

Not Particularly Special: critiquing ‘NPS’ as a category of drugs

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Abstract

Novel Psychoactive Substances (NPS) have been a dominant feature of drug discourse for many years now and, in academic, policy and public discourse, have become established as a new – and by implication, distinct – category of drugs. We argue that this understanding of NPS is fundamentally problematic. Differences within the category are obscured, as are similarities between NPS and more established categories of drugs. Focusing on NPS as something new, different or particularly special is misleading and counterproductive and can have serious consequences in terms of understanding the bigger picture in relation to illegal drugs more generally. This has led to overestimations of the size of the NPS problem, obfuscation of the common underlying causes of dependent drug use, and the implementation of significant and problematic policy changes. Further, a failure to see the rise in NPS as just one of a number of emerging trends in contemporary drug scenes, alongside the development of online markets or the rise in domestic drug production operations, for example, impairs our ability to understand the wider societal, cultural and theoretical underpinnings of drug use. NPS are not particularly special: treating them as such can have dangerous and far-reaching consequences.

Key words

NPS, Novel Psychoactive Substances, drugs, drug policy

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Introduction

NPS, as a category of drugs, is a relatively recent construct, but has become firmly established in the lexicon of drug research and policy. NPS stands for Novel (or New) Psychoactive Substances – something of a catch-all term for drugs not otherwise known, or at least not well-recognised, either in established drug culture or in existing legal or academic categories. It is an inherently vague category, but has proven popular, at least on a rhetorical level: media, researchers and policy makers uncritically use the term despite, or because of, the fact that it incorporates a diverse range of substances with a diverse range of issues associated with them. NPS have thus become a dominant and distinct theme in the worlds of drug policy, research and discourse. This has had far-reaching and significant consequences – for example, in terms of policy formulation and impact on the experience of users. It is therefore worthy of critical exploration, as we illustrate here taking the UK as an example.

In 2010, in response to widespread concerns about the use of new substances such as mephedrone and synthetic cannabinoids, the UK introduced 'emergency' legislation allowing new substances to be temporarily banned on the presumption of harm to prevent widespread use occurring before control measures could be implemented. In 2016, the UK government took a further substantial step via the introduction of the Psychoactive Substances Act (PSA), which bans the supply of all substances that have a potential psychoactive effect when consumed. It is notable that substances as common (and in some cases necessary) as food, caffeine, nicotine and alcohol have had to be specifically listed as exemptions under the act. These two steps represent not just a significant and enduring change in UK drug control, but in terms of legislative power in general. Previously, new substances would be subjected to scientific analysis and risk assessment before justifying and enacting legal controls. Now the proof of harm is no longer required and substances are, de facto, controlled on the blanket presumption of harm (Stevens et al, 2015).

Policy changes such as those witnessed in the UK, based on the presumption that NPS need to be treated differently from other existing substances, can also have wide reaching consequences for particular groups of people. Remaining with the UK as an example, an argument erupted in March 2016 about the inclusion of amyl nitrates (poppers) within the PSA. Crispin Blunt, a British MP, supported by the wider LGBT community, successfully argued that its harms were negligible and that a whole population of gay men (who often use the substance because of its muscle relaxing properties) would be criminalised if it was included in the act, and managed to secure a last minute exemption based on their "completely harmless" nature (Dimoldenberg, 2016:1). Contrastingly, users of nitrous oxide, another substance widely believed to be of negligible harm (Winstock, cited in Ruz, 2015), were not able to secure exemption from the act and recent evidence shows that 71% of arrests made under the act have in fact been for nitrous oxide (Harry, 2017) which is notoriously

bulky to carry around and therefore easy to detect (it is usually obtained in heavy aluminium canisters). (Incidentally, recent court cases brought in the UK under the PSA in relation to nitrous oxide have been abandoned due to debate over nitrous oxide's legitimate medical uses with a lawyer successfully arguing that they are therefore not covered by the PSA (Farand, 2017).)

As the examples above demonstrate, the changes imposed by the presumption that NPS constitute a distinct category of substances that present a significant problem to societies and existing systems of drug control, can have serious consequences, particularly for certain groups of people. Yet, we suggest, it is not just policymakers and the media that have bought into this need for emphasis and distinction of these substances, but also academics. For example, NPS themed panels are regular constituents of the annual conference of the International Society for the Study of Drug Policy (ISSDP); seven out of 26 papers on the programme for the European Society for Social Drug research (ESSD) 2017 conference had 'NPS' in their titles; and leading drug journals have dedicated NPS-themed special issues. Of course, academics should respond to the issues of the day – particularly those working in the field of policy, or those seeking to understand contemporary social issues. But the papers that discuss NPS, and which are lumped together in special issues or on conference panels, tend to focus on a wide and differing range of actual substances. Critiques in this area exist, but mainly address the flawed and unworkable policy making process in this area (Stevens et al, 2015; Reuter & Pardo, 2017) or the failure to consider the need for harm reduction as part of the NPS policy response (van Amsterdam et al, 2013; Measham, 2013; O'Brien et al, 2014).

While we regard these critiques as important, we suggest that they obscure a bigger problem: NPS have become accepted as a distinct category of drugs, even, albeit inadvertently, by many of those writers critical of policy responses. Here, we wish to build on the work of Barratt et al (2017) and Measham & Newcombe (2016). Barratt et al (2017: 23), as part of a critical analysis of the term 'psychoactive' in Australian drug policy, emphasise the likely problems that will be caused by treating NPS as a single category, and invite researchers to consider: "What are the implications of this framing of NPS, and the possible conflation or non-differentiation of substances? What does it mean when we see variability, multiplicity and difference obscured or erased in this way?" Furthermore, Measham & Newcombe (2016) suggest that one of the consequences of categorising NPS as a 'new' problem is to obscure connections and continuities with the wider drugs field.

