



# Ring and bring drug services: Delivery dealing and the social life of a drug phone

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## ARTICLE INFO

### Keywords:

Drug markets  
Delivery dealing  
mobile phones  
Social construction of technology

## ABSTRACT

**Background:** Illegal drug dealers no longer compete for customers only through the quality of their products, but also in convenience and speed of delivery. This article investigates "ring and bring" drug dealing, and argues that a focus on dealers' use of mobile phones is useful for exploring current changes within retail level drug markets. **Methods:** The article is based on 21 face-to-face in-depth interviews with active drug dealers in Denmark all of whom were involved in the delivery of drugs (mainly cannabis and cocaine) often to buyers' homes. **Results:** Contrary to studies emphasising how drug dealers often take up new communication technologies with enthusiasm, the dealers in this study displayed a technological conservatist stance. Moreover, mobile phones have become key to dealers' construction of in-group hierarchies, and have led to retail level drug selling becoming more flexible, individualised and more of a service on par with other services in the consumer society. Finally, the increasing use of mobile phones has also created a situation where portfolios of drug customers, held on cell phone SIM cards, are today traded and sold alongside other commodities in the drug economy. **Conclusion:** We show how a social constructivist approach to technology can provide a more detailed and nuanced account of the socio-technical ensemble and the meaning-making processes giving shape to retail level "delivery dealing."

## Introduction

In recent years, the proliferation of novel communication technologies has paved the way for new drug dealing structures. While one such example of this is internet-based cryptomarkets (Barratt & Aldridge, 2016; Demant, Houborg, & Munksgaard, 2018); another, more commonly used technology is that of mobile phones. According to May and Hough, the use of (mobile) phones has "radically transformed retail drug markets" (2004, p. 554), enabling easier and more flexible distribution structures such as "mobile dealing" (Barendregt, van der Poel, & van de Mheen, 2006), or what we are calling "delivery dealing". While street dealing is often confined to specific geographical spaces, where buyers travel to dealers, delivery dealing is a delivery service, in which buyers contact sellers, for instance by phone, and make appointments for the delivery of drugs at the buyer's home or other specified locations (Curtis, Wendel, & Spunt, 2002).

In the British media, phone-based drug delivery services are today known as "ring and bring drug phone lines" (ITV Report, 2017) or "dial-a-drug" (Scott, 2017). Research suggests that delivery dealing first became a growth area in the early 1980s (Curtis et al., 2002) and then accelerated in recent years. As an indication of this, the European

Monitoring Centre for Drugs and Drug Addiction EMCDDA (2018) recently described how the European market for cocaine is undergoing a process of "Uberisation", where more sellers provide "fast delivery anywhere at any time" (2018, p. 18). The impression that the delivery model is on the rise is also reflected in the 2018 Global Drug Survey. Here, approximately 15,000 drug users worldwide were asked whether it was quicker to get a gram of cocaine delivered or a pizza. The incentive for this question was an assumption that, given the recent expansion in online drug trade (social media and the Darknet), the next customer service upgrade was likely to be a growth in services offering convenience and speedy delivery of drugs to customers. The fastest delivery times were reported by respondents in Brazil, followed by the Netherlands. However, when scaled down to a city/regional level, western provincial Denmark (the focus of this article) stood out with the fastest delivery times. Here, approximately 46% of respondents claimed they could get cocaine delivered in less than 30 min (Global Drug Survey, 2018). In Denmark, drug delivery services are today an important form of cocaine and cannabis distribution. As a senior officer from the Danish State Police noted: "We have seen a modus and trend, where more people are buying drugs in ways that resemble ordering a pizza" (Fogt, 2015).

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While numerous researchers have pointed to the importance of delivery dealing, there is currently little in-depth research specifically focused on this phenomenon (exceptions are Barendregt et al., 2006; Curtis & Wendel, 2000; Curtis et al., 2002; Salinas, 2018). Furthermore, existing research on the use of mobile phones in drug dealing has often remained descriptive in nature and only briefly includes first-hand accounts of dealers' perspectives on mobile phones (some exceptions are Aitken, Moore, Higgs, Kelsall, & Kerger, 2002; Curtis et al., 2002; Fader, 2016; Salinas, 2018). Consequently, the complex ways that dealers relate to and make use of (mobile) phones have often remained under-theorised and hence insufficiently understood. Against this background, this article draws on 21 qualitative interviews with active "delivery dealers" in a large provincial city in western Denmark to provide an in-depth understanding of the intertwined nature of delivery dealing and the dealers' use of 'old school' mobile phone technology. Using a social constructivist approach (Bijker, Hughes, & Pinch, 2012), we aim to provide a nuanced understanding of the socio-technical ensemble and the meaning-making processes giving shape to phone-based delivery dealing. Furthermore, we hold that a focus on the role of mobile phones in delivery dealing can provide a window through which to develop a nuanced understanding of retail drug market dynamics. Rather than constituting a monolithic entity (*the* drug market), recent studies have argued that drug markets vary both vertically and horizontally (Coomber, 2015). Inspired by this insight, this study seeks to explore how current processes of drug market differentiation are influenced by oppositional processes, where some sections of the market seem to take up new communication technologies with great enthusiasm while others deliberately adopt what we call a "technological conservatist approach".

