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A critical examination of the definition of ‘psychoactive effect’ in Australian drug legislation

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Abstract (max 300 words)

As the number of new ‘psychoactive substances’ detected globally has risen exponentially, the policy response of assessing and prohibiting each new substance individually has become increasingly unworkable. In an attempt to disrupt the availability of new as-yet-unscheduled substances, Ireland (2010), Poland (2011), Romania (2012), New Zealand (2013), Australia (2015) and the United Kingdom (2016) have enacted generic or blanket ban legislation that prohibits all ‘psychoactive substances’ that are not already regulated or belong to exempt categories. How such generic legislation defines ‘psychoactive substance’ is therefore crucial. While there is a growing critical literature relating to blanket bans of ‘psychoactive substances’, the Australian legislation is yet to be described or critically analysed. In this commentary, we aim to draw the attention of local and international drug policy scholars to Australia’s newest legislative approach to ‘psychoactive substances’. Using the Australian experience as a case study, we first describe and trace the origins of this generic banning approach, especially focusing on how ‘psychoactive effect’ came to be defined. Then, we critically examine the assumptions underpinning this definition and the possibilities silenced by it, drawing on the work of poststructuralist and critical scholars. In doing so, we explore and raise a series of questions about how this legislation works to stabilise drugs, drug harms and drug effects, as well as addiction realities; how the category of ‘psychoactive substances’ is produced through this legislation; and some of the material-discursive effects which accompany this rendering of the ‘problem’. We offer this commentary not as a comprehensive discussion of each of these elements but rather as a starting-point to promote further discussion and debate within the drug policy field. To this end, we conclude with a suggested research agenda that may help guide such future work.

Keywords (3-6)

New psychoactive substances; drug effects; policy; poststructuralism; problematisation; Australia.

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Introduction

What is a ‘psychoactive substance’? What are ‘drugs’? These questions may seem simplistic, yet the taken-for-granted assumptions underpinning how these objects are approached and constituted within legislative responses to ‘drug problems’ are worthy of critical consideration by drug policy scholars as they materially affect the lives of people who use, possess, supply and manufacture those objects designated to be ‘psychoactive substances’. The definition of ‘psychoactive substance’ has become critically important for countries where generic or ‘blanket ban’ legislation prohibiting all such substances has been enacted: currently, including Ireland (2010), Poland (2011), Romania (2012), New Zealand (2013),¹ Australia (2015) and the United Kingdom (2016). While there has been a growing amount of analysis relating to blanket bans of ‘psychoactive substances’ more broadly (van Amsterdam, Nutt, & van den Brink, 2013), and the Irish (Kavanagh & Power, 2014), New Zealand (e.g., Rychert & Wilkins, 2015; Rychert & Wilkins, 2016), and UK (Stevens, Fortson, Measham, & Sumnall, 2015; Walsh, 2016) models in particular, the Australian legislation is yet to be described or critically analysed.

In this commentary, we aim to draw the attention of local and international drug policy scholars to Australia’s newest legislative approach to ‘psychoactive substances’. Using the Australian experience as a case study, we first describe and trace the origins of this generic ‘banning’ approach, especially focusing on how ‘psychoactive effect’ came to be defined. Then, we critically examine the assumptions underpinning this definition and the possibilities silenced by it, drawing on the work of poststructuralist and critical scholars, including Bacchi (2009) and Fraser and Moore (2011c). In doing so, we explore and raise a series of questions about how this legislation works to stabilise drugs, drug harms and drug effects, as well as addiction realities; how the category of ‘psychoactive substances’ is produced through this legislation; and some of the material-discursive effects which accompany this rendering of the ‘problem’. Acknowledging that each of these elements could form the basis for more detailed investigation, we offer this commentary not as a comprehensive discussion of each

¹ New Zealand differs from the other countries by including the theoretical possibility of a low-risk substance being regulated, but no such substance has been approved (Rychert & Wilkins, 2015).

of these elements but rather as a starting-point to promote further discussion and debate within the drug policy field. To this end, we conclude with a suggested research agenda that may help guide such future work.

Background

The global drug control regime, enshrined in the three international drug control conventions (United Nations Office on Drugs and Crime [UNODC], 2013b), has been increasingly strained by the proliferation of new psychoactive substances (NPS). A variety of terms have been used to describe ‘psychoactive substances’ that are not yet controlled by these conventions, including ‘designer drugs’, ‘synthetic drugs’, ‘analogues’, ‘legal highs’, or ‘new’, ‘novel’, or ‘emerging’ drugs or substances (see, Corazza, Demetrovics, van den Brink, & Schifano, 2013; Jenkins, 1999; Perrone, 2016). Although epidemiological studies often frame this issue as a seemingly recent phenomenon (e.g., Champion, Teesson, & Newton, 2015; Goggin, Gately, & Bridle, 2015; Sutherland et al., 2016)², documentation of alternate or new substances arising in response to legislation controlling similar substances traces this issue back as early as 1925, when the International Opium Convention banned morphine and heroin. The UNODC (1953) reports that alternative esters of morphine, including dibenzoylmorphine, were manufactured to replace the prohibited morphine and heroin, leading to the first analogue resolutions being passed by the League of Nations in 1930 (UNODC, 1953). When the main legislative instruments that attempt to control drugs, both internationally and within nation states, rely on being able to specify the prohibited substance by name, the question of how to assess new substances for inclusion on these schedules has posed a long-standing problem for legislators.