Our article documents the construction of NPS as a distinct category, but argues that the creation of the category itself has resulted in significant consequences while having neither meaningful coherence nor academic utility. To discuss it as if it does obscures both the differences between substances within the NPS category and the similarities between NPS and other illicit substances. These obfuscations hold significant consequences in terms of the public discourses and policy responses that we create around NPS, and, perhaps most importantly, the development of theoretical understandings of wider drug trends as a facet of contemporary social and cultural development in general.

Constructing the category NPS

'New' drugs, destined to become categorised as illegal, have consistently appeared on the scene throughout the history of global drug control: the primary function, for example, of the 1971 Convention on Psychotropic Substances was to bring a substantial list of psychoactive substances not covered by the 1961 Single Convention on Drugs under the framework of international drug control. What has changed, in recent years, is their "range, potency, profile and availability" (Winstock & Ramsey, 2010: 1685). The rising role that the internet plays in drug markets (Barratt and Aldridge, 2016), and the increasing blurring of the boundaries between licit and illicit substances (prescription medicines, human enhancement drugs, lifestyle drugs) has allowed for easier marketing and distribution of substances which, in turn, has meant more people are willing to focus on the development of new drugs. This has led to a fundamental change in the way that new drugs are conceptualised. Rather than being treated on an individual basis (as was the case when MDMA became popular in the 'rave' scene in the 1980s, or when Ketamine use spread in the 1990s), or ignored as being too 'under the radar' to be worthy of academic attention or public concern (as was the case with both MDMA and Ketamine when they first emerged), they have come to be treated as a category of drugs in their own right. This means that hundreds of substances, often with quite different effects – and quite different associated problems – are lumped together. At first these substances were often referred to as 'legal highs', signalling that they fell outside the terms of existing national and international drug control legislation, or 'designer drugs' or 'research chemicals', reflecting their manufactured nature. More recently, they have been termed 'new' or 'novel' psychoactive substances (NPS).

Europe has played a pivotal role in the NPS category construction since a 1997 Joint Action (European Council, 1997) on the control of new synthetic drugs established a mechanism for information exchange, risk assessment and control. This categorisation was later solidified in a 2005 Framework Decision (Council of the European Union, 2005) in the same area, representing the highest level of European integrated drug control. Taken collectively, these pieces of international drug legislation set the scene for treating NPS as a distinct category and necessitating the development of new legislation, over and above that which already existed, to control them. Since 1997, many countries around the globe have ascribed to this general categorisation of NPS and have initiated policy responses directed specifically towards them. The United Nations Office on Drugs and Crime (UNODC) has recently developed its own Early Warning Advisory to share information on NPS on a global scale. The European Early Warning System identified 14 new substances in 2005, with numbers increasing exponentially since. In 2015, 98 new substances were reported, with a further 66 in 2016, bringing the total number of new substances being monitored to 620 (EMCDDA, 2017).

There have been some attempts to break down the categorisation of NPS into different groupings. Newcombe (2015) describes different attempts at sub-categorising NPS as related to where they come from (source), how they are regulated (legal), how they affect the brain (psychopharmacological) and their chemical groupings (psycho-chemical). Based on the latter two approaches, the UNODC (2013) have identified nine broad categories of NPS: synthetic cannabinoid receptor agonists (e.g. JWH-O18, 'Spice'); aminoindanes (e.g. MDAI); synthetic cathinones (e.g. mephedrone); tryptamines (e.g. 5-MEO-DPT); ketamine and phencyclidine type substances (e.g. 4-

MeO-PCP); piperazines (e.g. benzylpiperazine); phenethylamines (e.g. Bromo-DragonFLY); plant based substances (e.g. Khat) and other substances (e.g. DMAA). Two of these categories remain particularly problematic. 'Plant based substances' and 'other substances' can include drugs with a wide range of chemical compositions – and hence a wide range of psychoactive effects. And Khat, often used as the foremost example of plant based new substances, has been culturally normalised in East Africa for hundreds of years (Anderson et al., 2007). Ultimately, however, this attempt at sub-categorising NPS begs the question why they are divided into their own sub-categories rather than being subsumed under more general attempts to categorise illicit substances. For example, the vast majority of NPS could be incorporated into an existing system such as Adley's (2015), which employs the categories stimulants, empathogens, psychedelics, dissociatives, cannabinoids, depressives and opioids.

Deconstructing the category NPS

Separating NPS from other existing drugs is problematic in numerous ways. Firstly, there are problems with the naming of the category, starting with the term 'novel' or 'new': how long does something remain new for and when, if ever, do drugs stop being novel and become decategorised? It must be acknowledged that the specific substances which are or are not included under 'NPS' varies wildly – there are regional, jurisdictional and discipline-centred variations and a review of the various papers we cite in this article demonstrates the lack of consensus about which drugs should be included or what an exact definition of NPS might be. As such, NPS often includes drugs that have been with us for ages (e.g., Ketamine, 2CB, GHB, GBL), while usually excluding other notable synthetic chemicals such as MDMA, or the 230+ psychoactive compounds discovered and experimented with by Alexander and Anne Shulgin, documented in their books *PIHKAL: A Chemical Love Story* (1990) and *TIHKAL: The Continuation* (1997)¹. Does 'new' refer to newly discovered (or re-discovered), newly marketed, newly formulated, or newly used in more widespread (sub)cultural contexts (Newcombe, 2015)? This is more than a semantic criticism: the label 'new' implies that we have limited knowledge of a substance (e.g., of patterns of use or associated harms) which may suggest a different policy – or academic – response compared to where we have an established evidential base to inform us.