## Theoretical framework

The first in-depth study of drug delivery services was conducted by Curtis and colleagues (Curtis & Wendel, 2000; Curtis et al., 2002), who analysed how changes in the social and technical organisation of one New York drug market led to street transactions being largely replaced by drug delivery services. While Curtis and colleagues demonstrated how dealers' use of pagers and mobile phones played a key role in the structural transformation of drug markets, they only provide brief accounts of how dealers themselves viewed and used mobile phones in their daily practices. In line with this, much of the existing research focusing on drug dealers' use of (mobile) phones has been descriptive and more concerned with outlining general patterns of drug sales rather than analysing dealers' use of (mobile) phones as situated practices. Furthermore, with few exceptions these studies rarely explain their analytical understanding of technology. Nevertheless, researchers have often implicitly adopted two somewhat contrasting, but equally limited approaches to technology.

The first, and most dominant, is what could be termed an instrumentalist approach. From this perspective, mobile phones are portrayed as relatively neutral tools standing ready to serve the purpose of their users. Research has, for instance, described (mobile) phones as "facilitators of drug dealing" (Natarajan, Clarke, & Johnson, 1995, p. 137), as a "working tool" (Pérez, Benschop, & Korf, 2014, p. 57), a "marketing medium" and "indispensable tool" (Barendregt et al., 2006, p. 82 & 84), "equipment" (Curtis & Wendel, 2000, p. 130), or a "master tool" in drug dealing (McEwen, 2010, p. 135). More specifically, researchers have focused on how dealers utilise phones to organise supply logistics (Natarajan et al., 1995); to reduce the visibility of their illegal activities; to coordinate meetings with buyers (Barendregt et al., 2006; Curtis & Wendel, 2000; Fader, 2016); to build a stable customer base (Curtis et al., 2002); to set up local warning systems to reduce the risk of police detection (Aitken et al., 2002), as well as their use of smartphone encryption apps to brand their products (Moyle, Childs, Coomber, & Barratt, 2019). Though the above studies do provide important accounts of how dealers' use of mobile phones is guided by

perceptions of risk and safety (see for instance Curtis et al., 2002; Moyle et al., 2019), these studies predominantly portray mobile phones as relatively neutral "tools", while analysing dealers (and users) as isolated, rational actors who utilise phones to achieve strategic benefits such as increasing profits and reducing risks. While dealers do use mobile phones as working tools, the shortcomings of a narrow instrumentalist focus is that this can lead researchers to produce relatively decontextualised descriptions of dealers' mobile phone use patterns and the strategic benefits (or risks) of adopting a particular technology.

The second approach is to view technology as a force of (radical) transformation. From this perspective, technology and the social are seen as somewhat separate spheres, and technological developments are primarily represented as an outside force that in itself impacts upon and changes the mode of drug dealing. This perspective is particularly pronounced in media accounts. As an example of this, Moyle et al. (2019) quote a recent BBC documentary that claims that social media apps are "revolutionising the way that young people buy and sell illegal drugs" (p. 102). The notion that technology in, and of itself, is a driving force in drug market developments also appears from time to time in some research literature. For example, in their earlier work Curtis and Wendel argued that "[t]he rise of delivery services is a direct outcome of the widespread diffusion of sophisticated telecommunications technology such as pagers and cell phones" (2000, p. 130). They later finessed this perspective by providing accounts of how the emergence of drug delivery services in New York was also a market response to changes in law enforcement (Curtis et al., 2002). While it is beyond doubt that technological innovation is important, and that recent years have seen an increased drug market use of more sophisticated communication technologies such as cryptomarkets and smartphone apps (Barratt & Aldridge, 2016; Moyle et al., 2019), we would wish to suggest that researchers should be careful not to view technological evolutions as independent autochthonic forces. The problem with such a perspective is that it can lead researchers to give insufficient attention both to human agency and to the ways in which contextual social processes shape the implementation, capacities and uses of technologies. Furthermore, it can also lead researchers to focus primarily on those sections of the drug market that enthusiastically embrace new technologies, while potentially overlooking other sections of the market that might continue to prefer more 'old school' communication technologies, despite the availability of newer and more sophisticated ones. A point that we will demonstrate in this paper.

In this paper, we argue that a social constructivist approach to technology (Bijker et al., 2012) can be used to develop a more comprehensive understanding of the role of mobile phones in drug dealing. From this perspective, technologies are understood as both cultural and socio-technical artefacts. This implies that a given technology, such as a mobile phone, is viewed not as an outside force impacting upon the social (the modes of drug dealing) or as an artefact with intrinsic 'neutral' properties to be utilised by rational actors at will. Instead, mobile phones are viewed as part of, and shaped by, the social world in which drug dealers live. Hence, a social constructivist approach directs our attention to the socially constructed nature of mobile phones, meaning that the way we make sense of them, what we think they are (or are not) capable of, and how we use mobile phones are produced within social and discursive practices. For example, McEwen (2010) has argued that the concept "interpretive flexibility", derived from the work of Bijker et al. (2012), can be used to focus our attention on how mobile phones in drug dealing are imbued with multiple meanings, and sometimes intertwine with the actors' construction of cultural identities. Furthermore, a social constructivist perspective also directs our attention to how the use of mobile phones forms part of heterogeneous social network processes that can influence modes of distribution and procurement of illegal drugs (see Moore, 2006).