The 1971 UN Convention on Psychotropic Substances provided the first mechanism for assessing new substances for international control and tasked the World Health Organization (WHO) with providing recommendations to the UNODC for each new substance (Coulson & Caulkins, 2012; Reuter, 2011). To form these recommendations, the WHO conducts an assessment of various information sources to determine whether the substance “has the capacity to produce (i) a state of dependence, and central nervous system stimulation or

² Also including epidemiological studies of NPS by the first author (Barratt, Cakic, & Lenton, 2013; Lawn, Barratt, Williams, Horne, & Winstock, 2014; Winstock & Barratt, 2013a; Winstock & Barratt, 2013b).

depression, resulting in hallucinations or disturbances in motor function or thinking or behaviour or perception or mood, or (ii) similar abuse and similar ill effects as a substance in Schedule I, II, III or IV”, and “is being or is likely to be abused so as to constitute a public health and social problem” in light of its usefulness as a medicine (Article 2, Section 4). Even the UN itself admits (UNODC, 2013a, p. xi) that the processing and assessment of individual substances has become unmanageable in recent times due to the exponential increase in the number of NPS that are known and monitored by international agencies, which now number in the hundreds (European Monitoring Centre for Drugs and Drug Addiction, 2016). The sheer number of compounds to assess is problematic, and so too is the fact that so little is known about their pharmacology and toxicology, which is the kind of information advisory bodies including the WHO require to make their recommendations. There is a paradox: time is needed to collect sufficient data to assess each new drug, yet swift scheduling is seen as desirable due to the ‘precautionary principle’ that dominates in this area of policy making (Stevens & Measham, 2014; van Amsterdam, et al., 2013). It is also increasingly recognised that individually assessing and listing NPS as prohibited simply moves markets from one drug to the next, and may indeed result in greater harm to users who are more likely to consume drugs with little to no history or available research (Bright, Bishop, Kane, Marsh, & Barratt, 2013; Measham, Moore, & Østergaard, 2011). For these reasons, there has been a global search for different policy responses to NPS beyond the scheduling of individual compounds. As described by Reuter and Pardo (2016), these include prohibition of structural similar compounds (analogues), prohibition of neuro-chemically or functionally similar compounds, general or blanket prohibitions, and regulatory approaches including full and restricted availability.

Australia, like many other Western democracies, has monitored the emergence of NPS. In some cases use has been associated with harmful events, including dependence, death, and intoxication at workplaces where workers could evade drug screening by using as-yet-untested substances (Burns et al., 2014; Caldicott, Bright, & Barratt, 2013). The emergence of drugs with the potential to ‘mimic the effects of illicit drugs’ but able to be legally sold and marketed as ‘legal highs’ has attracted high levels of media attention, public concern and subsequent policy changes by governments wishing to be seen to be responsive to these concerns (Bright, et al., 2013). The Commonwealth of Australia has utilised a combination of criminal law, medicines regulation and consumer law in its attempt to control NPS (see Table

1). Ratification of the 1971 UN Convention in 1976 produced a criminal offence for importing scheduled substances and allowed Australia to add new drugs to the local schedules in line with the UN treaties. In 2005, Australia introduced analogue legislation into criminal law, meaning criminal offences applying to already scheduled drugs also automatically applied to substances deemed to be structurally similar. In 2009, the *Therapeutic Goods Act 1989 (Cth)* was amended to establish an advisory committee to recommend amendments to the Poisons Standard, which classifies and controls poisons and medicines. Thus, in criminal law and medicines regulation, separate agencies could add new substances to their respective schedules, after determining that a risk of death or harm exists, or that the substance was substantially similar to an already scheduled substance.

[Insert Table 1 here]

In 2011, synthetic cannabinoid receptor agonists (SCRA), also known as ‘synthetic cannabis’ and ‘synthetic cannabinoids’, began appearing on the Australian drug markets (Barratt, et al., 2013). The Commonwealth responded through the medicines regulation framework by (1) adding individual SCRA to Schedule 9 of the Poisons Code in July 2011, then in February 2012 (2) adding eight structural groups of SCRA, and (3) adding a category ‘synthetic cannabinomimetics’, which includes functional analogues, that is, “any synthetic product that has similar effects to cannabis” (Bright, 2013, p. 4), even if it is structurally dissimilar (although no specific definition of synthetic cannabinomimetics was provided in the legislation). In 2013, following “incidents reported in New South Wales involving the use of consumer goods believed to be synthetic cannabinomimetics, NBOME type substances, or synthetic cocaine type substances”³, the Commonwealth legislated an interim consumer protection ban that prohibited the sale of a list of ‘psychoactive substances’ that used specified brand names or contained specified substances listed on Schedule 9 of the Poisons Standard, “whether or not a statement to the effect that the goods are not intended for human consumption is made”.⁴

There were still ongoing concerns about NPS use in Australia following these various

³ Explanatory Statement, Competition and Consumer Act 2010 - Consumer Protection Notice No. 3 of 2013 - Imposition of Interim Ban on Certain Consumer Goods Containing Synthetic Drug Substances, p. 1.