There are also problems with the term 'psychoactive', usually defined as leading to (significant) changes to the state of the central nervous system and/or inducing dependence. This has come under scrutiny because of blanket ban legislation, which has been enforced against all psychoactive substances in a growing number of countries (Ireland, Poland, Romania, New Zealand, Australia and the UK to date; Barratt et al., 2017). In a critique of UK legislation against psychoactive substances, Stevens et al. (2015) remind us that not all such substances are harmful (e.g. lavender oil, morning glory seeds), that many have legitimate uses (e.g. nitrous oxide), and that the psychoactive effects of substances about which very little is known can be hard to determine. Barratt et al. (2017), critiquing Australian legislation, build on these arguments to draw out the dangers of equating 'psychoactive'

¹ The titles of these two books are acronyms for 'Phenethylamines I Have Known And Loved' and 'Tryptamines I Have Known And Loved'.

with 'harmful and worthy of control': doing so makes the psychological effects of individual substances seem stable and unchanging, rather than subjective and varying. It also disassociates them from the cultural contexts in which they are taken and thus disregards well-established work on the importance of contexts of drug use (see e.g. Zinberg's (1984) work on set and setting).

Finally, the range of 'substances' that have been included in the category (subject to the variations of use mentioned above) is highly problematic. There are a huge number of these with a widely varying range of effects and chemical make-ups. Further, the substances included within the umbrella term seem arbitrary. Why, for example, are ketamine (first synthesised in 1962) and Nitrous Oxide (1772) sometimes referred to as NPS, while mephedrone (1929) is always included, but MDMA (1912) almost never is? Even more striking, however, is the fact that over the same period as the emergence of NPS as a category, another huge grouping of new substances has also emerged: human enhancement drugs (HED). These can be divided into six categories (Evans-Brown et al, 2012): muscle drugs (e.g. Anabolic-Androgenic Steroids); weight loss drugs (e.g. Xenical); image enhancing drugs (e.g. Melatonin); sexual enhancers (e.g. Viagra); cognitive enhancers (e.g. Ritalin); and mood and behaviour enhancers (e.g. Diazepam). Despite many of these categories containing the potential for psychoactive effect, and despite clear overlap in terms of their marketing and distribution, these substances receive a fraction of the attention to those ascribed the label NPS, and are rarely discussed in the same fora (Chatwin et al, 2017).

Semantics aside, there are further problems in the creation of this new category. Typologies and categories become useful when we have lots of variation in some broad class of things (e.g., drugs) and can group individual examples together because they share characteristics that are important for understanding the broader class and its component categories. Typologies reflect not just important similarities across those examples within the same type, but also important differences between categories. For NPS to be a useful category, scientifically, there should be recognised similarities across the substances within that category *and* important differences between those substances categorised as NPS and those that are not. It is not clear that anything objectively unites NPS in a way that also delineates them from pre-existing categories of illicit drugs, or from psychoactive substances as a whole. Creating the category NPS therefore leads to two significant, overlapping problems: it obscures both the differences between substances within the category and the similarities between NPS and other illicit substances. The consequences of these obfuscations are explored next.

Consequences of missing the bigger picture

Public Discourse

One of the important consequences of conflating the hundreds of NPS emerging onto the scene into one category is to inflate the apparent size of the problem. The figures on numbers of new drugs discovered, for example by the EU or UNODC systems, suggest that this is a situation spiralling out of control. International bodies charged with monitoring the drug problem have flagged the issue as the latest challenge facing national and international systems of drug control (European Commission, 2011; INCB, 2011). A more in-depth perusal of the figures, however, suggests that,

while the numbers of identified new substances is high and continues to increase, the problem may not be as large as often portrayed.

While most regions in the world confirm the appearance of NPS within their internal drug markets (UNODC, 2013), the limited information that is available on prevalence rates suggests that they remain relatively low. In the UK, for example, only 0.7% of the adult population reported having used *any* of the 560+ NPS in the last year (Gromyko, 2016). This appears small when compared with the 8.4% who had taken 'any drug' (a category that doesn't include NPS and which actually now includes fewer drugs than the NPS category), or the 6.5% who have used cannabis (i.e., one specific drug rather than a category encompassing many drugs) in the last year. A more detailed analysis suggests that over half of the 0.7% of last-year NPS users reported a herbal smoking mixture (i.e., synthetic cannabis) as the substance taken on their last occasion of NPS use, a fraction of the number using actual cannabis. Finally, if we examine the limited figures for NPS prevalence on an individual basis the scale of the problem again seems to shrink: for example, 0.3% of the adult population reported last-year use of mephedrone, reportedly the most popular NPS in the UK, compared with the 1.5% who used ecstasy or the 2.2% using cocaine (Lader, 2016). For the vast majority of NPS, the number of users will be much smaller again. These figures should, however, be read with the proviso that there will of course also be considerable *unintended* use of NPS by users who have attempted to, for example, purchase a substances such as LSD and have, often without even realising it, been instead sold a substance such as NBOMe (Martins et al, 2017).

