## Chapter 9

# **Cryptomarkets and Drug Market Gentrification**

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## **Abstract**

Cryptomarkets have expanded rapidly since the launch of Silk Road in 2011, offering a significant new mode for the sale and distribution of illicit drugs. One of the key questions accompanying the proliferation of cryptomarkets and online drug distribution concerns how these unique online for a alter relationships between drug suppliers and their customers. Existing research points to an increase in perceptions of safety and respect among people who use cryptomarkets to purchase drugs relative to other 'offline' modes of drug acquisition. There is a growing body of evidence that suggests that drug suppliers are also attracted to cryptomarkets by perceptions of increased safety, as well as by market norms and institutional processes that are characterised by respect and courteous engagement. These issues fall broadly under what has been termed market 'gentrification' - that is, the substitution of offline drug market norms, which are sometimes characterised by violence, intimidation, suspicion, and exploitation, with relative feelings of safety, respect, and courtesy. This chapter explores the 'gentrification hypothesis' and examines how the unique structural characteristics of cryptomarkets, which include user feedback and ratings, dispute resolution systems, and administrator and community 'policing' of cryptomarkets, as well as online discussion forums, assist in fostering the development of pro-social norms that appear to be prevalent on cryptomarkets.

*Keywords*: Cryptomarkets; dark web; online drugs; gentrification; non-violence; pro-social norms

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## Introduction

In late 2016, I was travelling through British Columbia carrying out interviews with participants in the local cannabis trade. I met one interviewee in her home – a large, wealthy suburban house behind a white picket fence where she lived with her husband and their school-age children. It was a surprisingly idvllic representation of North American suburban life. The striking aspect was the contrast – this visibly affluent and respectable woman was, in simplistic terms, a 'criminal', the owner and manager of an illicit grow operation of thousands of cannabis plants which comprised a small but significant component of the region's signature illicit export, BC Bud. Of course, this contrast should not have come as a surprise. Participants in the shadow economy routinely belie the stereotypical images that are presented in news media. Nonetheless, I asked the couple whether they felt there was a contrast between the respectability of their lifestyle and the illegality of their work. 'It's not as bad as you might think', the woman replied, pointing out that with federal legalisation slowly approaching, local law enforcement was not prioritising investigation into cannabis growers, and there was therefore little risk of 'the police kicking in the door'. More importantly, she continued, the local cannabis growers all knew one another, and the trade no longer involved interaction – and possible confrontation – with outlaw motorcycle gangs and other dangerous organised crime groups. The trade was therefore noticeably safer than it had been in previous years: 'It's not like the old days', she explained, 'if it was, there's no way we'd still be doing this'.

This exchange was instructive on several levels. Firstly, it demonstrated an intuitive and no doubt well-honed sense of risk perception on the part of a drug market participant with decades of first-hand experience in the local drug economy. Secondly, it showed that the perception of risks in said drug economy could change, and that people use their knowledge of these risks to inform their participation on an ongoing basis. If the level of threat from law enforcement and non-state sources were deemed to be too high, they would find alternative work and the trade would be left to those with greater risk tolerance. If risks were judged to be sufficiently low, more risk-averse actors – such as the woman I was interviewing – would participate in the market. Thirdly, risk, a well understood but exceedingly difficult concept to quantify, seemed at these very low levels to translate into a qualitatively different experience, one where the dangers of arrest, injury, or violent confrontation appeared so remote as to no longer represent a plausible reality. And lastly, the perception of negligible risk seemed likely to be self-reinforcing in that it could attract other risk-averse, 'respectable' participants – in this case, the other local growers with whom the interviewee associated – whose presence in the market would further entrench norms favourable to conflict aversion and non-violence. In this way, and with the right conditions, it seemed as though a wave of gentrification could sweep through an illicit industry like those sweeping through inner urban areas of the post-industrial Global North.

This anecdote, highlighting the potentially self-reinforcing dynamic between low risk and the attraction of risk-averse market participants, represents just one way that drug markets may experience gentrification. But what exactly does gentrification mean in the context of illicit drug markets? And what factors precipitate its development? This chapter aims to explore these questions from a criminological perspective with particular reference to cryptomarkets and the dark web trade in illicit drugs. It will define gentrification in the context of illicit drug markets, before discussing the processes by which gentrification manifests on cryptomarkets and the empirical basis that underpins them. The chapter will conclude with some exploratory thoughts that may be used as a basis for further research to consider drug market gentrification both on the dark web as well as in other drug markets.