⁴ Competition and Consumer Act 2010 - Consumer Protection Notice No. 3 of 2013 - Imposition of Interim Ban on Certain Consumer Goods Containing Synthetic Drug Substances, s. 2.

legislative amendments, as described in the Intergovernmental Committee on Drugs (IGCD) report *Framework for a National Response to New Psychoactive Substances* (2014). The most recent legislative move by the Commonwealth of Australia is the focus of analysis in this paper. The *Crimes Legislation Amendment (Psychoactive Substances and Other Measures) Act 2015* (Cth) (hereafter ‘The Act’) amends the *Criminal Code Act 1995* (Cth) and bans the importation of all substances that have a ‘psychoactive effect’ that are not otherwise regulated. The amendment inserts new definitions of the terms ‘psychoactive effect’ and ‘psychoactive substance’. The revised explanatory memorandum states that:

The term *psychoactive effect* is used in the definition of *psychoactive substance*. There are two alternate limbs to the definition of *psychoactive effect*. The first deals with the physiological effects on a person of consuming a serious drug. The second deals with the addictive effects of those drugs. A substance will have a psychoactive effect if it satisfies one of those limbs.⁵

A ‘psychoactive effect’ is defined in this way in the Act:

psychoactive effect, in relation to a person, means:

- (a) stimulation or depression of the person’s central nervous system, resulting in hallucinations or in a significant disturbance in, or significant change to, motor function, thinking, behaviour, perception, awareness or mood; or
- (b) causing a state of dependence, including physical or psychological addiction.⁶

The Act declares it a criminal offence if a person imports a ‘psychoactive substance’, defined as “any substance that, when a person consumes it, has the capacity to induce a psychoactive effect”.⁷ This offence is meant to apply only to ‘psychoactive substances’ not already defined in law; that is, the following categories are exempt: food (including caffeine), tobacco, therapeutic goods or medicines regulated by other instruments, agricultural products,

⁵ Revised Explanatory Memorandum, Crimes Legislation Amendment (Psychoactive Substances and Other Measures) Bill 2014, p. 33

⁶ *Crimes Legislation Amendment (Psychoactive Substances and Other Measures) Act 2015* (Cth), s 320.1(1)

⁷ *Ibid.*, Section 320.2(1)

veterinary products, industrial chemicals, plants or fungi, or ‘serious drugs’ already prohibited.⁸ The onus rests with the defendant to prove that the imported substance is either not a ‘psychoactive substance’ or belongs to an exempt category in order to avoid criminal penalties and reclaim the seized substance. A further offence was added should a person import a substance and “at the time of the importation, the presentation of the substance includes an express or implied representation that the substance is a serious drug alternative”.⁹ Presentation includes the name, labelling, packaging and advertising material associated with the substance. Similar exemptions as per above apply and the onus of proof of exemption lies with the defendant.¹⁰

The origins of Australia’s ban on ‘psychoactive substances’

The approach taken by Australia’s latest legislative move to ban all substances with a ‘psychoactive effect’ appears at first glance to be a departure from prior approaches (see Table 1). The rationales used to justify adding new substances to schedules for legislative control in previous amendments relied upon demonstrating: (1) prevalence of non-medical use, *and* (2) (i) various references to ‘serious harms’ associated with taking the drug, or (ii) an effect similar to a substance already controlled.¹¹ In contrast, by stipulating that all ‘psychoactive substances’ will attract criminal penalties if imported into Australia, it is no longer necessary to show that such substances have similar ‘effects’ to already controlled substances. The definition of ‘psychoactive’ in the Act may also be understood as conflating ‘effect’ with ‘harm’, based on the assumption that ‘hallucinations’ or ‘significant disturbance(s) in, or significant change(s) to, motor function, thinking, behaviour, perception, awareness or mood’ are always already inherently harmful (unless caused by the list of exempted substances, which include alcohol, caffeine and medicinal products). The Act also departs from previous legislative approaches by not requiring any demonstration of

⁸ Ibid., Section 320.2(2)

⁹ Ibid., Section 320.3(1)

¹⁰ In Australia, a variety of drug possession and trafficking laws have reversed the onus of proof, compromising the basic legal principle that a person is innocent until proven guilty. Others have argued for the abolition of such legislation, for example, Australia’s ‘deemed supply’ laws, on the grounds of increasing fairness and respect for the law (Hughes, Cowdery, & Ritter, 2015), a position with which we concur.