Various academics have questioned the dominant discourse around the size and seriousness of the NPS issue. Reuter (2011:4) has described the problem as 'modest and localised', and points out that major disasters and violent markets have not been a problem particularly associated with NPS to date, although a few notable exceptions have emerged, including multiple fatalities in Russia associated with a particular strain of synthetic cannabis (RT News, 2014) and a localised outbreak of HIV associated with NPS injection in Dublin, Ireland (Giese et al, 2015). Birdwell et al. (2011) further elaborate that it is unusual for an NPS to cause widespread and significant problems and van Amsterdam et al (2013:317) contend that 98% of NPS are little more than 'one-night wonders'. Finally, EMCDDA (2013) figures suggest that, of the 73 NPS discovered in 2012, more than 50 were slightly different varieties of synthetic cannabinoid receptor agonists, further contextualising the *range* of substances discovered. Taken collectively, these tendencies to (i) collect statistics on NPS as a group rather than as individual substances, (ii) retain NPS that have not remained in use, and (iii) record every small variation as a newly discovered substance, have led to an inflation of the size and scale of the NPS problem. Alongside these quantitative points we should recognise the qualitative aspect of the often sensationalist nature of media coverage of NPS (a full discussion of which is beyond the scope of this paper, but see, e.g., Daly, 2016, Forsyth, 2012 and Sare, 2011 on media coverage and its influence on policy responses to mephedrone in the UK). All this has encouraged NPS to be viewed as one of the most pressing problems facing drug policy makers today, which has had important consequences in terms of the direction of funding, resources and expert attention to this relatively small part of the overall drugs issue. As we shall see below, this has had further significant consequences in terms of policy development.

The issues outlined above arise because NPS are often treated as one distinct category of drugs and thus provide an example of obscuring the differences within the NPS category. Other public discourse related problems arise because the similarities between NPS and existing illicit substances are obscured. For example, the emerging body of literature on NPS use amongst vulnerable populations such as the homeless, those who are imprisoned, and pre-existing dependent drug users (e.g. Blackman & Bradley, 2017; Ralphs et al, 2017; Quintana et al, 2017; Alexandrescu, 2017a) suggests that these groups are experiencing important problems *because of* NPS use. In the UK, outbreaks of synthetic cannabis use in prisons or amongst homeless populations have resulted in protests from the media about the vile nature of these substances and the damage they are doing to our vulnerable populations. Yet, as Alexandrescu (2017b:1) points out, drug epidemics of any kind are symptomatic of 'deeper, structural economic problems and inequalities' rather than inherent to the individual substances themselves. Vulnerable populations such as the homeless or those who are imprisoned are not experiencing problems for the first time *because of* the arrival on the scene of synthetic cannabinoids or other NPS; they are experiencing problems related to wider societal inequalities, part of which manifests as problematic use of whatever substances are available to them. The pertinent point here is that, rather than being treated as a distinct issue affecting these populations, the use of NPS should be seen as an extension of existing problematic drug use: the similarities in causes and circumstance of use between existing illegal substances and NPS are greater in these cases than are the differences.

Policy

The consequences of the emergence of NPS as a distinct and cohesive category of drugs have been significant and profound in terms of national and international drug policy development, as partially explored already in our introduction. The problem posed by NPS, in policy terms, is that existing systems of drug control tend to be sluggish in their reaction to emerging drug markets: a new substance is developed, marketed, gains in popularity, comes to the attention of the authorities and, where warranted, is eventually added to the list of controlled substances. NPS, however, tend to emerge much more rapidly and often in tandem with each other, making it difficult for existing drug control systems to keep pace with developments. Once legislation is passed to prohibit a substance, the offending compounds can be easily moderated to create a huge number of slightly different substances (van Amsterdam et al, 2013) in what has been characterised as a 'cat and mouse game' (Measham et al, 2010). Increasingly, demands have thus been placed on national and international drug control systems to adapt their existing drug laws to make them more effective in responding to NPS (Measham, 2013).

The significance placed on the issue of NPS, combined with the perception of existing legislation as unfit to contain them, has led to the development of a raft of new measures that have been readily added to the table of policy options by an increasing number of countries, and which have fundamentally changed the landscapes of drug policy provision. For example, traditionally, drug legislation lists individual substances which are to be controlled, but systems have been developed, in response to the rise in focus on NPS, which allow chemical compounds that are structurally similar (generic model) or which are perceived to have similar effects (analogue model) to existing controlled substances to be automatically controlled at any one time. Elsewhere, emergency legislation has been introduced that allows a substance to be immediately banned for a specific period without undertaking the lengthy evaluations of harm usually necessary to bring a substance

under permanent control. Finally, a handful of countries (listed previously) have established a blanket ban system whereby any substance meeting certain criteria (i.e. psychoactivity, however legally defined) are *pre-emptively* subjected to a total ban (Chatwin, 2014). Even in countries such as New Zealand where the desire to create a regulated market for substances with low levels of harm exists, the obstacles to creating such a market have, thus far, remained insurmountable, resulting in a defaulting to banning on the basis of psychoactivity (Wilkins & Rychert, 2017).

Each of these new measures are based on the 'precautionary principle' (Hughes & Winstock, 2011), representing a significant change in drug policy. Traditionally, the prohibition of substances and criminalisation of their users has been justified by establishing that they represent a significant harm, to both individuals and communities. Systems such as analogue, generic, emergency and blanket-ban legislation dispense with this need to establish harm as a justification for prohibition, and instead presume that, because the substances are 'psychoactive', they are likely to be harmful. Prohibition is therefore justified as a precautionary measure. Measham & Newcombe (2016) have thus revised the characterisation of the relationship between NPS development and policy change from 'cat and mouse' to 'hare and hounds', whereby the speed of policy change itself becomes one of the important drivers of future NPS innovations. This means that a 'modest and localised' (Reuter, 2011:4) facet of the overall drug problem has led to fundamental changes in the way that we control drugs at both the national and the international level (the EU is currently proposing changes to European drug control (Chatwin, 2017)).