First, a quick note on terminology. This chapter refers both to cryptomarkets and the dark web. The dark web, also known as the Tor network, is an encrypted sub-section of the Internet. Accessing the dark web is only possible through the use of a Tor browser, which masks a user's IP address, which is the unique identifier that allows authorities to track an Internet user's location, browsing activity, and so on. The dark web is sometimes confused with the deep web, which is a different, much larger part of the Internet which is not accessible via a regular Internet search and is instead behind a paywall or sign-in obstacle of some kind (e.g. a university or business intranet). The clear web, by contrast, constitutes anything on the Internet accessible via a regular search. Cryptomarkets are pseudonymous marketplaces operating on the dark web (Martin, 2014b).

## **Background**

Gentrification and illicit drugs are often considered to be negatively correlated. On the one hand, conventional urban gentrification is associated with the 'transformation of a working-class or vacant area of the central city into middle-class residential and/or commercial use' (Lees et al., 2013, p. xv). It is a process of urban change and renewal that, depending on one's perspective, may seem alternatively inevitable, desirable, or regrettable. On the other hand, illicit drugs, at least in much of the popular imagination, have traditionally been associated with urban decay, with slums and ghettos, junkies and muggers, and with the great destroyers of property value – crime, disorder, and fear. Aggressive gentrification, whether in São Paulo's 'Crackland' or in Sydney's Kings Cross, has been implicated in crackdowns on open-air drug dealing and the displacement of drug users, particularly those who are homeless, socially, or economically marginalised, or whose use is visibly problematic (Amaral and Andreolla, 2020; Dertadian and Tomsen, 2019).

As is the case with many dichotomies, the seemingly polar and mutually exclusive influences of illicit drugs and gentrification are simplistic and false. Rather than gentrification necessarily working in opposition to illicit drug markets or vice versa, both can inform and influence the other in sometimes complex and mutually reinforcing ways. This is due in large part to the ubiquity of drug consumption among both the working and middle classes across much of the world, including here in Australia (AIHW, 2019; UNODC, 2020). Swapping one class for the other therefore does not preclude the development, continued functioning, or even the expansion of local drug markets. Gentrification does, however, necessitate adaptation on the part of drug market participants in response

to changes in the urban environment, such as the destruction or privatisation of formerly public or abandoned spaces in which drugs are sold and/or consumed, shifts in consumer demographics, including their drug preferences and levels of disposable income, and changes in the presence of local law enforcement and the strategies that they employ.

One of the most informative accounts of this process in action is provided by Curtis et al. (2002), who undertook a detailed ethnographic study of the effects of urban gentrification on illicit drug markets in New York in the late 1990s. They explained how an assertive police presence as well as demographic shifts from working to middle class among residents in Manhattan's Lower East Side resulted in the abandonment of open-air drug markets in favour of closed markets where retailers and consumers would meet in private locations. This shift was accompanied by reductions in violence as dealers forewent confrontation with one another over prized drug-retailing 'turf' and instead delivered their products discretely to consumers in their own homes. In addition, critical in this shift was the role of new technologies – in this case mobile phones and beepers – to facilitate drug sales without relying upon inherently risky and problematic physical retailing sites (Curtis et al., 2002). These insights are valuable in that they demonstrate how alterations in the physical, social, and technological environment in which drug markets operate can produce cascading changes in how market participants behave, interact with one another, and experience the drug markets in which they are involved.

Curtis et al. (2002) refer to the changes in the observed drug markets caused by urban gentrification as drug market gentrification, though they do not offer any specific definition of the latter. In general terms, we may therefore consider that drug market gentrification is a process through which potentially violent social norms are replaced by more cordial, professional relationships between market participants (see also Martin, 2018). Of course, as Coomber (2006) and others have pointed out, drug markets are marked by heterogeneity not homogeny, particularly with regard to the prevalence of violence. Not all drug markets experience high levels of violence, and the extent to which they do so is often over-estimated by a general public conditioned by decades of drug war propaganda (Coomber and Maher, 2006; Reuter, 2009). So to do social norms regarding cordiality and professionalism vary significantly between different drug markets, or even within the same markets across different periods of time. Drug markets therefore have significant and perceptible differences in the degrees to which they are gentrified, just as they have variations in endemic levels of violence, competition, profitability, and so on.