¹¹ See Table 1, and *Law and Justice Legislation Amendment (Serious Drug Offences and Other Measures) Act 2005* (Cth) s. 301.1 and s. 314.1(2), *Therapeutic Goods Amendment (2009 Measures No. 2) Act 2009* (Cth), s. 52E(1), and *Crimes Legislation Amendment (Serious Drugs, Identity Crime and Other Measures) Act 2012* (Cth), s. 301.7.

prevalence of non-medical use for substances to be prohibited (perhaps again, resting on the assumption of their inherent harmfulness, regardless of whether or how they might be used).

This seeming departure from existing Australia laws governing ‘psychoactive substances’ raises the question: where did this new legislative approach come from? Table 2 presents the Act (in the fourth column) alongside four other definitions of ‘psychoactive substance’ and ‘psychoactive effect’ in laws internationally. Here, we have traced the language used in the Act back to the Irish *Criminal Justice (Psychoactive Substances) Act 2010*. Ireland was the first jurisdiction to enact a law to prohibit psychoactive substances that were not otherwise captured by existing laws. In the preamble, it states that the law is intended to “prevent the misuse of dangerous or otherwise harmful psychoactive substances”¹² by adding offences for the sale, import, export and promotion of psychoactive substances not covered by other Acts. The stated intention is to control ‘dangerous’ or ‘harmful’ psychoactive substances, but the wording of the law targets *any* psychoactive substance. The implication of this law as written is that *all* psychoactive substances are inherently ‘dangerous or otherwise harmful’. But as Kavanagh and Power (2014, p. 855) note, “the onus is placed on prosecutors to show that such compounds are psychoactive, beyond reasonable doubt, in a criminal prosecution. This can be a difficult and unworkable task”. The Australian blanket ban legislation removes this ‘problem’ for prosecutors by reversing the onus of proof.

[Insert Table 2 here]

From where did the language defining ‘psychoactive effect’ in the Irish legislation, upon which the Act in question is based, arise? While we cannot know with certainty, we suggest that the definition used in Ireland resembles in part the definition written in Article 2, Section 4 of the UN Convention on Psychotropic Substances, 1971 (see Table 2). The language stipulating central nervous system depression or stimulation, ‘resulting in hallucinations or disturbances in motor function or thinking or behaviour or perception or mood’ has been amended in the Irish and Australian definition to include ‘significant’ disturbance ‘or significant change to’. The new definition adds ‘awareness’ as an additional characteristic of the person that can be ‘disturbed’ or ‘changed’. The definition in the UN Convention stipulated that a substance had to produce ‘a state of dependence’ *and* ‘central nervous

¹² Ireland. Criminal Justice (Psychoactive Substances) Act 2010, p. 3.

system change resulting in disturbance...’, while the Irish and Australian definitions use the conjunction ‘or’ instead of ‘and’. While in the Irish definition, this change at least makes grammatical sense (‘psychoactive substances’ ‘have the capacity to produce’ ‘central nervous system change resulting in disturbance...’ or ‘a state of dependence’), the Australian definition has been altered to read that ‘causing a state of dependence’ is a second way in which a substance can be deemed as having a ‘psychoactive effect’ (we analyse this in more detail below).

In summary, what at first seems to be a shift from requiring a demonstration of harms associated with a substance in order to warrant control, to controlling all psychoactive substances regardless of demonstrable harm, is perhaps reminiscent of language from the UN 1971 Convention, which defined ‘psychoactive substance’ without overt reference to harmful outcomes. While it is likely that the present definition of ‘psychoactive effect’ ultimately draws from the 1971 definition, small but crucial edits were made. The use of the conjunction ‘or’ broadened the scope of the definition to include substances that ‘stimulated or depressed the central nervous system with resulting significant disturbance/change’ but did not necessarily ‘cause a state of dependence’, but the addition of the term ‘significant’ could be interpreted as narrowing the definition’s scope to exempt substances associated only with mild ‘disturbance/change in motor function, thinking, behaviour, perception, awareness or mood’.

The assumptions underpinning the definition of ‘psychoactive effect’

In this section we apply a different lens and critically examine the definition of ‘psychoactive effect’ in the Act. We argue that the legislation presupposes that ‘psychoactive substances’ inherently have particular (stable, consistent and predictable) attributes and/or ‘effects’ – including adverse effects and harms. We tentatively explore the possibility that the legislative schema also conflates different substances and their supposed ‘effects’ and ‘harms’ through the construction of the category of ‘NPS’ as a singular entity, thus obscuring difference. We also critically examine the meaning of references to ‘addiction’ in the legislation, and the particular models of addiction it invokes and re-inscribes.

