline how a specific type of online drug focused marketplace produces drug dealer and user subjectivities. Typically, illicit drug distribution can be characterised as taking place between three different distribution modes. In one corner is social supply with principles of mutuality, reciprocity and a flat network distributing arrangement (Coomber and Turnbull, 2007). In another is distribution through market exchange which prioritises the cash nexus, profit/value incentives and relationships mediated by consumption (Felstead, 2018). Finally there is a third mode, that of ideologically driven, altruistic supply that emphasise the drug and use as in a political, ideological or spiritual relationship (Tupper, 2008). That broad brush typology disguises many nuances and subtleties in practice (Hammersvik et al., 2012). The distribution modes may involve varying degrees of exploitation and obligation, they may promote practices of care or generate harm, they may expand drug distribution or keep it within a tightly bound social and cultural context (Belackova and Vaccaro, 2013; Coomber and Moyle, 2014). Different distribution modes and presentations of self may occupy the same technical infrastructure and market space (Bakken, 2020; Demant et al., 2018).

The generalisation of markets as a mode for illicit distribution and organisation has had wide ranging effects on how drug users obtain and consume drugs. As has happened more broadly in capitalist societies we have seen an expansion in the conscious use of market forms for identity formation, self-creation and expression (Dijck et al., 2018). Market principles value certain qualities in both products and users: professionalism, the capacity to make objective judgements, to act as self directed, accountable agents, and invite drug users to express themselves as instrumental, reflexively hedonistic consumers (Turner, 2018). Digital technologies are both disruptive and confirmatory. They transform opportunities for illicit drug exchange, the formation of cultural collectives of drug users and the capacity for self creation. They also confirm and reproduce some existing hierarchies, especially those between self identified recreational and dependent users. They create new spaces for trade and discussion, define new attributes, and foreground the experimental and the competitive (Martin et al., 2019). That has implications for how we understand normalisation as happening through markets. The drug distribution mode affects the parameters of normalisation for example with social supply contributing to normalising particular use patterns (Coomber et al., 2015). We can welcome self organising digital markets as promoting and embedding norms of destigmatisation and harm reduction but also be aware of where its foregrounding of a market focused engagement with drug distribution can lead user communities. It may concentrate market power, promote bulk purchase over retail, create supply chain risks and ultimately increase dealer power.

Cryptomarkets, as one such example of market innoviation forming the focus of this chapter, are hidden, anonymous marketplaces which mostly deal in illicit drugs along with some other illicit goods and services. They are hosted on the Tor ('The Onion Router') darknet. Tor is developed and operated by a network supported by The Tor Project foundation. It emphasises the benefits of privacy and security. The system uses encryption and signal routing to hide participants' digital identities. The markets are hosted by administrators who connect their servers to the Tor system. This is called 'onion hosting'. Along with the use of a distributed cryptocurrency, typically bitcoin, it allows transactions to take place in relative anonymity. Drugs are bought and sold, and delivered to the buyer using couriers, the postal system, or dead drops. Mostly they handle the 'last mile' of the drug trafficking system with sellers, buyers and market hosters mostly based in more affluent countries, and within that representing a more connected and affluent fraction of users (Dittus et al., 2017). Users are a specific demographic – not necessarily more affluent but digitally skilled and

adept at operating with this kind of market. Cryptomarkets function as a drug distribution ecosystem and forums for drug users and sellers to meet virtually and examine the drugs being sold, the reliability of sellers and the desirability of particular drug effects. They also provide sites of contestation of the illegality and stigmatising of illicit drugs (Barratt et al., 2016; Hübschle, 2017).

I am focusing on market modes of distribution and the effect they have as it provides an opportunity to examine how the process of drug distribution shapes intoxication subjectivities and the drug as a specific type of object with tangible characteristics. Market based drug distribution embeds some basic principles about drugs as objects: that they are commodities, they are interchangeable. It also frames drug users as specific types of subjects: they are consumers, they are focused on product qualities such as purity and they expect and reward customer service by dealers. It emphasises competition between drug dealers and between consumers. Just to pause here: not every market really does that in practice, and as we will see, apparently open and consumer led markets can in fact concentrate power among a small number of providers who can set the terms of trade. In this way the illicit drug markets function much like capitalism everywhere. An apparently open, free and voluntary relationship really depends on the consumer adapting themselves to the terms of trade offered. It narrows the drug *users'* self perception to that of a drug *consumer* focused on calculated, planned hedonism, meaning an expectation of pleasure along with a risk reflexive subjectivity (Bilgrei, 2019). That is a powerful ideological effect of a market society and culture. The focus of this chapter will be a specific element of that, how drug buyers in cryptomarkets construct, assess and reward potency as a tangible quality of the drugs they are buying and using.