While drug markets are typically characterised by differentiation rather than similarity, it is intriguing that cryptomarkets appear to be an outlier in this regard in that they are often remarkably similar to one another in terms of operation, structure, and composition. To some extent, the remarkable degree of homogeneity witnessed across cryptomarkets is a product of the success of the original Silk Road website, which provided the essential template upon which subsequent cryptomarkets have been built (Martin, 2014a). Seller pages, the centrality of customer feedback, escrow, and dispute resolution may all be reasonably expected

to produce convergence in how cryptomarket participants go about their trade. Also, working in favour of similarity is the fact that users, whether buyers or sellers, often migrate from one site to another with the result that in the inevitable event that a cryptomarket is closed, the very same population is able to continue trading, albeit in a different digital space. This is not to disregard differentiation entirely; cryptomarkets may also be distinguished from one another in various ways, such as their size, (in)tolerance for various kinds of dangerous goods and services, and varying degrees of political engagement among their users (Martin et al., 2019; Munksgaard and Demant, 2016). However, the magnitude of differentiation among cryptomarkets is almost certainly narrower than it is among various kinds of offline drug markets. This is significant in that the conclusions drawn concerning cryptomarkets and gentrification, and indeed other aspects of their operation, are likely to have a greater degree of generalisability than is the case with other sites of drug exchange.

### Non-Violence

As noted above, violence is a persistent threat, if not a reality, in many illicit drug markets, and systemic drug market violence – that is, violence that occurs as part of the functioning of illicit drug markets (Reuter, 2009) – is in many countries a major driver of serious violent crime, including assault, robbery, kidnapping, and homicide (UNODC, 2020). Causes of violence in conventional, offline drug markets (i.e. those that involve at least some element of in-person exchange) include competition between drug suppliers, predation of suppliers by customers and other offenders, retaliation by market participants against scams and other infringements of market norms, and as a means of promoting discipline within drug supply organisations (Reuter, 2009). A lesser but still commonly cited cause of violence is the psychopharmacological effects of some illicit drugs which may predispose users to aggression, paranoia, and other anti-social psychological states (MacCoun et al., 2003). Underlying and aggravating each of these causes is the illegality of the illicit drugs trade which leaves market participants without the capacity to call upon legal authorities for protection, dispute resolution, or insurance against financial and physical risks.

All of the causes of violence listed above, with the exception of the general illegality of the drugs trade and the necessity to maintain discipline within drug supply organisations, are construed differently and are in some way ameliorated on cryptomarkets. Consequently, cryptomarkets have been distinguished from other drug markets by a conspicuous absence of violence since their inception. Non-violence was an intended feature of the original Silk Road, whose creator, Ross Ulbricht, aspired for the site to offer a radical, utopian-libertarian alternative to the violence associated with conventional drug markets blighted by the global war on drugs (Greenberg, 2013a, 2013b). There is strong empirical support for the notion that cryptomarkets are not associated with violence. This evidence comes from a range of studies, including quantitative surveys of user experiences (Barratt et al., 2016), qualitative case studies (Tzanetakis et al., 2016; Tzanetakis, 2015), analysis of cryptomarket discussion fora (Morselli et al., 2017), and

interviews with both consumers and suppliers who use cryptomarkets (Felstead, 2018; Martin et al., 2020; Van Hout and Bingham, 2013b, 2014). One notable study by Barratt et al. (2016) shows that users of cryptomarkets experience both threats and actualised violence at very low rates, even when compared to other drug markets in which violence is rare: only 3% of users reported threats of violence and 1% reported experiencing violence. The conclusion of the authors regarding the prevalence of violence on cryptomarkets is unambiguous:

Cryptomarkets are associated with substantially less threats and violence than alternative market types used by cryptomarket customers, even though a large majority of these alternatives were closed networks where violence should be relatively less common. (Barratt et al., 2016, p. 2)

Intriguingly, this study also provides the only known evidence for the existence of *any* physical violence on cryptomarkets; to date, there has never been a verified case of violence between cryptomarket participants in the history of their operation. That said, non-physical violence, which includes threats of physical violence and intimidation or the release of identifiable, often incriminating information (known as 'doxing'), is encountered on cryptomarkets, though as Barratt et al. (2016) show, this too occurs at levels lower than is reported in other drug markets.