Collectively, these policies represent a move away from harm reduction and evidence based policy and a return to stricter policies in a move that Stevens & Measham (2014) have described as part of the 'drug policy ratchet': responding quickly becomes all important and, in the absence of scientific evidence, the tendency for policy makers is to err ever more heavily on the side of caution. Ironically, this means that the focus on NPS as a new, distinct and important facet of the drugs problem, once seen by some as an opportunity for the development of innovative strategies of drug control (for example, Seddon 2014), has actually resulted in a return to older and more stringent methods of drug control that echo war on drugs mentalities. It is therefore evident that the tendencies to view NPS as one distinct category of substances, and to view this category as inherently separate from existing substances, has had far-reaching and wide-ranging consequences in terms of the development of drug policy in general.

Theory

These obfuscations also undermine our ability to develop theoretical understandings of the contemporary drug landscape. Again, part of this problem is the artificial separation of NPS from drugs more generally, rather than the conceptualisation of NPS as merely the next chapter in our history of narcotica (Boothroyd, 2016). History demonstrates that some members of society will seek out whatever mind-altering substances are available to them, whether to cope with negative circumstances or to embrace positive benefits (e.g., Karlsson, 2010). Aside from the NPS phenomena, we see other contemporary changes in patterns of drug use – such as the resurgence of opiate use (van Amsterdam & van den Brink, 2015) or the abuse of prescription medicines (Wilson, 2016). Similarly, in terms of drug supply we have seen other recent changes, including the development of online drug markets (Barratt and Aldridge, 2016), the spread ('glocalisation') of

cannabis cultivation (Decorte & Potter, 2015; Decorte et al., 2011) and the domestic production of other drugs (UNODC, 2016). The growth (predominantly online) of forums for discussing drug use – for peer-peer advice, user-experience/trip-reports, harm reduction strategies, etc – is also noteworthy (Boothroyd & Lewis, 2016). The point is that patterns and trends in drug use, drug markets and drug harm reduction change, as they always have, in relation to wider social, cultural and economic conditions.

The tendency to focus on NPS themselves as the latest trend in drug policy means that important opportunities to develop wider and more enduring understandings of drug use, that encompass but are not limited to the rise in range and availability of NPS, are lost. To date, despite the scramble for the development of profound policy changes in the area of NPS, there has been little attempt to link NPS use to existing theoretical standpoints (but see, e.g., Griffiths et al., 2010, Barratt and Lenton, 2013, and Potter, 2014, for some discussion along these lines). For example, if we were to focus on socio-technological developments as the most significant recent development in patterns of drug use, a very different theoretical picture would emerge. Changes in technology have certainly played a significant role in the changing nature of drug use in recent years: chemical and horticultural techniques enable the development of new drugs and the production of old ones; new media technologies facilitate the connections between interested actors, the dissemination of information, and even the distribution of drugs. In this way, the rise in NPS use should be viewed as part of a landscape of wider drug-scene developments with connections to more general trends of later modernity and globalisation, rather than as a distinct phenomenon.

Elaborating on this, there are many different versions of late (post, high) modernity theory, but the starting point for most is not (just) that the contemporary social world is fundamentally different from the 'modern' era, but that change is perpetual and accelerating. This constant change is facilitated by technological advances and socio-economic developments, with those two strands inter-dependent. In terms of understanding the social world, a key difference from earlier modernity is that humans (as individuals, communities, nation states or as a global society) struggle to respond to this rapid and unceasing change. Hence, Bauman (2000; 2007) talks of 'liquid modernity', and how the increasingly fluid nature of contemporary life poses serious challenges to the 'solid' institutions (economic, political, cultural) of an earlier modernity; Young (2007) uses the metaphor of vertigo – the individual and collective dizziness experienced as we have fewer rigid points to anchor ourselves to in an ever-changing, uncertain world.

NPS have been analysed through the lens of 'liquidity' by Dąbrowska and Bujalski (2014), referring not just to the (ever changing) substances and their effects, but also to the fluid nature of the way they have been marketed (legally and illegally, online and off), the cultural scenes in which they have been used, and the portrayal of all these aspects in the media. A focus exclusively on NPS, however, obscures the fact that the development of online drug markets and user forums, and of domestic production of cannabis, methamphetamine and other drugs, fit the same pattern. All are driven by technological developments; all fit Beck's (1992) idea of 'manufactured risk' – initially beneficial scientific advances leading to unforeseen new challenges and risks. At the same time, media and policy responses fit the characteristics of vertigo, and of a reflexive society struggling to keep up. None of this is new, as such, and the general trends (if not the specific forms) of NPS, online supply,

virtual cultural networks and domestic drug production – and social responses to these – should really have been predictable.

Toffler (1970), for example, described nearly 50 years ago how the exponential rate of technological advancement and accompanying social change leads to ‘future shock’ – breakdown in an increasing number of institutions (and individuals) that evolved under the less complicated conditions of early modernity and prove unable to cope with the challenges of constant change. NPS policy, and the desperate – but flawed – efforts of blanket ban legislation fit this model, but should not be seen as an isolated case. Responding effectively to developments in domestic production, online markets and drug-related social media encounters similar difficulties. Further, academic tendencies to try to conceptualise the ‘new’ as something separate (whether because they are following the lead from policy-makers or not) are part of the same problem and unlikely to offer solutions (whether in the form of effective policies or of serious and relevant sociological theories). Of course, academics often have to ‘follow the money’, researching areas where funding is available which itself reflects what politicians, policy makers and funding bodies (in turn, influenced by the media) perceive as the ‘hot topics’ of the day. The casualization of academic posts, and the need for non-tenured researchers to win funding to maintain their own employment, are themselves features of the late-modern employment landscape (also an aspect of Beck’s (1992) ‘risk society’), further illustrating how we need to consider broader social (as well as scientific) changes to fully understand the contemporary drug situation!