## Analytical framework

While we draw theoretical inspiration from a social construction of technology approach (Bijker et al., 2012), our analytical approach is rooted in grounded theory (Strauss & Corbin, 1997). Rather than being guided by pre-established categories, the analysis presented in this article was generated on the basis of themes emerging from the interviews. More specifically, in the analysis we use a constructivist approach to technology, focusing on contextualised meaning-making, to investigate how dealers' use of phone technologies is shaped by local notions of safety (see Curtis et al., 2002; Moyle et al., 2019). More importantly, we demonstrate how this approach also enables us to explore broader sociological questions, such as how dealers' use of mobile phones is both informed by and influences the fabric of the drug dealer subculture, including dealers' in-group construction of identity and status: i.e., "street capital" (Sandberg, 2008). This is something that is currently missing in the existing literature. Furthermore, rather than conceptualising dealers as individualised rational actors, we use a social constructivist perspective to explore how their understanding and use of mobile phones is the outcome of situated social (network) processes. This involves exploring how dealers' use of phones is implicated in ongoing social (re-)organisations of drug distribution networks, and how different "relevant social groups" (Bijker et al., 2012) engage in struggles to try to stabilise how mobile phones should be used.

## Background: delivery dealing in Denmark

Research indicates that mobile phones have become an affordable and ubiquitous technology in many countries and have enabled novel modes of drug distribution, such as delivery services (Curtis & Wendel, 2000; Natarajan et al., 1995). In Denmark, as elsewhere, the rise of drug delivery services is also a market response to policy changes (see also Barendregt et al., 2006; Curtis et al., 2002; May & Hough, 2001).

In 2003, the Danish government launched a new drug action plan called *The Fight against Drugs* (Government (Regeringen) (2003)), which aimed to close down open drug markets (Frank, 2008). Prior to this, the Government had pushed for legislative changes, such as the passing of the so-called "Hash Club Act" (The Law Prohibiting Visitors to Designated Places). The Act enabled the police to use administrative powers to close down premises (typically apartments) where cannabis or other illegal drugs were suspected of being sold, and to issue "exclusion orders" restricting specific individuals from frequenting these premises. These policy changes resulted in a number of transformations in retail drug markets. While some street sellers relocated to areas with less police surveillance, other dealers adopted new and more discrete sales methods, such as selling from cars and offering delivery services (Frank, 2008).

In Denmark, the first publically known example of a drug delivery service emerged in Copenhagen in the early 2000s. Since then, the phenomenon has spread to many other towns and cities, and in 2013, police departments across the country reported that delivery services had become prevalent (Gustavsen & Ellegaard, 2013). In their communication with customers, delivery dealers in Denmark have traditionally used regular mobile phones with pre-paid SIM cards, which can be bought and used anonymously. In recent years, safety concerns have led some delivery dealers to start using internet-enabled encryption apps such as Wickr, Signal or WhatsApp, which are downloaded on smartphones (Bjørnager & Lauritzen, 2016). These apps provide end-to-end encrypted communication and have built-in message capabilities that "self-destruct" after a certain time. International research shows that dealers use these apps to arrange deliveries, and to post videos, images and group messages to advertise their products (Moyle et al., 2019). While the use of smartphone encryption apps is growing, media accounts from Denmark suggest that dealers' use of traditional mobile phones and non-encrypted calls and text messages remains significant (Fischer, 2017; Fogt, 2015; Graubau, 2017). One reason for this might

be that, in comparison to many other European countries, Denmark has much stricter legislation when it comes to police use of special investigation techniques (Vendius, 2015). While Danish police can obtain warrants to open confiscated dealer phones, the Danish Administration of Justice Act stipulates that the police are only allowed to conduct wiretapping and use "agents provocateurs" in relation to "serious crimes" that carry a maximum penalty of at least six years. Since the delivery business-model is based on dealers' provision of a large number of low-volume unit sales, it is often difficult for the police to prove beforehand that such practices constitute "serious crime". This means that even if police get their hands on a dealer phone number, which some dealers now make publicly available on open-net platforms, police are rarely allowed to pose as customers as a means of arresting a dealer. This in turn has created a situation where the Danish drug delivery market is characterised by a great deal of variation in terms of the technology used, and by dealer practices cutting across technological boundaries. For instance, unlike "app-dealers", dealers using traditional mobile phones rarely post images and hardly ever videos, in part because of security, but also because the technology they use is limited in this regard. Some mobile phones for instance do not have a camera. Like app-dealers however, dealers using traditional mobile phones also often send group messages to customers advertising their products, the only difference being that they use regular non-encrypted text messages to do so.

One reason for the proliferation of drug delivery services is that these services, in comparison to street dealing, are not as easy to detect by the police. Not only does the use of mobile phones allow more covert contact between customers and dealers (Curtis et al., 2002; May & Hough, 2004), delivery dealers are also constantly on the move, which makes traditional hotspot police surveillance ineffective (Barendregt et al., 2006). Another reason for the popularity of delivery services is that they offer convenience for customers and a high speed of delivery (see also Moyle et al., 2019). In comparison to online cryptomarkets that rely on postal services for the actual delivery of drugs (Barratt & Aldridge, 2016), delivery dealers are better able to cater for users' spontaneous desire for relatively common drugs, such as cannabis and cocaine. Furthermore, delivery dealers are also very easily accessible in terms of the technical knowledge required. This is the case with app-based delivery services (Moyle et al., 2019), and even more so with dealers using traditional mobile phones. However, some access barriers might still operate. For example, May and Hough (2004) argue that "ring and bring" drug services operate as closed networks where sellers and buyers will only do business if they know each other, or if a third party vouches for them. Although this might be true for some delivery schemes, many may also operate with a very low access threshold, as will be illustrated below.