There are a variety of reasons why (physical) violence is so rarely encountered on cryptomarkets. The first and most obvious is that cryptomarket users do not meet face-to-face but rather have drugs delivered by post, courier, or via 'dead drop' where drugs are concealed in a location revealed to the buyer upon receipt of payment. By not meeting in person, both buyers and sellers are protected from the possibility of violence occurring between them. Similarly, an absence of physical interaction also helps insulate buyers and sellers from the possibility of violence occurring at the hands of external parties, including police and other offenders. The physical safety of cryptomarket users is enhanced further by their use of pseudonyms and encrypted communications which delineate users' online offending from their offline identities. By not meeting in person, and by keeping the names and physical locations of drug suppliers secret, there is effectively no possibility that they can be targeted by those prepared to use violence to relieve them of their drugs or illicit earnings.

As described in the introduction of this chapter, an absence of violence incentivises the participation of traders who are averse to violence, as well as to other forms of conflict. This perspective is described by one cryptomarket vendor interviewed by Martin et al. (2020, p. 10):

I hadn't ever thought about selling drugs in any capacity because I dislike violence and it just seemed impossible to be involved in selling drugs in 'real life' without running into some sort of confrontation pretty quickly .... I was always too scared and slightly nerdy to do that and never really contemplated it seriously until the darknet.

In having a reputation for non-violence, cryptomarkets attract users who have a preference for either avoiding conflict or resolving conflicts via non-violent means. These alternative means are provided by institutional features built into cryptomarkets. In particular, escrow and dispute resolution incentivise honest conduct between buyers and sellers and enable conflicts, in those instances when they do arise, to be resolved by cryptomarket administrators (Tzanetakis, 2015). Discussion forums provide a further means by which conflict can be managed between buyers and sellers on cryptomarkets. For example, Morselli et al. (2017) describe how notifications of scamming behaviour and calls for ostracism shared on discussion forums is the first option typically employed by cryptomarket users in situations of potential conflict. The existence of these fora, and the importance of customer feedback and vendor reputation in attracting new clientele, helps ensure that vendors behave honestly—or at the least maintain a plausible veneer of honesty—which in turn further reduces the potential for conflict.

There are limitations to the notion that cryptomarkets are entirely violence-free. One exception to this concerns those who reveal their identities or locations in the process of either sourcing or selling drugs outside of cryptomarkets – for example, vendors who purchase drugs from an offline supplier but then subsequently sell them online, or who in addition to selling drugs via cryptomarkets also do so in person. In these instances, however, cryptomarkets are not directly implicated in the violence that may result. Another possibility for violence which is harder to decouple from cryptomarkets is the necessity for physical interaction with offline drug suppliers on the part of cryptomarket vendors as part of securing their own drug supply. While some vendors are known to also source their drugs via cryptomarkets, these online-to-online buyer-vendors (OOBVs) are also in the minority (see Martin, 2019) with most cryptomarket vendors sourcing their drugs in person, thus exposing themselves to potential violence.

Another scenario associated with violence related to cryptomarkets is the necessity to maintain discipline within drug vending firms. Relatively little is known about the structure of large-scale cryptomarket vendors. We do, however, have evidence that some large-scale vendors work in teams (Martin et al., 2020), which potentially exposes them to pressures comparable to those of conventional drug supply networks operating in the offline drugs trade and among whom violence is well documented (Reuter, 2009). Comparable to this scenario is the potential for violence not among vendors but within the administrative structure of cryptomarkets. The prime example of this concerns Silk Road and its administrator Ross Ulbricht, who was implicated in ordering multiple 'hits' on members of his administrative team (see Greenberg, 2013c). The fact that these executions were never carried out, and that the alleged hitman and at least one target were working undercover for law enforcement (Jeong, 2015), does not invalidate the potential for violence occurring within cryptomarkets as a means of maintaining discipline among members; indeed, it is an example of precisely the opposite – that under extreme conditions, at least one cryptomarket administrator has shown himself willing to employ lethal violence to protect themselves and their operations.