Of course, the discussion above provides just one example of the benefits of viewing developments in use and prominence of NPS as part of our wider social and cultural understandings of drug-scenes in general. Alternative, and equally useful, analyses could be drawn from seeking to understand NPS through the lens of, for example, moral panic theory or Christie’s conceptualisation of drug users as the ‘good enemy’ (Christie & Bruun, 1985). The point to emphasise here is that the creation of NPS as a distinct category and as a phenomenon separate from established drugs scenes discourages these kind of analyses. There have been some attempts to apply existing theories to the NPS phenomenon – see, for example, the aforementioned work on NPS and liquid modernity (Dąbrowska and Bujalski, 2014) or Alexandrescu (2015) on moral panic theory and injecting NPS users. (Horsely’s (2017) critique of moral panic theory as overused, reductionist and outdated notwithstanding, the NPS example of media portrayal – and exaggeration – of both the extent and related harms of a social phenomenon particularly associated with demonised sub-cultural groups, the inputs from un(der)informed ‘experts’, and the resulting excessive policy responses does seem to fit the criteria of moral panic. However, a full discussion is beyond the scope of this paper.) But we are advocating here for more than this: for the conceptualisation of NPS, not as a new and distinct issue from the rest of the drug scene, but as an important part of it that is inextricably tied up with wider drug-scene changes (in markets, production, information sharing practices, etc.) and wider societal changes (the liquidity of late modernity, the exponential increase in the advance of technological ability, etc.). The rise in prominence of NPS cannot be effectively understood without viewing it as a part of the bigger social, cultural and theoretical picture with which we are already familiar.

Conclusions

We are not calling for an end to research in 'new' drugs, but we are asking for critical reflection on the use of NPS as a category. Sometimes, the focus should be on specific substances – particularly when looking at health issues that relate to biochemical interactions. In other circumstances, we should look at drugs *in general* – particularly when it is the socio-economic conditions driving drug use that interest us. Comparisons between legal and illegal drugs, and the cat-and-mouse (or hare-and-hounds) situation of new drugs being developed specifically as legal alternatives to prohibited substances, are of interest when considering the deterrent effect or harmful consequences of particular policies. But rarely does academic work nor public discourse focusing on NPS as a category fit these examples, especially when those NPS that might once have been 'legal highs' cease to be legal.

The uncritical categorisation of NPS, as a group of drugs separate from established substances, is unhelpful. It has facilitated over-estimations of the size and scale of the problem and a tendency to ignore the underlying conditions that stimulate patterns of drug use. It has contributed to significant and profound policy changes that have included a tendency to ignore the need to reduce the harm done by substances themselves *and* the policies employed to control them, in favour of a return to more repressive styles of drug control. Finally, it has proved a distraction from wider efforts to understand the societal and cultural contexts within which drug use occurs.

We contend that the real challenges for drug policy today, rather than pursuing ever more draconian control options, are, as they have long been, to determine how to reduce harm, how to reach out to vulnerable populations and how to reduce inequalities in society in general. In terms of theoretical conceptualisations of drug use, the need is not to apply existing theories to NPS as an isolated case, but to view NPS as just one part of the ever changing face of contemporary drug use and to seek to interrogate wider social and cultural theories for their usefulness in explaining not just the rise in prominence of NPS, but also other recent developments including, but not limited to, around online drug markets or the blurring of boundaries between the licit and illicit. NPS are Not Particularly Special: treating them as such can have dangerous and far-reaching consequences.

References

- Adley, M. (2015) *The Drugs Wheel: a new model for substance awareness* www.thedrugswheel.com
- Alexandrescu, L. (2016) *Legally High, Offically Lost: Injecting NPS use and drug abjection in Post-communist Romania*. PhD Thesis, Lancaster University.
- Alexandrescu, L. (2017a), 'NPS and the methadone queue: spillages of space and time', *International Journal of Drug Policy*, 40, 50-56.
- Alexandrescu, L. (2017b) 'Spice is not the real problem, it's the way we look at poverty', *Volteface*, www.volteface.me

Anderson, D., Beckerleg, S., Hailu, D. & Klein, A. (2007) *The Khat controversy: stimulating the debate on drugs* Oxford: Berg.

Barratt, M. & Aldridge, J. (2016) 'Everything you always wanted to know about drug cryptomarkets* (*but were afraid to ask)' *International Journal of Drug Policy*, 35, 1-6.

Barratt, M., Seear, K. & Lancaster, K. (2017) 'A critical examination of the definition of 'psychoactive effect' in Australian drug legislation' *International Journal of Drug Policy*, 40, 16-25.

Bauman, Z. (2000) *Liquid Modernity* Cambridge: Polity Press.

Bauman, Z. (2007) *Liquid times: Living in an age of uncertainty*. Cambridge: Polity Press.

Beck, U. (1992) *Risk society: Towards a new modernity* London: Sage.