## Method and data

This paper is based on data from 21 in-depth qualitative interviews with 19 male drug dealers between the ages of 17 and 22 (medium age 18), whose dealing practices were organised as "ring and bring" delivery services. The interviews took place as part of a larger research project examining the experiences of young ethnic minority men with Danish police. As part of this study, we interviewed 100 young ethnic minority men living in a large provincial town, which, for the purposes of this paper, we have named Telborg. Participants were recruited through a multi-tiered recruitment strategy, which included online and street-level recruitment as well as chain referrals (Heckathorn, 1997). Interviewing involved a multi-method approach in order to expand the breadth and depth of the potential narrative data (Antin, Constantine, & Hunt, 2015). While the initial interviews focused primarily on the young men's experiences interacting with the police, these interviews also revealed that several participants were actively involved in drug dealing. Given the paucity of existing research on drug dealing in Denmark, we decided to invite these research participants, all with

experience of dealing, to be re-interviewed to allow us to explore in more detail their dealing practices. In these follow-up interviews, which lasted between one and two hours, we used a semi-structured interview guide. Participants were given a gift voucher worth 150 DKK (approximately 20 Euro) for participating in the interview. All interviews were digitally recorded and answers to the open-ended questions were transcribed verbatim.

Participants were thoroughly informed about the purpose of the study and the voluntary and anonymous nature of their participation. The interviews were designed to examine the following issues: motives and pathways into drug dealing; social and organisational aspects of delivery services; and the role of mobile phone technology. The interviews focused on dealing practices; relations between local dealers; relations between dealers and customers; and how dealers ascribe meaning to their mobile phones. The importance of mobile phones to dealers' drug selling was underscored by the extent to which their mobile phones rang during interviews (see also Fader, 2016). Having completed the second interview, we were able to combine this narrative data with data from the initial interviews, which also contained socio-demographic data including age, civil status, area of residence, family background, ethnic background, place of birth, educational level and employment. All 19 participants had grown up in the same socially deprived neighbourhood characterised by unemployment, relatively high crime rates, and a high percentage of ethnic minority families. Of the 19 participants, 14 self-identified as being of Palestinian, two of Somali, one of Turkish, one of Kurdish and one of Iraqi cultural background. Ten were officially unemployed, two were high school students, five were enrolled in an educational program to become mechanics, carpenters or electricians, and two had part-time jobs at grocery stores. While twelve participants reported that money made through drug dealing constituted a supplementary income, besides the welfare benefits or state education grants they received, seven participants said that dealing was their primary or only source of income. Many of them also reported lengthy histories with the criminal justice system, and their various offences included drug trafficking, drug dealing, violence, burglaries, and possession of illegal drugs and weapons.

In order to contextualise interview findings, we collected relevant government documents on Danish drug policy and police strategies, and conducted an analysis of media accounts on drug delivery services. Based on a grounded theory approach (Strauss & Corbin, 1997), data arising from the interviews were coded deductively around a number of emerging themes such as “dealer perspectives on phones”, “safety”, “social networks”, “practical use of phones”, “recruitment of customers”, “phones, meaning-making and identity”, “SIM cards” and “other communication technologies”, resulting in the thematic analysis presented below. The decision to focus on “other communication technologies” was influenced by a desire to avoid ‘silo’-thinking where one primary technology becomes the sole governing principle of focus and analysis, and instead conduct a contextualised analysis of the complex socio-technical ensemble giving shape to delivery dealing. The study was approved by the Danish Data Protection Agency. Pseudonyms are used throughout the article and specific locations are anonymized.

## Results

The results are divided into three sections. Contrary to studies emphasising how some drug dealers enthusiastically embrace new communication technologies, the first section provides insights into how other sections of the drug market continue to display what we call a technological conservatist stance, where communication technologies are chosen because they are simple, easily accessible, and considered safe. The second section investigates the role of mobile phones in the social organisation and reorganisation of drug delivery services. In the final section, we show how dealers' use of mobile phones have implications for the dealer subculture; for instance, how the “building” of

a successful sales phone is key to the dealers' construction of street capital and in-group hierarchies.

### *Technological conservatists*

In recent years, researchers have given special attention to how innovative communication and encryption technologies, such as computer browsers (Tor) and smartphone apps, are taken up with enthusiasm by some sections of the retail drug trade (Barratt & Aldridge, 2016; Moyle et al., 2019). However, if we are to adequately understand current drug retail markets, we also need to focus on how other sections of the drug trade deliberately adopt a more conservative approach to technological developments, where communication technologies, such as ‘old school’ Nokia phones, are chosen because they are simple, easily accessible and considered sufficiently safe. Furthermore, we also argue that if we are to understand the complexities of current drug markets, we need to focus not only on how these are differentiated, but also on how they intersect (Coomber, 2015). In the following, we therefore also explore how delivery dealers often combine the use of mobile phones with what might be seen as more outdated forms of technology and with forms of practices associated with street dealing. Hence, dealers' adaptation of mobile phone technologies does not always lead to “radical” changes, but instead to a situation where more traditional practices and technologies are given new meanings and purposes.