In capitalist societies markets are often presented as naturally occurring creations, places where people with something to sell and others with a need to fulfil meet in mutual exchange. This is a powerful view in understanding some qualities of illicit markets, and moving away from pathologizing the actions of drug dealers and users within them. Markets are places of competitive exchange and they come into being to address problems of stability, predictability and reliable valuation (Beckert and Wehinger, 2012). Markets are also inventions, social constructs which institutionalise, design in and reward specific ways of being. Players in illegal markets face various problems. They have to succeed in making their activities work together despite being disparate, remote, fleetingly interacting. It is a problem of ordering interaction in ways that will lead to the expected outcome. Market actors want to exchange but they want to do it at a price that suits them. That can be tricky to agree, hence formal pricing mechanisms are handy. Every participant is risking something, and this is more the case in illicit markets. Therefore participants use heuristics to reduce that risk – platform loyalty, brand loyalty, vendor loyalty, and markers of quality and reliability which of course may not be that reliable. Markets can only solve these problems if they are culturally, socially and institutionally supported (Beckert, 2009). Drug markets are institutionalised whether in the street (Coomber and Maher, 2006), social media (Moyle et al., 2019) or the darknet (Aldridge and Décary-Hétu, 2016).

Digital illicit markets and cryptocurrencies promise greater transparency, democracy and accountability but this is not necessarily borne out in reality (Bratspies, 2018; van der Gouwe et al., 2017). To the extent to which these qualities do come about they are due to the efforts of participants and sometimes involve circumventing or resisting the centralising, profit driven logic of the markets themselves. In this chapter I argue that the cryptomarkets discipline users towards a specific set of stances towards the drugs they purchase: that the drugs they buy are 'good' drugs – both in the sense of legitimated and also being of the most suitable quality and effect, and that drugs are or should be informationalised and commodified as consumer products Users adopt a tendency to reify, quantify, and engage in cost benefit analysis and rational use discourse about their drug consumption. They show willingness to accept harm as a necessary and sometimes welcome risk as long as it allows for users' agency. There are some partial exceptions to the focus on drugs as products, particularly in the field of psychedelic use where user communities often resist commodification. Those precepts foreground a market effect in our analysis in that the supply chain

matters in shaping what is being bought and consumed, and how it is consumed. The buying and distribution infrastructure places users squarely in the hyper modern category of risk reflexive, hedonistic consumers.

Research

The chapter draws on research from a drug cryptomarket. Discussion forum data were collected from a leading cryptomarket, Agora, from 2014- 2015. Agora was dominant in the cryptomarket ecosystem before voluntary closing after succumbing to technical and organisational problems. Launched in 2013, it survived the coordinated takedown of cryptomarkets in Operation Onymous in 2014 and thrived afterwards (Décary-Hétu and Giommoni, 2017). For this paper 3500 posts were coded from the whole dataset to understand the relationship between market use and the self-orientations of opiate users. The focus of my analysis of Agora was on opiate users' threads as after reviewing the dataset potency was a theme to the fore in opiate buyers' and sellers' discussions, and this quality was critical to their understanding of the cryptomarket as a useful mode of drug distribution. Discussions of psychedelic and other drug use was included for comparison. The threads discussed a variety of drugs as users consumed many different drugs alongside opiates. Their drug repertoire included Xanax, benzodiazepines, cocaine and amphetamines.