Birdwell, J., Chapman, J. & Singleton, N. (2011) *Taking drugs seriously: a demos and UK drug policy commission report on legal highs* www.ukdpc.org.uk

Blackman, S. & Bradley, R. (2017) 'From niche to stigma – Headshops to prison; Exploring the rise and fall of synthetic cannabinoid use among young adults', *International Journal of Drug Policy*, 40, 70-77.

Boothroyd, D. & Lewis, S. (2016) 'Rethinking evidence in online social drug use research'. In A. O'Gorman, G. Potter & J. Fountain (eds) *Evidence in European social drug research and drug policy*. Lengerich: Pabst.

Boothroyd, D. (2016) 'Roundtable: New Drugs and the "Bigger Picture"', *ESRC Seminar Series on New Drugs* University of Kent, 6th September, 2016

Chatwin, C. (2014) 'New psychoactive substances: new European policy landscapes'. In G. Potter, M. Wouters & J. Fountain (eds.) *Change and continuity: Researching evolving drug landscapes in Europe*. Lengerich: Pabst.

Chatwin, C. (2017) 'Assessing the 'added value' of European policy on new psychoactive substances', *International Journal of Drug Policy*, 40, 111-116.

Chatwin, C., Measham, F., O'Brien, K. & Sumnall, H. (2017) 'New drugs, new directions? Research priorities for new psychoactive substances and human enhancement drugs', *International Journal of Drug Policy*, 40, 1-5.

Christie, N. & Bruun, K. (1985) *Den gode fiende: narkotikapolitikk i Norden* (English Summary), Universitetsforlaget.

Council of the European Union (2005) *Council decision 2005/387/JHA of 10 May 2005 on the information exchange, risk-assessment and control of new psychoactive substances*, Brussels: OJ L127.

Dąbrowska, K. & Bujalski, M. (2014) 'A liquid phenomenon? Images of new psychoactive substances in Polish print media'. In G. Potter, M. Wouters & J. Fountain (eds.) *Change and continuity: Researching evolving drug landscapes in Europe*. Lengerich: Pabst.

Daly, M. (2016) "Tabloid Scare Stories About Drugs Actually Make People Buy More Drugs" *Vice* 18th July 2016. https://www.vice.com/en_uk/article/3b4bzk/tabloid-scare-stories-about-drugs-actually-make-people-buy-more-drugs-narcomania

- Decorte, T. & Potter, G. (2015) "The globalisation of cannabis cultivation: a growing challenge" *International Journal of Drug Policy*. 26 (3): 221-225. doi:10.1016/j.drugpo.2014.12.011
- Decorte, T., Potter, G. & Bouchard, M. (eds.) (2011) *World Wide Weed: global trends in cannabis cultivation and control*. Ashgate: Aldershot.
- Dimoldenberg, A. (2016) 'Turns out Poppers aren't banned in the UK, even the politicians thought they were', *Vice*, 16th March 2016.
- EMCDDA (2013) *European Drug Report 2013: Trends and Developments* www.emcdda.europa.eu
- EMCDDA (2017) *European Drug Report 2017: Trends and Developments* www.emcdda.europa.eu
- European Commission, (2011) *Towards a Stronger European Drug Policy* Brussels: COM 689 final.
- European Council, (1997) *Joint Action of 16 June 1997 adopted by the council on the basis of article K.2 of the Treaty on European Union, concerning the information exchange, risk assessment and the control of new synthetic drugs 97/39/JHA*.
- Evans-Brown, M., McVeigh, J., Perkins, C. & Bellis, M.A. (2012) *Human Enhancement Drugs: the emerging challenges to public health* Liverpool: North West Public Health Observatory.
- Farand, C. (2017) 'Laughing gas ban: Judge rules 'hippy crack' still legal despite law which bans psychoactive substances', *The Independent*, 31st August, 2017.
- Forsyth, A. J. (2012) 'Virtually a drug scare: Mephedrone and the impact of the Internet on drug news transmission' *International Journal of Drug Policy*, 23(3): 198- 209
- Giese, C, Igoe, D., Gibbons, Z., Hurley, C., Stokes, S., McNamara, S. & Fitzgerald, M. (2015) 'Injection of new psychoactive substance snow blow associated with recently acquired HIV infections among homeless people who inject drugs in Dublin, Ireland', *Eurosurveillance*, 20.
- Griffiths, P., Sedefov, R., Gallegos, A., & Lopez, D. (2010) 'How globalization and market innovation challenge how we think about and respond to drug use: 'Spice' a case study', *Addiction*, 105: 951-953.
- Gromyko, D. (2016) 'New psychoactive substances'. In D. Lader (ed.) *Drug Misuse: Findings from the 2015/16 Crime Survey for England and Wales Second edition*. London: Home Office/Office for National Statistics.
- Harry, J. (2017), 'The PSA is mostly helping London police arrest NOS sellers', *Vice*, 23rd January 2017.
- Hughes, B. & Winstock, A.R. (2011) 'Controlling new drugs under marketing regulations' *Addiction*, 107: 1894-1899.
- INCB (2011) *Report of the International Narcotics Control Board for 2011* www.unodc.org
- Karlsson, P. (2010) 'Alternatives to the deficit model of adolescent drug use' In Decorte, T. & Fountain, J. (eds) *Pleasure, Pain and Profit: European perspectives on drugs*. Lengerich: Pabst.
- Lader, D. (ed.) (2016) *Drug Misuse: Findings from the 2015/16 Crime Survey for England and Wales Second edition*. London: Home Office/Office for National Statistics.
- Martins, D., Barratt, M.J., Pires, C.V., Carvalho, H., Vilamala, M.V., Espinosa, I.F. & Valente, H. (2017). 'The detection and prevention of unintentional consumption of DOx and 25x-NBOMe at Boom Festival', *Human Psychopharmacology: Clinical and Experimental*, 32(3): 10.1002/hup.2608

Measham, F. (2013) 'Social Issues in the use of novel psychoactive substances' in P.I. Dargan & D.M. Wood's (Eds.) *Novel Psychoactive Substances: classification, pharmacology and toxicology*. London: Academic Press.