All of the dealers we interviewed emphasised that mobile phones were essential to their drug delivery services. All reported having at least two phones: a smartphone with internet connection for private communication, and, typically, a traditional Nokia phone, with no internet, no GPS and no Bluetooth functions, to communicate with drug buyers. Research participants explained that they considered the latter to be safer than smartphones, because they believed it was more difficult for the police to tap into and trace them. The participants' preference for old-style Nokia phones was based on locally shared notions about the safety of this particular type of phone, passed on from more experienced dealers.

*Anas: [Old Nokias] cannot be tapped. They [police] cannot trace it, because it has no internet.*

*Researcher: How do you know that?*

*Anas: The older guys told us.*

Aside from using a very basic type of phone, the dealers applied a range of other somewhat traditional technological measures to reduce the risk of police detection. Not only did they use pre-paid SIM cards, they also regularly changed phone numbers if they sensed a particular number was getting “hot”. Similar to the finding of Fader (2016), the dealers reported that there was a delicate balance between changing their phone number to avoid police detection and retaining a phone number to be accessible to customers: every time a dealer changes the phone number, he risks losing customers. The above indicates how some dealers seek to reduce the risk of police detection by adopting what might be called a technological conservatist stance. While the participants did acknowledge that recent technological developments, such as encryption apps, had made smartphones considerably safer, many remained reluctant to use them because they did not trust the safety of this new technology. Though it might be the case that old-style Nokia phones are ‘objectively’ less safe, the point here is that these dealers placed greater trust in the advice of their more experienced peers than they did in the (encryption) features of a particular technology.

In spite of their technological conservatism, dealers' use of mobile phones had led to a number of important changes. The use of phones has, for instance, enabled new ways of recruiting and maintaining customers. In line with Moyle et al.'s (2019) description of how dealers sometimes use smartphone encryption apps to send out group messages or “deal spam” to customers, the dealers in our study regularly sent out text-based group messages, via their non-encrypted Nokia phones, as a means of getting regular customers to choose their service and in the

hope of getting new customers to notice them. The group messages typically contained information about dealers' opening hours, prices and the quality of their products, and emphasised their quick response time. The below is an example of one such text message, sent from a local delivery dealer to customers in Telborg.

Hey friends. Like most of you know we changed the prices on brown [cannabis]. From now on the prices on brown are as follows 3 g for 200 kr [DKK]<sup>1</sup> – 5 g for 300 kr and 10 g for 500 kr. Also we upgraded the quality of the smoke. You of course get the best to smoke. The prices on green are still 1.25 g for 100 kr and 5 g for 300 kr. Share the message. Best regards Cool style.

In the effort to recruit new customers, dealers often combine the use of phone-based recruitment strategies with more traditional ones. For instance, in the group messages sent to regular customers dealers regularly encouraged them to “share the message” with potential new customers. Such “spreading the word” between customers might be done through face-to-face interactions, but also by customers electronically forwarding dealer text messages to friends and acquaintances. Another way dealers combine the use of phones with traditional recruitment strategies was explained by the dealer Mehmet. In the interview, Mehmet described that when he wanted to recruit new customers he would head into town and engage in traditional street dealing either at nightclubs or at street corners. Mehmet emphasised, however, that the real purpose of these transactions was not to sell drugs, but to hand out his phone number to customers, as this could facilitate a more lasting relationship with buyers.

I went into town and approached people, sold some bags, gave them my number, handed out numbers to him, to him, to him, maybe gave them a free sample, handed out more numbers... and slowly it begins, and someone calls: “I need some of the good stuff” (interview, Mehmet).

Another way of blending new and old recruitment technologies is seen when Abdul and his friends headed for the city's biggest open drug market. Since the authorities had declared the area a “visitation zone”, meaning that it was heavily policed and that the police could stop and search anyone without probable cause, Abdul and his friends would not bring drugs with them. Instead, they brought paper notes or business cards with their phone number to hand out to potential customers.

You know we have Torveparken. Police can search you for no reason, because lots of drugs are sold there. So we go there, wait, wait, wait, and then someone comes up, and you say; “Maybe you need a good number, so you don't need to come here. I'll come to you”. Then he says; “yes”, [and I say]: “Here you are” [Abdul illustrates how he passes on a piece of paper or business card to the potential buyer]. And that's how it starts (interview, Abdul).

Getting a phone-based distribution system up and running may involve the use of conventional technologies such as pieces of paper and business cards (see also Graubau, 2017). Media accounts also show that some of the bolder dealers sometimes put up flyers, with the image of a cannabis leaf and their phone number, at bus stops or inner-city lampposts, or drop their business cards in the mailboxes of city residents (Jørgensen, 2013).