Theoretical approach

To inform our discussion and open up further debate, here we draw upon and combine insights from a range of critical approaches to the study of alcohol and other drugs (AOD),

addiction and causality including that of feminist and poststructuralist theorists, and science and technology studies (STS) scholars. We draw, for example, from the work of poststructuralist policy critic Carol Bacchi (2009, p. xi) – who takes her inspiration, in turn, from Michel Foucault’s (1977, 1988) notion of ‘thinking problematically’ – as a way of questioning how law and policy constitute issues of concern as policy and legal ‘problems’. Rather than regarding problems as fixed and objective (existing ‘out there’ waiting to be ‘solved’), Bacchi argues that policy gives shape to the ‘problems’ it purports to address. The proposition that policy problems are ‘endogenous - created within’ rather than ‘exogenous - existing outside’ of the policy-making process eschews the dominant ‘problem-solving’ paradigm which underpins evidence-based policy discourse (Bacchi, 2009, p. x). This approach draws critical attention to the ways in which the ‘problem representations’ implicit within policies give particular meaning to ‘problems’ and, in so doing, carry with them a range of important effects (Bacchi, 2009; Bacchi & Eveline, 2010). Although we do not undertake a traditional Bacchi analysis in this paper (for examples, see Bacchi, 2015; Fraser & Moore, 2011a; Lancaster, Duke, & Ritter, 2015; Lancaster & Ritter, 2014; Lancaster, Seear, & Treloar, 2015; Pienaar & Savic, 2016; Roumeliotis, 2014; Seear & Fraser, 2014a), we draw inspiration from her highly influential conceptualisation of policy as productive and constitutive.

We also take inspiration from the work of feminist science studies theorist Barad (2003), including her approach to ‘phenomena’ and her theory of ‘agential realism’, which we describe in more detail below. Of particular relevance for present purposes is Barad’s challenge to conventional realist understandings of both objects and causality (and, by extension, conventional understandings of ‘cause and effects’). Barad challenges conceptualisations of cause and effect in ways that have particular significance for the study of AOD in general and NPS in particular, particularly where straightforward claims about the ‘effects’ and ‘harms’ of AOD are being made (for a more thorough discussion, see Fraser & Moore, 2011b; Seear, 2013). In addition, we draw from a separate body of critical literature that has emerged in recent years, raising questions about epidemiological, public health and criminological processes and methods. Much of this literature follows from STS theorists such as Mol (1999, 2002) and Law (2004). As Duff explains, a great deal of this work aims to problematise the claim that one can ‘quantify and ascribe “causal” responsibility to individual actors, objects or factors’ (2013, p. 168). For Duff (2013, p. 168), this is a rationale that is:

premised on the assumption that individual actors, objects and/or factors may be statistically ‘abstracted’ from their contexts in order to probabilistically determine their ‘contribution’ to the particular state of affairs under investigation. ... Without ignoring the significance of these kinds of studies, they have not fared especially well in the treatment of counterfactuals, such as the vast majority of instances in which ... alcohol intoxication fails to produce violent (male) subjects.

Scholars drawing inspiration from these ideas and from STS theorists – including Mol and Law’s (2002) work on complexity and mess – have emphasised the difficulties in speaking straightforwardly about drugs and their effects. In their book *The Drug Effect*, for instance, Fraser and Moore (2011b, p. 1) make the point that:

Drugs are often spoken of in terms of their physical or psychological ‘effects’. In turn, they are generally treated as the origins or causes of other entities, crime being perhaps one of the most widely assumed.

Drawing upon the work of Barad, however, Fraser and Moore problematise positivist and realist claims about drug effects (which would see drugs as producing particular ‘effects’, or harms as originating from the attributes of substances ‘themselves’), as well as constructivist approaches that might posit effects and/or harms as merely the outcome of discourse. In a now influential critique of both formulations, Fraser and Moore (2011b, p. 5-6) argue that Barad’s ‘agential realist’ theory of materiality allows us to instead observe that:

... where objects do not have inherent attributes separate from the processes of observation or of intra-action with other objects, it makes no sense to see them as acting independently or consistently on other objects, or as ‘determining’ reality in predictable ways. What they do, what they are, is entirely dependent on their circumstances.

For Fraser and Moore, drug effects are neither purely material nor discursive. Moreover, they are not stable, consistent, predictable or singular, meaning that ‘blanket assumptions about the properties of drugs, their actions, their effects (even their physical properties and physiological effects) cannot be made’ (Fraser & Moore, 2011b, p. 6). These ideas have been

taken up by a number of scholars (e.g., Demant, 2013; Duff, 2014; Seear, 2013; Seear & Moore, 2014) as a direct challenge to the notion that drugs produce consistent or predictable effects *in and of themselves*.¹³ Some of this work takes its cue from Gilles Deleuze's concept of 'assemblage' (for further discussion, see Duff, 2014), which Law (2004, p. 42) reads as:

... a process of bundling, of assembling, or better of recursive self-assembling in which the elements put together are not fixed in shape, do not belong to a larger pre-given list but are constructed at least in part as they are entangled together.