Making the drug

Intoxicants are valuable commodities (Reuter and Greenfield, 2001), risky objects generative of human subjectivity (Fraser and Valentine, 2008; Vitellone, 2004), totemic and productive cultural entities (Fitzgerald, 2015), effective technologies of governance (Seddon, 2009), and facilitators of social life which articulate and affirm social order (Fraser and Moore, 2011). Drugs as objects carry all of these elements which shape their effects in the world. They go into defining whether a drug is a good or bad object and in what terms. I examine potency as a biochemical matrix composed of different elements – predictability, purity, consistency, lasting effect, and pharmacokinetics. The relationship between the substance and the body is critical: the pharmaceutical lasts in the body, metabolises, leaves traces and memories (Dennis, 2016). This effect is a material and social product, a human and non-human assemblage (Dennis, 2019). Power is composed of chemical potency and potency is a political quality. The two compose the intoxication consumption regime, the ontological politics of the drug (Fraser, 2020).

There is a recurring pharmaceutical myth that differences in drug effect are largely produced by differences in chemical purity and stability. To move away from that, the triptych of drug, set and setting was identified by Zinberg (Zinberg, 1986). Outcomes are a result of the interaction between these three points, the chemical substance, the user's psychology and expectations and the consumption environment. Going slightly further, drugs themselves become different substances in different consumption regimes. Medical diamorphine and street heroin are qualitatively and quantitatively different, in composition, consumption and effect (Strang and King, 1997). This has a real world effect in the attributes applied to the drug and in decisions about regulation that directly affect the market (Moeller et al., 2021).

Cryptomarkets are notable in shaping potency because the markets are designed to expose drug purity as a factor in the purchasing decisions made by buyers. Both buyers and sellers value the market's ability to help informationalise the product and introduce explicit discussions of purity. The link between drug content and potency is one that can be examined critically. Many assumptions are made about what purity means for the user and these are picked apart in the cryptomarket user forums. Users were concerned to demonstrate that the drugs they used were 'good' drugs. In the case of PsychForumMarket this meant that drugs were effective in the world. They wanted the psychedelics they shared to transmit spiritual psychedelic culture, to heal and to disrupt harmful ways of thought and life. Agora users wanted the drugs they consumed to be effective on themselves, to be potent.

The starting point for discussions of potency was the pharmaceutical quality of the drug, which became known in several ways: as an embodied experience, through a visual and chemical assay of the drug, and through user reports of it. The qualities of the drug were viewed in terms of the way it fitted best with the context and purpose of use. Users advised caution and told others to approach stronger drugs with a degree of care. Less experienced users were thought to be more at risk and with more potent drugs it was harder to establish an effective dose-response relationship. There is a danger of the drug becoming unwanted, a bad drug that induces overdose or other unwanted effects. For opiate users, potency was a tricky feature, both desired and dangerous, as greater purity typically meant more adverse, unwanted effects. Warnings from the drug vendor could be a badge of quality and risk as in this quote from a heroin buyer:

> *When [vendor] mentions that this is of comparable strength to Diamorphine, I undoubtedly agree. Those without a tolerance must take extreme caution with this product, the infrequent user will most probably get a very strong effect at 5mg, with a full blown nod at 10mg.*

Users and vendors posited statements about the likely purity of each batch expressed as a percentage. However they also were aware that purity is a slippery and subjective construct and the percentage 'purity' given was used as a rule of thumb or guide to the drug's relative effectiveness. Users expressed potency in terms of strength and the challenges the drug presented when being used, stronger batches being 'hard to come to grips with' and 'not to be trifled with'. Side effects were accepted by some heroin users as indicators of good potency. Users personified the drug as an animal, strong but dangerous as with this heroin user:

> *I got [vendor's] stuff back when he was still sending out 'good' quality, but I still rank him at the bottom. It seemed potent, but I'm pretty sure that it seemed so potent because it was cut with some antihistamine or other sedative. Didn't really make me itchy or nauseous, which good dope* [heroin] *always does.*

An unexpectedly strong effect like the heroin 'nod' could be reassuring to users. Users of this forum often self defined as addicted. It told them they were still able to feel pleasure, to experience risk and that their drug use was not wholly defined by addiction. The unexpected pleasure that came with using a particularly effective batch was reassuring to those that experienced it. It signified that they still retained the ability to shape their drug use and experience a range of effects from it. In contrast users of ecstasy/MDMA in the same market tended not to see those drugs in this way. Side effects were largely characterised as 'dirty', wholly unwanted contaminants. A frequent example would be residue in the spoon after cooking heroin. In contrast to unpleasant side effects which could be taken to be dirty or as desirable and indicating high potency, residues were always dirty, always unwanted. They signalled unused contaminants that had been introduced into the drug. In terms of potency then the remnants from cooking were a final clue before consumption as to the true nature of the drug being consumed. The residue may act as a cue and primer for consumption. A complete burn of the drug indicates purity and so prepares the user for a more exciting ride.