In the literature, drug distribution systems are sometimes organized in the form of a typology based on the key technologies used. From this perspective, the Telborg system can be identified as a “phone-based market” (May & Hough, 2004), as opposed to “street markets” (Sandberg, 2008), “app-based markets” (Moyle et al., 2019) or “online cryptomarkets” (Barratt & Aldridge, 2016). While such distinctions may be useful in producing an overview, the above illustrates that if we are to understand the workings of specific drug distribution systems, such

as a phone-based drug delivery services, it is equally important to focus on the possible combination of different communication technologies. Importantly, such a focus directs our attention to how shifts towards more modern technology-based modes of drug distribution do not necessarily involve radical changes that render more ‘archaic’ technologies and practices obsolete. Instead, these older technologies or practices might be given new meanings and purposes, as is the case when face-to-face street dealing and the distribution of business cards are used to recruit customers for phone-based drug delivery schemes.

### *Service is everything*

This section explores how mobile phones are used in the social (re) organisations of supply networks. Rather than viewing mobile phones as neutral and stable tools, the following shows how a social construction of technology lens (Bijker et al., 2012) can be used to explore how the employment and capacities of mobile phones in drug dealing are constructed through social network interactions, involving negotiations between dealers and between buyers and dealers.

Research participants often compared their mode of drug dealing to service professions such as being a taxi driver or running a pizza delivery service:

It's like being a taxi-driver. The phone rings. You drive out to meet people. You gotta be there in ten minutes, so you have to hurry up. You're not going to drive them somewhere. You're going to deliver something, and they give you money (interview, Asharf).

The dealers in this study did not only compete for customers through the quality of their products, but also in customers' experience of a convenient service, and in speed of delivery. The running of a successful delivery service is underpinned by various socio-technical practices. For instance, when a customer calls, the dealer needs at a minimum to be available and to pick up the phone. Furthermore, the dealer needs to get the customer's order right to ensure a successful delivery. However, transactions mediated by phones were considered to involve the risk of confusion, resulting in incorrect deliveries. Rather than just having one phone that buyers can call to order different drugs, many dealers therefore operate two sales phones; a “smoke phone” for cannabis, and a “coke phone” for cocaine and other drugs, and they try to catalogue their customers accordingly.

Hash and skunk you can have on the same phone. But hash and, let's say cocaine, need to be separated. Because if someone calls and says “I want to buy for 500 DKK”, and then you drive out to him and give him 12 g of hash, but then he goes “no, I meant cocaine”, then you have to drive back and pick up some cocaine (interview, Nasser).

Our interviews also indicated that mobile phones had enabled a new user culture where users' sourcing of drugs was increasingly characterised by spontaneity and immediacy, which in turn led users to place demands on dealers for speedy delivery. At least, that is how some dealers saw it.

You need to be on time. That's really important. It's like when you order a pizza, and you're really hungry, you don't want to wait an hour, right (interview, Hamsa).

While participants refuted the idea that they were part of any organised gang structure, many had chosen to team up with a few other trusted collaborators as this enabled them to better manage the time pressure and ensure a rapid delivery service to customers. Interviews indicated that these “teams”, or smaller groups of “freelancers” (see Curtis et al., 2002), were infused with an entrepreneurial spirit, that they operated relatively independently, and that they typically consisted of one or two drug phone owners and a couple of “runners”. The teams were organised by a certain division of labour. While phone owners were in charge of answering calls and text messages from customers, the delivery of drugs was sometimes outsourced to runners (see

<sup>1</sup> 200 Danish kroner (DKK) is equivalent to 27 Euro.

also Curtis et al., 2002). Though the use of mobile phones has reduced conventional time-space constraints, by enabling drug buyers to get in contact with delivery dealers regardless of physical location, the constant movement of the delivery vehicle has created new demands for spatial and socio-temporal co-ordination. When drug phone owners receive calls from customers, they need for instance to phone the runner driving the car to coordinate their routes. Timing is also needed to ensure smooth transactions. For instance, when a buyer calls, phone owners will often give an estimate of when the delivery car will arrive at the agreed location. This is done to avoid either the runner or the customer having to wait unnecessarily.

If you got a phone, you need to answer calls. You make an agreement for when to meet, and then you got to be there on time, or you'll lose that customer (interview, Rashid).

Coordinating the whereabouts of the delivery car can be difficult for drug phone owners if they communicate with buyers from their home. Therefore, some drug phone owners drive along in the delivery car. Aside from providing evidence of how mobile phones support the social organisation of delivery schemes, the above also shows how the specific use of phones is implicated in networks of actors, where the actions and demands of one actor (buyers), affect other actors' (dealers) use of phones. The use of mobile phones can, however, also enable social and real-time reorganisations of supply networks.

There are currently many delivery dealers operating in Telborg. Research participants therefore feared that if they were out of drugs for a time, this might lead some customers to choose another delivery operator. To prevent this, some dealers engage in ad hoc alliances with other trusted dealers.

I have a phone and so does my friend. If he is short on coke for a customer, he calls me and asks: "Can you serve this customer today"? We help each other, right. Instead of you losing a customer, you let your friends borrow them for a day. Then they also make some money. We just don't tell the customer about it (interview, Walid).

When arranging deals with customers, dealers can take advantage of the asynchronous communication enabled by the use of text messages, that is, the delay between the time a message is received and the time it is answered. By taking backstage measures, such as secretly calling and lending out customers to trusted other dealers if they themselves are short on drugs, delivery dealers are able to preserve their 'public' image as reliable drug suppliers. In so doing, they also temporally re-organise local distribution networks and provide evidence of a relatively fluid supply structure where different delivery teams sometimes operate as competitors and sometimes as collaborators.