Stabilising drugs, drug harms and drug effects

As noted above, 'psychoactive effect' is defined as meaning either: (a) stimulation or depression of the person's central nervous system, resulting in hallucinations or in a significant disturbance in, or significant change to, motor function, thinking, behaviour, perception, awareness or mood; or (b) causing a state of dependence, including physical or psychological addiction. Focusing, first of all, on the first limb, we argue that this definition rests on the assumption that particular substances generate certain kinds of (stable, consistent and predictable) effects. A particular kind of causal relationship between NPS and bodies is presupposed, in which the category of NPS are understood to *generate* psychoactive effects in the form of 'stimulation or depression of the person's central nervous system *resulting in* hallucinations or in a significant disturbance in, or significant change to, motor function, thinking, behaviour, perception, awareness or mood' (our emphasis). The logical sequence and wording is curious, and raises a series of questions about how drugs are understood to *act upon* bodies, different models of causality and the possible 'multiple realities' (Mol, 2002) of drug consumption.

This particular notion of causality raises a number of questions for us. Can substances produce effects in isolation from the milieu within which they are consumed? And are these effects stable and unchanging? How are polydrug use (including simultaneous AOD consumption) and drug 'effects' within the context of polydrug consumption understood in this context? What is the meaning of the introduction of the effects-qualifier 'significant' (for

¹³ See also, for example, Fraser, Moore and Keane (2014). They take up key insights from science and technology studies (including the work of Bruno Latour and Steve Woolgar, among others) as a way of further disrupting taken-for-granted assumptions about the agency and operation of drugs and drug effects.

both disturbances and changes) but the absence of an effects-qualifier elsewhere (for hallucinations)? Why is the effect ‘hallucination’ singled out when it could arguably be classified as a disturbance of perception, therefore encompassed within the second clause? Where reference is made to ‘significant’ changes and disturbances, how is significance to be classified, assessed or operationalised? And does this presuppose that certain (less than significant) effects are both possible and permissible? If so, what assumptions, if any, underpin this notion of variable effects on a sliding scale, and might this trouble or conflict with claims made elsewhere (see below) about the seeming inevitability of harms in connection with NPS? What implications may be drawn where people understand themselves to experience different or alternative effects in association with their NPS consumption (including those not described here) or effects that they might understand or attribute to other factors, whether in combination or otherwise?

These are difficult questions, not all of which can be answered here. We include them so as to begin to open up discussions about the way the legislation approaches and constitutes its central objects and as a way of trying to problematise its claims and assumptions, reveal possible tensions, and operational challenges. In our view, the legislative definition of ‘psychoactive effects’ works to stabilise claims about drugs and drug effects through the dual claim that NPS produce ‘psychoactive effects’ and through an approach that defines such effects in a particular kind of way.¹⁴ Unlike recent approaches that problematise straightforwardly realist claims about cause and effect, or that view drug ‘effects’ as unstable, multiple and emergent (e.g., Duff, 2014; Fraser, Moore, & Keane, 2014), drugs are here constituted as producing singular, stable, consistent and predictable effects (in the form, for instance, of hallucinations). Our reading of the extraneous materials surrounding the Act (for example, the explanatory memorandum to the Bill) reveals that the definition works to stabilise NPS realities through drawing connections between NPS and drug-related harms and deaths. For example, in the subsequent discussion of which human rights were to be engaged by the proposed legislation, NPS were described – variously – as ‘untested and potentially dangerous substances’, which have been ‘connected to a number of serious health incidents

¹⁴ By stabilisation, we mean that the realities of drugs (their attributes, what they ‘do’, how drugs are understood to act upon bodies and affect individuals) are crystallised and made to appear ‘natural’ and incontrovertible. For more on the stabilisation of realities, we recommend Law (2011).

and deaths across Australia’ and ‘across the world’. The proposed law was also described as ‘an important tool in reducing the harms and fatalities associated with NPS and in preserving individuals’ right to life’,¹⁵ as well as a response designed to protect public health through prohibiting ‘the importation of dangerous and potentially fatal substances into Australia’.¹⁶

A key presupposition of the definition in the legislation is that NPS are harmful (or likely to be harmful) even despite their fundamentally imprecise and ill-defined nature. While NPS may be associated with harms on some occasions and in some circumstances, the claims in the Act go further than this, portraying NPS as inherently dangerous, with a strong risk/harm profile. This presupposition is problematic for three reasons. The first – following on from our earlier discussion of the literature regarding the complexity and multiplicity of drug effects and harms – is that it implies that NPS constitutes harms as largely (if not entirely) an effect of the attributes of the substances ‘*themselves*’. NPS are in this way isolated from the social, cultural, political and regulatory assemblages within which they are consumed and the entangled and complex nature of the way drug-related harms manifest. A second problem with this approach is that NPS are paradoxically constituted as substances with complex, dynamic, unknown and frequently changing chemical structures (indeed, this is part of the rationale for the particular legislative response developed here), and yet sufficiently bounded and distinguishable that we can isolate them and speak of the harms they (may) cause. A similar kind of paradox was also noted by Fraser and Moore (2011a) in their analysis of Australian policy documents about ‘amphetamine-type substances’, which constituted these substances simultaneously as both poorly understood *and* as inherently dangerous. A third and related problem with such claims is that they tend to treat NPS as a singular category of substances without accounting for variation and difference. We tentatively suggest that the definition of ‘psychoactive effects’ may work to constitute NPS as a single and largely undifferentiated category, where the possibility of plurality and/or multiplicity, variability and/or difference is erased. In the ‘Statement of compatibility with human rights’ that accompanied the original Bill, for example, NPS are depicted as a category of substances characterised by deliberate processes of structural manipulation, implying variability and

¹⁵ Revised Explanatory Memorandum, Crimes Legislation Amendment (Psychoactive Substances and Other Measures) Bill 2014, p. 8.