The drugs' pharmaceutical potency mediated its moral purity. The relationship between heroin users and side effects was a complex one. Where ecstasy users sought a clear dividing line between desired effects and 'dirty' side effects, for heroin users dangerous side effects were too closely bound up with desired effects to be separable. As Mary Douglas theorised, dirt is matter out of place – an environmental but also primarily a moral and social contaminant (Douglas, 2013).

Commodifying the drug and introducing supply chain effects

Moving the drug as a good or bad object, this section is about the terms in which the drug is defined as desirable/undesirable as a market commodity. Drug users' subjective reports often are able to distinguish whether the drug is desirable, for example distinguishing MDMA from undesired

analogues by noting particular adverse effects or the lack of effect in tablets told as ecstasy (Brunt et al., 2012). Online markets and discussion forums promote information sharing and a consumerist rationale around which users shape a drug user identity (Bilgrei, 2019).

Vendors' reputation depended on a consistent, potent product, delivered as expected. Stability existed between testing and consumption, and the vendor's capacity to provide a consistent stream of the product. Forensic data was a useful go-to for buyers. Vendors and users would post drug test results on the forum. Independent harm reduction services would also do the same. Users also assessed the methodological qualities of the testing methods being used. They discussed sampling problems and the construct validity of test results. The use of drug testing was incorporated into the narrative of the good vendor who supplied a predictable, potent product. The use of tests was not wholly reliably as an independent measure.

Agora combined many of these information sources into an understanding of the drug as a commodity. Some qualities that matter here are consistency between different batches of the same product, consistency within the same batch, and whether it is in a form that can easily be separated into smaller doses. Commodification promotes an understanding of the drug as an instrumental object. From the vendor's point of view the ability to price different batches according to their characteristics and for that to mean something to drug users is key to their business. Selling heroin in grades according to different qualities allows them to sell batches of different purity and present this as a business choice rather than a necessity caused by the supply chain.

A critical effect of commodification was the way in which changes in potency and the drugs being sold were driven by supply chain needs rather than necessarily consumer demand. Discussions of changing drug potency often make an assumption of a consistent potency-risk curve (ElSohly et al., 2016). The higher the dose, the higher the risk from each intoxication event. However there is at most a weak long term correlation (Desmond et al., 1978; Risser et al., 2007; Schifano and Corkery, 2008). Localised market fluctuations create short term risks depending on the quality of shared intelligence about purity and dose (Mars et al., 2018a). However confounding factors such as disruption to local markets and injecting sites are more significant in terms of negative outcomes (Maher and Dixon, 1999). There are challenges however (Lamy et al., 2020; Lokala et al., 2019). One of the challenges of fentanyl is framed as the drug being so potent that it is very easy to get the mix wrong. That may be a product of how it is sold. When cut with supplement heroin then it becomes difficult to manage the dose properly. Small variations in a sample will mean significant differences in the effect, and it is unlikely for a street sample to have the drug spread evenly throughout.

Therefore the dealer may not know what they are selling. Even if the dealer has a good sense of the purity of the drug – which is not a given (Coomber, 1997) - any individual package made for retail sale will vary from the total purity of the dealer's supply. The user will also introduce another degree of variation when choosing an amount from that package to use. The potent quality of fentanyl introduces challenges when it comes to dose titration. These challenges are not insurmountable – many users manage well and are able to titrate their dose with confidence. However it places more demands on dealer and user in order to achieve the expected and desired dose (Broadhurst et al., 2020). Potency mattered for heroin users in particular who elaborated on a strong link between potency and pleasure. Potency meant a combination of material qualities, including purity, lack of unnecessary adulteration and the right mix of constituents. A critical distinction was drawn between unwanted 'cutting' where the dealer padded out the drug for their own profit and necessary mixing where the dealer added to the drug either during or after production to produce particular intoxicant qualities. This required an understanding of pharmacokinetics and pharmacological effects. For example, one heroin type could be preferred because it produced a longer lasting high, or another because it staved off cravings for a longer period of time.