While phones are used to facilitate meetings between dealers and customers, interviews also showed how these parties at times engaged in disagreements about what constitutes appropriate use of mobile phones. For drug users the use of mobile phones has created a situation where some might feel that delivery dealers should always be available. As an indication of this, some dealers described how customers would sometimes call them in the middle of the night when they were asleep. Being in principle "on call" everywhere and at all times can be wearisome, and like other "teleworkers" (Haddon & Brynin, 2005), dealers, too, struggled to uphold a proper work-life balance.

It can be very stressful. If you want to be with your family, but then your phone rings.... Family time, you can't run out the door every 10th minute because the phone rings, or if you are attending a wedding, a meeting or something. If you want family time you give the phone to your partner (interview, Salim).

One way that dealers try to impose control over when the phone rings and customers demand attention is to team up with a partner. Other ways include operating with specific opening hours, typically between noon and midnight, or simply switching off their "work

phone" (see also Salinas, 2018). The above is thus indicative of how the use of mobile phones is contested, and shaped by social network processes.

#### *Drug phones, identities, and dreams*

A social construction of technology lens can also further our understanding of mobile phones in drug dealing beyond conventional instrumental perspectives by drawing our attention to the importance of contextual meaning-making. In the following, we illustrate this by exploring how dealers ascribe cultural meanings and construct sub-cultural identities in relation to their sales phones.

In consumer society, portable phones are status symbols and expressive of identity (Katz, 2006; McEwen, 2010). In comparison to the latest iPhone, the Nokia phones used by dealers can hardly be said to be status symbols in mainstream Danish society. Between dealers, however, traditional Nokia phones and the like function as subtle in-group markers by which one dealer can recognise another. Sales phones are also central to dealers' in-group construction of identities and hierarchies. Interviews showed that status was ascribed according to how successful a particular sales phone was presumed to be in terms of generating money. The more successful a sales phone is presumed to be, the more symbolic capital is ascribed to its owner, as the following quote illustrates.

We have a big pusher in this area. His phone will probably be sold for 2–3 million DDK [270–405,000 Euro). He got someone selling for him, and he [the runner] makes 25–30,000 DDK a month, and it's just a "smoke phone" (cannabis). Try to imagine what Mr. Big makes. Also he [Mr. Big] don't just have one phone. He got something like five phones going (interview, Abdul).

The participants often spoke with admiration about other dealers who allegedly had a very successful sales phone. While dealers who have a "coke phone" (deal cocaine) are generally placed higher in the hierarchy than those who 'just' have a "smoke phone" (deal cannabis), the above illustrates how smoke phone owners can also be ascribed high status if their phone is believed to generate a lot of money. This illustrates how the use of mobile phones is intertwined with dealers' construction of "street capital" (see Sandberg, 2008).

Aside from functioning as identity markers, sales phones were also the locus of many dealers' hopes and dreams of a prosperous and better future. While dealers sometimes described their phones as tools that enabled them to make a here-and-now income, they often also talked about their work with the sales phone as a form of investment that could potentially result in a substantial future economic return. As an example of this, dealers frequently described their dealing practices as, "building a phone", and many dreamed of selling their sales phone for a fortune. In order to fully understand this, additional explanation is required. For delivery dealers, the sales phone, and more specifically the SIM card, functions as the contact point for a diverse network of customers. In delivery drug markets, SIM cards, containing a portfolio of customers, have therefore become valuable commodities that can be traded and sold between dealers. The following quote is an illustration of this.

People in this area start dealing when they are 14 [years old]. They start small scale and then they upgrade it [the phone]. Bigger and bigger. If you start a phone when you are 14, and then when you are 28.... If you have been using the same phone all along, and you worked hard for it. Then it has a lot, A LOT of customers, and is worth a lot of money. Gold, man (interview, Hamsa).

The selling of SIM cards is not restricted to dealers using traditional mobile phones. Most likely it also applies to dealers using smartphones. Importantly, the fact that SIM cards can be bought and sold influences how dealers conceived of their phone. Rather than viewing phones as mere tools to make immediate transactions and income, sales phones

become the locus of dealers' future plans. One dealer, for instance, explained that he was eager to "build" a successful "[drug] phone" (i.e. build a large customer portfolio on his SIM card) because he hoped that at a later stage he would be able "to sell the phone" (the SIM card) to pay for his Arab wedding, which tend to be very costly.

There's a lot of money in it [dealing and selling a drug phone]. You get rich. Money to get married, if that's what you want. Have you ever seen an Arab or Somali wedding? Wallah, it's like an open house party, totally crazy. 500 guests, who have to eat, and the girls' jewellery, and decorations, and it's the guy. He has to pay for it all (interview, Ghaalib).

In an informal conversation after the recorded interview had been completed, another participant explained that he hoped "to sell his [drug] phone" for a good sum of money so he could leave Denmark and go live a pleasurable life on a tropical island. Hence, (mobile) phones are embedded with socio-cultural meanings dependent on the cultural context in which they are used. Understanding such meaning-making processes is crucial when trying to understand what motivates young people to engage in and continue with delivery dealing, regardless of whether they use traditional mobile phones or smartphone encryption apps.