¹⁶ *Ibid.*, p. 12.

difference, on the one hand, and as a singular entity which poses uniform dilemmas and harms, on the other:

Schedule 1 of the Bill ... [bans] the importation into Australia of untested and potentially dangerous substances that are intended to mimic effects of illicit drugs. The ban will strengthen the current border controls on NPS by preventing importers from tweaking the chemical structure of illicit drugs to evade those controls.¹⁷

There is a kind of circularity to this approach, in that NPS are positioned as *both* ontologically similar and different, chemically variable and constantly changing, but capable of customarily producing psychoactive effects of a (largely) analogous kind. Importantly, in spite of the (apparently) fluid nature of NPS, it is constituted as a largely coherent object that ‘hangs together’, in Mol’s (2002) terms, as a singular entity, thus obscuring difference. This is so even despite the fact that NPS are often spoken about in the plural. 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? What can we say about the legislature’s claims, detailed earlier, regarding the nature of the ‘threat’ posed by NPS and the apparent dangers they present, if the ‘object’ in question is not one, but many?

Stabilising addiction realities

In the second limb of the legislative definition of ‘psychoactive effects’ we see a conceptual shift, where NPS move from being associated with certain kinds of (apparently finite and precise physical, mental and physiological) effects to being associated with ‘addiction’. As we noted earlier, ‘psychoactive effects’ are defined in the second limb as effects ‘causing a state of dependence, including physical or psychological addiction’. This rendering raises another series of questions, and requires us to first say a little about the many tensions, controversies and uncertainties that plague the field.

The notion of ‘addiction’ is actually a relatively recent historical phenomenon (Levine, 1978; Room, 2003). Interestingly, and in spite of its ubiquity, there is little consensus regarding

¹⁷ Ibid. p. 8.

what the term actually means, or the key concepts that underpin it (Karasaki, Fraser, Moore, & Dietze, 2013). There are also – crucially – several different models of addiction, including medical models (one of the most prominent being the ‘brain disease model’ of addiction). As well as these different models of addiction and addiction concepts, the language of addiction is increasingly being “extended to cover an ever wider range of behaviours and states” (Room, 2006, p. 285), leading Sedgwick (1993) to suggest that we are witnessing an ‘epidemic’ of ‘addiction-attribution’. Fraser, Moore and Keane (2014, p. 236) have recently taken this further through their development of the notion of ‘addicting’, which they define (in part) as:

the ways in which addiction is being made, that is, how the ‘addicting’ of contemporary neo-liberal societies and their subjects is going on. Substances, persons, brains and behaviours; the *DSM* and its lists; neuroscience and its scans and receptors, its endogenous opioids and cannabinoids; bread, chips and biscuits; drinking patterns, hangovers and regrets are all being made via addiction; they are all being brought into, or reinscribed in, particular overlapping but not identical ideas of addiction, Where Sedgwick (1993) saw an epidemic of ‘addiction attribution’, therefore, we see an epidemic of *addicting*, with all the material implications this revision suggests.

In a sense, the incorporation of addiction in the definition of ‘psychoactive effects’ both reflects and reproduces the *epidemic of addicting* that Fraser, Moore and Keane describe, and represents yet another instance of Sedgwick’s ‘addiction-attribution’. There is something particularly perplexing about this latest instance of ‘addicting’, though, in that it brings together two ontologically imprecise and nebulous objects (a collection of substances, on the one hand, and a contested and ontologically multiple disease state, on the other) and makes claims about ways they might be connected. In this sense, we suggest, the Act stabilises ‘NPS’ (in much the same way that it stabilises drug effects and harms), even though NPS are at times conceptualised as a category of substances with divergent chemical structures and unknown effects; at times understood as transient, emergent, changeable, dynamic and ontologically unknown and presently unknowable. Perhaps more strangely, parliament explicitly acknowledges that ‘NPS’ is not a closed category and that yet more substances (including those not yet imagined, let alone developed) will be added to its ranks. It is both curious and disconcerting that the NPS legislative schema can be at once so concrete and resolute in the face of such ontological complexity.