## **Professionalism and Cordiality**

Professionalism is a term historically reserved for particular occupations such as medical doctors, lawyers, and engineers which, according to Evetts (2003), require specialised knowledge and expert skillsets, serve a public good, and engender and necessitate trust on the part of customers or clients. Professionalism is also associated with institutional control in the form of professional associations which control group membership and set explicit, codified standards for appropriate and ethical conduct on the part of members (Noordegraaf, 2007). While it may appear somewhat of a stretch to apply this concept to illegal occupations, cryptomarket vending has been associated with professionalism since its inception (see Martin, 2014a; Van Hout and Bingham, 2014). This is not simply because vendors often refer to themselves as 'professional' or offering 'professional'-type services; there are several ways in which the workplace activities of cryptomarket vendors meet the various formal criteria of professionalism described above. This section of the chapter will discuss the empirical support for this concept.

Before discussing the ways in which cryptomarket vending and professionalism overlap, however, it is important to note that vendors are not a homogenous group, but may vary according to the size and sophistication of their operations as well as the amount of illegal revenues that they generate. In an analysis conducted on the cryptomarket Alphabay, Paquet-Clouston et al. (2018) find that approximately half of all revenues are generated by an 'elite' top 1% of vendors. Beneath these top performers sit a middle band of vendors, comprising 9% of sellers who account for 36% of sales, with the remaining 90% of vendors making very few to no sales. Tzanetakis (2018a) shows a similar degree of revenue concentration among the top tiers of vendors in her analysis of Alphabay. Given that the overwhelming majority of cryptomarket vendors are either inactive or *de facto* so, and generate little to no revenue as a result, it makes little sense to think of them as 'professionals'. Rather, this section of the chapter is written with reference to both the second and particularly the first elite tier vendors who together make up the vast bulk of cryptomarket sales and revenues.

## Specialised Knowledge and Expert Skillsets

There are a variety of studies that show that cryptomarket vendors possess specialised knowledge and expert skillsets that are necessary to trade drugs online safely and successfully. These include managing operational security (OPSEC), marketing strategies, and customer service skills. Operational security refers to the various practices employed by vendors to maintain anonymity and to manage and mitigate risks emanating from law enforcement and other threats. It includes digital aspects, such as knowledge and utilisation of encryption (see Bancroft and Scott Reid, 2016), as well as non-digital ones, such as product concealment (known colloquially as 'stealth') which is used to facilitate the covert passage of drug consignments through postal screening. According to vendors interviewed by Munksgaard and Martin (2020), developing a sufficiently robust understanding of operational security requires time, effort and a degree of technical proficiency.

The difficulty in acquiring these skills has been posited as a significant barrier to enter cryptomarket vending, particularly in comparison to the relatively minimal skills and capabilities required in various forms of offline drug supply (Kowalski et al., 2019; Maddox et al., 2016; Paquet-Clouston et al., 2018).

The process of learning operational security is facilitated by access to related discussion forums hosted on cryptomarkets and, increasingly, other dark web sites (such as the discussion forum Dread), as well as those on the clearnet (Kowalski et al., 2019; Martin, 2014a). Other necessary skills, however, such as marketing and branding are more likely to be learnt via an understanding of digital sales and retail operations in the legal economy. As Tzanetakis (2019, p. 68) notes, marketing is not associated with other offline forms of drug supply due to the fact that 'increased visibility corresponds with an increased risk of law enforcement activity'. On cryptomarkets, however, marketing is essential as it provides one of the only means available to vendors to stand out among intense competition and to rise to the most profitable tiers of vendor activity. Marketing is also used by site administrators to attract users to new and emerging cryptomarkets (Martin, 2014a). The practices involved with marketing on cryptomarkets are diverse and, according to Tzanetakis (2018b), include

indirect activities such as professional communication and visibility on platforms and associated forums, product branding, providing comprehensive information on the drug item (e.g., purity), speedy dispatch of slightly overweight drugs, and activities such as dispatching free sample items, free shipping, special discounts and promotion offers. (Tzanetakis, 2018a, p. 68)

Seller pages provide the first and most obvious context for the use of marketing on the part of cryptomarket vendors, and they include vendor names and logos, photographs of products, and textual information regarding product quality and composition, special discounts and, promotional offers (Martin, 2014a; Van Hout and Bingham, 2014). Ladegaard (2018) provides an intriguing insight into the use of one such marketing practice – the provision of free samples – on the Agora cryptomarket. He notes previous research from Coomber (2003) and others demonstrating the rarity of free samples in offline drug markets, and contrasts this with the widespread prevalence of the practice among cryptomarket vendors. Ladegaard (2018, p. 240) finds that free or low-cost (<US\$10) samples are available across all major drug categories, and that this practice is used by some vendors to 'introduce themselves and their businesses' either when establishing a new vending enterprise or when migrating from another cryptomarket. Free samples are particularly useful when provided to established 'critics' who will accept these goods in exchange for a (hopefully positive) detailed review posted to a cryptomarket discussion forum (Ladegaard, 2018).