The above examples also illustrate how delivery dealers' use of (mobile) phone technology has created a new situation where portfolios of drug customers can be traded and sold, alongside other commodities in the drug economy. In 2017, a Danish newspaper reported that the price for a cannabis sales phone SIM card ranged from 100,000 to 150,000 DKK (Fischer, 2017). In the UK, media reports suggest that drug phone SIM cards are sometimes sold for £50,000 pounds (Bassey, 2017). The amount a drug phone SIM card is sold for naturally depends on its income generating potential. For potential buyers it can be difficult to know how lucrative a particular SIM card is or will be in future. Our participants have therefore developed a relatively standardised procedure that can help buyers and sellers to reach an agreement about what the fair price for a particular drug phone SIM card should be. This procedure involves buyers spending time together with the seller.

It's not like I just give you my phone and you pay me the money for it. No, no, no. You are together with me for maybe a week, and then you'll see how active it [the phone] is (interview, Fahad).

Watching first-hand how often customers ring or text, and how much money a particular sales phone makes over a certain period of time, will give the dealer-buyer a more realistic idea of how much he has to pay to take over the drug phone SIM card and its portfolio of customers. Hence, the sales phone is no longer a mere technological instrument. It has also become a valuable commodity.

## Conclusion

New technologies do not just act by themselves and inform practice, nor are they solely used by actors at will. Rather, the use of technologies, such as mobile phones, is incorporated into already existing practices and their use set within given social and cultural contexts. In this article we have argued that a social constructivist approach to technology is useful to move beyond conventional instrumental perspectives on (mobile) phones in drug dealing. While we acknowledge that dealers do utilise mobile phones to achieve strategic benefits, such as increasing profits and reducing risk, the advantage of a social constructivist approach is that it focuses our attention on how the use and capacities of mobile phones are the outcome of social network processes. Furthermore, a social constructivist perspective also enables us to provide more nuanced accounts of how dealers' use of mobile phones intertwines with cultural meaning-making processes.

We argue that in order to understand current processes of drug market differentiation (Coomber, 2015), it is necessary to focus not only on those dealers, who enthusiastically adopt new communication

technologies (Barratt & Aldridge, 2016; Moyle et al., 2019), but also on how other sectors of the drug trade deliberately take a conservative approach. Furthermore, understanding the complexities of current drug markets not only necessitates a research approach that "starts from expecting difference" (Coomber, 2015, p. 8), it also requires a committed focus on the intersections between markets, technologies and practices. In this paper, we have tried to illustrate this by describing how dealers' shift to mobile phones and dealing organised as delivery services has not led to a situation where more traditional or old-fashioned technologies and practices have been rendered obsolete. Instead, these might be given new meanings and purposes, as is the case, for example, when face-to-face street dealing and the distribution of business cards become central to the recruitment of customers for phone-based drug delivery schemes. By focusing our attention on continuities and the ways in which traditional practices are reinvented for new purposes in everyday "phone-based markets" (May & Hough, 2004), we hope to have developed a more nuanced approach applicable also to the analysis of market sections dominated by, but not restricted to, other types of communication technologies, such as smartphone encryption apps or online social media platforms.

Nevertheless, dealers' increasing use of mobile phones has also facilitated important changes: First, mobile phones have enabled a more flexible mode of drug distribution, less dependent on physical place. Second, dealers' use of mobile phones and the delivery model have influenced the social organisation of drug dealing. Rather than forming part of a larger, hierarchically ordered gang structure, phone-based delivery schemes are indicative of a situation where drug dealing, at least at the retail level, has become increasingly individualised and organised through small, relatively independent teams or groups of "freelancers" (see Curtis et al., 2002), a point illustrated in our study. In line with this, Barendregt et al. (2006) have argued that mobile or delivery dealing is not as group-dependent as street dealing. While street dealers often have to be part of a larger group in order to defend a trading hotspot from competitors, delivery dealers are constantly on the move, and therefore do not need to 'own' and defend particular trading hotspots. This, however, does not mean that issues and competitions around territorial ownership have completely disappeared (e.g. Lalander, 2017). Our research participants similarly reported that while most of the inner-city and middle-class suburbs were open territory, they would not tolerate non-local delivery dealers in "their" housing estate.

Third, dealers' use of mobile phones and the proliferation of the delivery model have implications for the dealer subculture. While the display of street capital and the potential for violence continues to play a role in present-day dealers' attempt to protect their home turf (Lalander, 2017; Sandberg, 2008), the building of a successful sales phone has changed key elements in dealers' in-group construction of identities, hierarchies and street capital. The more successful a sales phone is presumed to be, the more symbolic capital is ascribed to its owner. Furthermore, since the selling of drugs has become a service – a delivery service – on par with other services in consumer society, customers increasingly demand efficiency, service, punctuality and customer friendliness from dealers. Hence, dealers in this study strived to "sell smarter" and "not harder" (Fader, 2016), here meaning that they strived to act relatively friendly and in a service manner in their interactions with customers. Fourth and finally, dealers' use of mobile phones also has implications for the types of "goods" that can be sold. More specifically, we have shown that the use of mobile phones has created a situation where portfolios of drug customers are today traded and sold alongside other commodities in the drug economy. This finding is most likely not restricted to dealers using traditional mobile phones. Rather, similar processes might also characterise markets dominated by more novel and sophisticated communication technologies.

## Declaration of interests

The authors declare no conflict of interests

## Acknowledgments

This research has received funding from the Independent Research Fund Denmark.

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