Users as hyper modern and risk reflexive consumers

Consumption begins with contemplating the drug's qualities, creating or selecting the time and place of consumption (Duff, 2014). Rationality is an orientation to a specific kind of cultural valuation that is produced by technical mechanisms and shared culture (Childs et al., 2020). The cryptomarkets are geared towards a rational actor subjectivity and cue up and reward this kind of behaviour and presentation by their users. Elements of this subjectivity were: value as defined by potency, quality and reflected in price; a focus on pharmaceutical makeup and potency; and embodying drug use practice as planned hedonism. Uses show a tendency to reify, quantify, and engage in cost benefit analysis and rational use theory. They resist some of the implications about what being an opiate user means. Self identified addicts in the Agora forums employed an addiction repertoire, using different types of drug in different ways depending on the context.

This is not straightforward as in the illicit context users had varying degrees of control over their consumption context. Some had to hide their use from family members while still consuming or maintaining a working life. Stigma and structural harm became manifest as part of that. The consumption context was not just in the act of ingesting the drug and experiencing its effects but included these other contexts that mattered. Use of a potent drug could be a way of affirming agency in the users' self-perception, as one heroin user argued:

> *Opiates are fairly easy to control as long as you keep a strict schedule (no longer then 3 days in a row/no using during a workweek). I have been doing heroin for about 2 months now almost every weekend and I actually decreased my initial dose. ... Still gives you a pretty nice rush and a good baseline euphoria while maintaining enough wits/awareness to watch tv, play video games or what have you.*

The combination of maintaining daily life along with regular heroin consumption domesticated potency in their view. Markets may reward participants who are better placed to present themselves as instrumentally motivated rational actors mediated by a process of social embedding (Moeller, 2018). Heroin became an everyday drug rather than a problem drug. Users recognised that market information would only tell them so much and that at some point they would have to use experiential methods to assess the likely interaction with the drug such as using low solution testers and observing others (Mars et al., 2018b).

The market infrastructure reflects and reproduces that subjectivity

Key decisions taken in designing and maintaining the buying and distribution infrastructure are designed with this subjectivity in mind through a combination of the technical affordances and features of the marketplace with the organisation and market power of both the cryptomarket administration and the vendor, and the Tor infrastructure (Collier, 2020). The listing system, the discussion forums, the reputation scoring system, the dispute resolution system, messaging, platform encryption, and favoured bitcoin services are all part of this. Platforms present themselves as technically effective, socially neutral systems. However they are designed to promote kinds of engagement and behaviour which are beneficial to the platform owners. For example, Finalise Early (FE) was a place where interests diverged between vendors and buyers (Moeller et al., 2017). The practice of FE means payment is released immediately. FE is largely in the interest of the seller. Initially discounts were provided for using FE, over time some vendors simply required it as a part of doing business. FE is a technical affordance of the platform. The platform concept draws on critical digital studies of integrated digital economies (Pasquale, 2017). They envelop users in a system which binds them economically, culturally and personally. They promote particular kinds of performance and action such as that of being a rational participant (Childs et al., 2020). The platform valued the vendors' ability to provide a range of product. Variety was valued as much as purity.

Some users especially appreciated vendors who acted as a one stop shop for substances ranging from opium to fentanyl and counterfeit Xanax.

Platform users had to develop both their technical and cultural competence in dealing with the cryptomarket as a platform which has technical affordances and economic dynamics that they could find difficult. The cryptomarkets tend to centralise and reward bigger players – both buyers and sellers. While often beginning as fairly open retail ventures they morph into systems that reward the more professional and well resourced players through economies of scale and the ability of larger vendors to arrange sweetheart deals with the market administrators. These larger and more successful players can set the terms of involvement of others, for example, by only selling to better established customers. New users expressed this in terms of having to adopt the right online persona that would adapt to the norms of the platforms. In several discussions the drug buyers expected themselves to be evaluated as a good or bad customer depending on their engagement with the vendor.