### Customer Service, Cordiality, and Trustworthiness

Underpinning and accompanying the various marketing practices employed on cryptomarkets is a widespread commitment to a high level of customer service

and professional, cordial engagement with customers or 'clients', as they are referred to by some vendors (Martin et al., 2020; Munksgaard and Martin, 2020). Customer service on cryptomarkets manifests in a number of ways, including a respectful tone of communication, trustworthiness (i.e. carrying out sales honestly), prompt attention to orders and customer complaints, conflict aversion, and deference to customer wishes when possible (Martin, 2014a; Moeller, 2023, chapter 3; Van Hout and Bingham, 2014). As one vendor interviewed by Martin et al. (2020) explained:

I try to provide the best products and service I can, when someone has a problem or claims [their order was] short on pills (as long as they have ordered from me before) I usually take them at their word.

Levels of customer service and trustworthiness are typically proxied via analyses of customer feedback, the provision of which is a norm on cryptomarkets (Kruithof et al., 2016). Christin (2013) shows extraordinarily high levels of customer satisfaction on Silk Road with more than 95% of transactions attracting a positive rating (either 4 or 5 out of 5 stars). The high levels of customer service prevalent on cryptomarkets is, for the most part, driven by both vendor and customer preferences. In qualitative interviews, vendors describe satisfaction in engaging positively with customers and providing quality products in a manner consistent with running a 'real' business (Martin et al., 2020; Munksagaard and Martin, 2020; Van Hout and Bingham, 2014). Similarly, interviews with consumers point to the attraction of cryptomarkets as a forum in which quality drugs can be obtained, and exchanges between users are 'nice' in contrast to the violence and chaos perceived (often incorrectly) to be inherent to offline drug markets (Masson and Bancroft, 2018).

Cordial engagement and trustworthiness are not only typically embraced by cryptomarket vendors and customers as appealing in their own right but are also associated with business success. In an analysis of the top 20 vendor profiles on Silk Road 2.0, Bakken et al. (2018, p. 449) describe all of the seller pages as 'written in a service-minded mode: polite, formal and informative'. Décary-Hétu and Quessy-Doré (2017) further posit that cultivating a positive customer experience is a factor in securing customer loyalty on cryptomarkets, which is doubly important given that a majority of customers prefer vendors with whom they have already successfully transacted. Similarly, the importance of customer feedback in attracting sales and revenue incentivises vendors to offer high-quality service as a means to attract new customers and grow their businesses (Prezepiorka et al., 2017). Treating customers with respect, therefore, provides vendors with the opportunity to attain both job satisfaction as well as a successful trading enterprise.

This customer-oriented approach is further facilitated by the safety inherent to cryptomarket drug trading. Unlike those involved in face-to-face forms of drug supply, cryptomarket vendors are not confronted with the potential of violence from their customers. This frees them from the necessity to present what Topalli et al. (2002, p. 341) describe as a 'reputation for formidability' that is sometimes necessary to deter victimisation when selling drugs in offline markets. Cryptomarket vendors, by contrast, report a sense of control enabled by social and physical distance from their customers (Martin et al., 2020). Problematic customers and those suspected of attempting to scam their suppliers can be 'treated at arm's length' and referred to site administrators and formal dispute resolution processes when unresolvable conflict arises and third-party mediation is required. These and other institutional features, particularly customer feedback and escrow, therefore help entrench cordiality and respectful engagement between buyers and vendors as marketplace norms.

While trustworthiness, good customer service, and cordial engagement constitute social norms on cryptomarkets, there are many routinely encountered instances when these are not followed. Exit scams are perhaps the most commonly encountered violation of these market norms. This particular type of fraud occurs either when a site administrator unexpectedly closes a cryptomarket and absconds with funds held in site escrow accounts, or when a cryptomarket vendor accepts payment for goods but never sends the consignments. In the latter of these instances, it may take days for customers to realise they have been defrauded, allowing the vendor to continue accepting payments that they have no intention of honouring before their accounts are shut down. Exit scams, and other types of fraud practiced on cryptomarkets are revealing in that they demonstrate how a commitment to honest and ethical conduct is often contingent upon financial reward. When behaving honestly is in an administrator or vendor's best interest – as in the growth and maturity phases of their enterprise – it is more likely to be practiced. Likewise, when disregarding honest conduct allows for enrichment – as is the case when an administrator or vendor decides to conclude their business – then dishonest, fraudulent conduct is much more likely to occur.