In a practical sense, this also raises questions about how the definition might be operationalised and/or practically enforced. Which model (or models) of addiction are being invoked (reinscribed or reinstated) here? How is causality and the ontology of addiction understood in this context? Must it even be proven? Or is there an assumption that NPS *always already* has the capacity to produce a state of ‘addiction’, regardless of other factors (including the fact that some of these substances have yet to come into being)? We think that the Act assumes addiction as an ‘effect’ of NPS consumption in much the same way that it presupposes drug effects and harms: as singular, predictable, consistent and stable, in other words, as opposed to multiple, complex, emergent and enacted. Despite the fact that addiction is a contested and complex term, with multiple (and sometimes paradoxical) meanings, alternate renderings of it appear to be silenced here. This complexity is obscured in the Act, which stabilises addiction and addiction realities.

Discussion

While the proliferation of NPS may appear to be a new ‘problem’ facing the drug policy field and government regulators alike, by describing and tracing the context and origins of Australia’s recent legislative approach to governing ‘psychoactive substances’ we have highlighted the ways in which these latest attempts to control drugs draw heavily on existing international regulatory frameworks. Through our initial critical analysis of how ‘psychoactive effect’ and ‘psychoactive substance’ are defined within this legislation, we have also pointed towards the ways in which these new legislative approaches to NPS rest upon a range of problematic taken-for-granted assumptions (which, in the case of ‘drug effects’ and ‘addiction’ for example, have already been the subject of extensive critical analysis in the drugs field). We suggest that the definition of ‘psychoactive substance’ in the Australian Commonwealth legislation works to stabilise the nebulous category of ‘new psychoactive substances’. The legislation banning all ‘psychoactive substances’ (except for those substances that are already legal or regulated through other instruments) implies that ‘psychoactive substances’ are necessarily associated with ‘significant’ effects, must always already be inherently harmful, and therefore warrant prohibition. Paradoxically, through this legislated definition, NPS are produced as a singular category of drugs capable of inducing harm while *at the same time* being multiple, ill-defined and unknown (by including substances that may not yet have been used or even invented).

The production of the ‘NPS problem’ in this legislative framework has complex and far-

reaching implications, which we suggest deserve further interrogation in both the Australian and international context. While we have only touched on some of these elements in our analysis, our aim in this paper has been to identify and open up a range of questions, issues and problematic effects which could be explored more fully in future research. For example, because NPS are produced as such a nebulous category, the extent to which individuals may see themselves as subjects of this law (that is, as applicable to them) is uncertain. Thus, the ways in which these laws produce publics and counterpublics (Race, 2009; Warner, 2002) of drug use may be worthy of consideration in this context; recognising the law as a key site for the production of meaning around drug use and the constitution of particular kinds of political subjects. Secondly, the multiple material-discursive effects of these laws could also be considered. For example, stabilising NPS as a single category allows harms associated with one NPS to be ascribed to the total category of NPS, therefore justifying the continuing ‘ratcheting up’ of policy responses (as observed in the UK by Stevens & Measham, 2014). Thus, the ways in which the legal framework produces and perpetuates the continued possibility of increasing and extending policy and legislative responses (to the exclusion of other possible approaches) deserves critical examination; as does the material impact of intensifying policy responses in people’s lives. Considering other possible material effects, it has been suggested that psychoactive substances that are not yet listed as medicines may be prohibited under this law, thereby making research into new medical treatments much more difficult to conduct (van Amsterdam, et al., 2013). Another possible effect to consider is the ways in which these laws may also continue to exclude the possibility of beneficial psychoactive substances or pleasurable effects, unless benefit is defined with a therapeutic or medicinal framework. Religious, spiritual or personal insight benefits are silenced, as are the benefits of relaxation and sociability. For example, the IGCD report notes that “a possible downside of the New Zealand approach is that it may result in substances being approved for sale for no other purpose than recreational psychoactive use” (IGCD, 2014, p. 20). There is no room in this discourse for the acknowledgement of value or benefit from such ‘recreational use’ (for discussion see Ritter, 2014).

There is also a range of legal and policy processes questions which could also be analysed. Given the recent introduction of this legislation, future research could examine how Australia’s blanket ban legislation has been applied and interpreted by the courts, and building on the work of Seear and Fraser (2014b) how drug use (and/or addiction) are

conceptualised by lawyers and judges in cases applying this new legislation. We might also ask why the blanket ban policy was and is still contested so publicly in the UK (e.g., see Fortson, 2016; Reuter & Pardo, 2016; Stevens et al., 2015), while there has been little to no commentary on its introduction in Australia. These differences could be unpacked through a comparative analysis of how the ‘problem’ of NPS is produced through policy and legislative documents, comparing Australia, the UK, Ireland, and other countries. Through conducting this kind of analysis on the discourses of recovery, Lancaster, Duke, et al. (2015) highlighted how ways of thinking about ‘problems’ reflect specific contexts and, therefore, the constitution of ‘problems’ is contingent upon these conditions (also see Bacchi, 2009).

As we have demonstrated, legislative responses to ‘psychoactive substances’ is an area of drug policy ripe for further analysis. The questions we have raised herein set out a new agenda for analysis with a critical eye to how these objects are approached and constituted. It is our hope that this commentary can form a foundation for a body of work in this area, and that the perspectives we have introduced to the debate may open up space for political and conceptual intervention.

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