The community shared principles of adaptability to the norms of the platform. Users were encouraged to leave reviews of the drugs they bought. Most vendors had very high scores, typically at least 4.5 out of 5. This led to some suspicion that the system was easily gamed by the vendor or corrupted by the administrator. While that was likely to happen, in part the review system was normalised and supported by the community of buyers in order to make it more effective. Users admonished disgruntled customers to express their sentiments to the vendor directly or in the discussion forum rather than dropping a negative review score.

A result of the platform's qualities was account 'stickiness'. Vendors and buyers were reluctant to create new accounts despite the potential security advantage. Having to start a new account 'clean' without their established reputation and without the existing relationships with market administrators and key customers would be far too disruptive. The platform design imposes security costs on its users. This helps keep them in the walled garden.

Discussion and Conclusion

Illicit markets shape subjectivities and drugs as commodities. Planned hedonism pulls opiate users who engage through the cryptomarket into that orientation. Cryptomarkets are a social-technical matrix that users must become savvy in when they use them. It involves a combination of cultural knowledge, technical and material qualities, and personal and organisational capacities. There is an overlayered network of infrastructures which are involved, from the market's technical and administrative infrastructure to at-home drug testing methods. The drug as a usable substance is shaped in the relationship between dealer, user, market and consumption context. Potency is a quality users and dealers bring into being (Moeller, 2018). Potency was a quality often referred to by users but was not a universal quality. The talk around opiates in the market was a struggle between the specificity of the particular batch that was being sold and consumed and the immutable characteristics of the drug. Producing a predictable effect involved assembling several supports – material, environmental, psychological, cultural and experiential.

Potency was desired, dangerous and elusive in the eyes of users. It was a quality they felt was acted upon them and was acted on by them. Potency was examined as a community construct that involved concepts of pharmaceutical purity, best fit to purpose and the user's set. Theorising the pharmaceutical qualities in these terms allowed me to account for its material stabilities and instabilities across different domains. The various opiates being discussed possessed relevant material qualities which were enacted in their presentation, purchase and consumption. As a political economy it applies to other systems such as the commodification of alcohol and performance enhancing drugs where risks and pleasures are similarly produced, distributed and enacted in consumption.

Cryptomarkets advertise their capacity for introducing predictability. As the experiences of users showed, however, markets could be vehicles for introducing risk and limiting knowledge. Users learnt and taught each other how their own experience and judgements were ultimately the only ones that could be relied on. They are systems which embed the political economy of the digital drug market, its focus on competition, consumer identity and principles of agorism. Agorism is the principle that societies should organise around voluntary anarchic exchange. The ideological emphasis on agorism in the markets tended to obfuscate some of the political economy aspects such as supply chain effects and the dominance of better established players (Lokala et al., 2019).

Problems arose when the supply chain was seen to introduce invasive substances (Mars et al., 2019) of which fentanyl was one. Discussion around substances like that would draw on a range of data from users' trip reports to public health warnings in order to resolve the substance as unwanted or as one that while risky could be absorbed into the user's drug repertoire (Bilgrei, 2016). The drug was then defined as dirty or clean depending on its acceptance within the community (Douglas, 2013). Adulterants were treated in a similar way. Some could be desired as changing the form and experience of the high, others as unwanted or dangerous.

The markets presented themselves as offering tools to make the drug buying and consumption process transparent. User ratings and tests were intended to support a rational approach to drug consumption. The ability of users to manage their use effectively was both supported and limited by this. The relative transparency about the products' pharmaceutical qualities exposed the limits of users' and vendors' abilities to manage and limit pharmaceutical risks. Adulteration could be introduced further up the supply chain so it became impossible to avoid consuming unwanted adulterants. Although the markets were designed to get around supply chain risks they often highlighted and reproduced them. These factors highlighted how markets can increase transparency and obfuscate power relationships at the same time. The markets were relatively open and supportive of users, so this was in many ways a positive harm reduction environment. Users placed a lot of store by their ability to engage in harm reduction practice. Alongside that it was apparent what risks could not be mitigated. Users would use the information provided to seek out some risks, associating higher potency, higher risk heroin with a better experience. Though that might sound negative it was a useful counterpoint in that it shows users' desire to enact their agency and not reduce their experience to a balance of risk and benefit.

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