### Institutional Control and the Public Good

It goes without saying that suppliers of illegal drugs do not have their own professional associations. Most drug-retailing organisations are loosely organised and exert minimal formal control over the conduct of their members (Decker et al., 2008). With cryptomarkets, however, circumstances are different and institutional controls are much more sophisticated and more closely resemble professional associations in the legal economy. For example, organisational charters, with explicit rules and standards regarding ethical behaviour and the appropriate treatment of customers are commonplace (Martin, 2014a). Scamming of customers, while routinely encountered (Moeller et al., 2017; Tzanetakis et al., 2016), is universally prohibited, and bans on the sale of goods deemed too dangerous for consumers, including drugs such as fentanyl, are widely prevalent (Martin et al., 2019). Prospective vendors must agree to abide by these rules, which are set down and codified by site administrators when applying for a seller account. Dishonest, fraudulent, and other unethical conduct runs contrary to site rules, which are policed by site administrators, moderators, and customers. Those who violate rules face sanctions, including the closure of their seller account and expulsion from the cryptomarket and, in serious cases, more controversial forms of retaliation such as doxing (Moeller et al., 2017).

Institutional features that promote ethical conduct and professional norms and regulate group membership not only mimic some of the functions of legal professional associations but also assist in the pursuit of loftier aspirations regarding another aspect of professionalism – the serving of a public good. The original Silk Road laid out the most ambitious mandate in this regard, with the formal charter written by Ross Ulbricht making explicit the libertarian, prosocial values underpinning the site's operations: self-ownership, responsibility, equality, integrity, and virtue (Martin, 2014a, p. 13). The Silk Road Charter, as well as other rules and writings laid down by Ulbricht, link the operation of the cryptomarket with the serving of a public good in facilitating economic activity free from the overbearing and violent influence of the state. While libertarian discourse achieved a dominant position on cryptomarkets in the Silk Road era, subsequent cryptomarkets and their users have increasingly eschewed these political ideals in favour of more pragmatically oriented discussions on topics such as privacy and anonymity, security from law enforcement, and safer usage practices (Munksgaard and Demant, 2016).

The question of whether or not cryptomarkets serve a public good now, or even during the operation of Silk Road, is contestable, and one's answer is likely to be influenced by one's personal views regarding drug prohibition and the global war on drugs (Bewley-Taylor, 2012; Martin et al., 2022). For proponents of drug prohibition, cryptomarkets represent an unambiguous social evil, a dangerous new vector through which an unprecedented range of harmful drugs can spread out into the community. For those who are more circumspect about the intended and unintended consequences of global drug prohibition, cryptomarkets are likely to be seen as serving a variety of purposes that benefit the public. These include the provision of higher quality, less adulterated drugs (Caudevilla et al., 2016); the reduction of systemic drug violence, particularly at the retail end of the distribution (Barrat et al., 2016; Martin, 2014a); and increased access to information regarding safer drug usage practices (Bancroft, 2017).

#### Conclusion

This chapter has sought to add detail to the concept of drug market gentrification and to explore the empirical support for conceiving of cryptomarkets as gentrified drug markets. Drug market gentrification is associated with non-violent trading practices, as well as with professionalism, which comprises expert knowledge and skillsets, cordial engagement with customers, and institutional controls resembling, at least in some respects, professional associations operating in the legal economy. As this chapter has described, there is indeed a wide range of empirical support for the notion that cryptomarkets represent a unique type of gentrified drug market. This gentrification is the result of user preferences on the part of site administrators, vendors, and customers, coupled with institutional and technological features of cryptomarkets that incentivise honest trading practices and punish those who transgress market rules and social norms. Cryptomarkets

may therefore be perceived as valuable examples of non-violent, self-regulating, and often harmonious sites of drug exchange. These findings add further credibility to the notion that the violence and uncertainty inherent to many forms of drug exchange can be ameliorated in those circumstances when threats from law enforcement and other sources can be effectively minimised.

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