Measham, F., Moore, K., Newcombe, R. and Welch, Z. (2010) 'Tweaking, bombing, dabbing and stockpiling: the emergence of mephedrone and the perversity of prohibition' *Drugs and Alcohol Today*, 10(1): 14-21.

Barratt, M. J., & Lenton, S. (2013) 'Drugs and the internet', in A. Ritter, T. King & M. Hamilton (Eds.), *Drug use in Australian society*. Melbourne: Oxford University Press.

Móro, L. (2014) 'Harm reduction of novel psychoactive substance use' in G. Potter, M. Wouters and J. Fountain (eds.) *Change and continuity: researching evolving drug landscapes in Europe*. Lengerich: Pabst.

Newcombe, R. (2015) 'NPS Taxonomy: A framework for classifying new psychoactive substances' Conference paper presented at the *ESRC seminar series on new drugs: supply and demand – drug markets in transition* Durham University, 26th March, 2015 www.backdoorbroadcasting.net

O'Brien, K., Chatwin, C., Jenkins, C. & Measham, F. (2015) 'New Psychoactive Substances and British drug policy: a view from the cyber-psychonauts', *Drugs: Education, Prevention and Policy*, 22(3), 1-7.

Potter, G. (2014) 'Change and continuity in the European drug landscape: an introduction', in G. Potter, M. Wouters and J. Fountain (eds.) *Change and Continuity: researching evolving drug landscapes in Europe*. Lengerich: Pabst.

Quintana, P., Ventura, M., Grifell, M., Palma, A, Galindo, L., Fornis, I., Gil, C., Carbon, X., Caudevilla, F., Farre, M. & Torrens, M. (2017), 'The hidden web and the fentanyl problem: detection of ocfentanil as an adulterant in heroin', *International Journal of Drug Policy*, 40, 78-83.

Ralphs, R., Williams, L., Askew, R. & Norton A. (2017, 'Adding Spice to the Porridge: the development of a synthetic cannabinoid market in an English prison', *International Journal of Drug Policy*, 40, 57-69.

Reuter, P. & Pardo, B. (2017) 'New psychoactive substances: are there any good options for regulating new psychoactive substances?' *International Journal of Drug Policy*, 40, 117-122.

Reuter, P. (2011) *Options for regulating new psychoactive drugs: a review of recent experiences* UK Drug Policy Commission.

RT News, (2014) *25 killed, over 700 hospitalised: Cheap 'Spice' designer drug causes severe poisoning across Russia* www.rt.com/news

Ruz, C., (2015) 'How dangerous is laughing gas?', *BBC News Magazine*, 31st July 2015.

Sare, J. (2011) 'How the media helped ban mephedrone' *British Medical Journal*, 342, d1138

Seddon, T. (2014), 'Drug policy and global regulatory capitalism: the case of new psychoactive substances (NPS)', *International Journal of Drug Policy*, 25(5), 1019-1024.

Shulgin, A. & Shulgin, A. (1990) *PIHKAL: A chemical love story*. Lafayette: Transform Press.

Shulgin, A. & Shulgin, A. (1997) *TiHKAL: The continuation*. Lafayette: Transform Press.

- Stevens, A. & Measham, F. (2014) 'The 'drug policy ratchet': why do sanctions for new psychoactive substances typically only go up?', *Addiction* doi: 10.1111/add.12406
- Stevens, A., Fortson, R., Measham, F. & Sumnall, H. (2015) 'Legally flawed, scientifically problematic, potentially harmful: The UK Psychoactive Substance Bill' *International Journal of Drug Policy*, 26, 1167-1170.
- Toffler, A. (1970) *Future Shock*. New York: Random House.
- UNODC (2013) *The challenge of new psychoactive substances* Global Smart Programme.
- UNODC (2016) *World Drug Report 2016*. Vienna: UNODC.
- van Amsterdam, J., & van den Brink, W. (2015). The misuse of prescription opioids: a threat for Europe? *Current drug abuse reviews*, 8(1), 3-14.
- van Amsterdam, J., Nutt, D. & van den Brink, W. (2013) 'Generic legislation of new psychoactive drugs', *Journal of Psychopharmacology*, 27(3), 317-324.
- Ward, V. (2015) 'Legal highs blamed for increasing levels of violence in prisons', *The Telegraph*, 12th June, 2015.
- Wilkins, C. & Rychert, M. (2017) 'Recent developments with the New Zealand regulated market approach to 'low-risk' psychoactive products', *Addiction*, 112(1), 34-36.
- Williams, J. (2017) 'The pale, wasted figures caught in a Spice nightmare that's turning Piccadilly Gardens into hell on Earth', *Manchester Evening News*, 9th April, 2017.
- Wilson, C. (2016) 'Addiction to prescription drugs is UK "public health disaster"' *New Scientist Daily News* 24th October 2016.
- Winstock, A. & Ramsey, J. (2010) 'Legal highs and the challenges for policy makers' *Addiction*, 105 (10): 1685-1687.
- Young, J. (2007) *The Vertigo of Late Modernity*. London: Sage.
- Zinberg, N. (1984) *Drug, Set and Setting* Yale: Yale University Press.