Recalcitrant Desires in Addiction

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Abstract: This paper argues that the crucial feature of the drug-related desires

experienced by addicted agents is not that they 'push' the agent with a force she cannot

oppose, but that they are not easily undermined by things that normally have the ability

to undermine desires —in other words, that they are extraordinarily recalcitrant. As a

result, the disposition to experience these desires is very persistent over the long-term,

manifesting itself in particular episodes of wanting to use drugs that recur with great

frequency. Both the persistence and the recurrence of these desires, it is argued,

contribute to a diminished ability to respond to relevant reasons that speak against drug

use.

Keywords: Addiction, addictive desires, recalcitrance, modulating factors, persistence,

recurrence, reasons-responsiveness.

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1. Introduction¹

In early February 2022, the drug-using community of Buenos Aires, Argentina, was shocked by deeply distressing news: nearly one hundred people used from a batch of cocaine that contained small traces of a different, much more dangerous substance. As a result, a total of twenty-four people died and another seventy people were hospitalized in critical condition. This terrible tragedy raises a number of pressing questions, including how best to ensure a safe supply for drug users, and whether we are doing enough to provide fair opportunities for people suffering from drug-related problems. Without neglecting the urgency of such questions, I wish to draw attention to another aspect of the story that is, I think, important for understanding addiction. This concerns the cases of three people who were among those able to recover from the consequences of using the drug, but who had to be readmitted to the hospital the day after being discharged, having used again from leftovers of the same substance they still had in their possession. These people had just gone through a terrible ordeal, they had seen their lives in peril, and presumably they understood well-enough what had happened to them. And yet, in spite of that, they went on to use the substance for a second time.

¹ A quick aside on terminology: I will only discuss here cases of drug addiction, but the view I put forward is meant to be relevant to other sorts of addictions as well. As for the term 'drugs', I will use it liberally to refer to whatever substances are the target of addictive behavior, thus including alcohol, nicotine and other substances not commonly referred to as drugs outside the addiction literature. Addicts are the target of a good deal of stigmatizing attitudes, and, in everyday discourse, referring to a person as an addict may be taken to imply a negative connotation about her behavior or character, and it might be taken to pick out an essential trait of the person referred to. I wish to imply none of those things. The appropriateness of labelling addiction a 'disease' or a 'disorder' will not be part of the present discussion.

Upon reflection, a particularly puzzling question stands out: why would anyone in those circumstances want to use the same substance again?²

In this paper I put forward a view of the drug-related desires experienced by addicted agents —'addictive desires', for short— that aims to shed light on that question. On my account, the remarkable feature of addictive desires is not that they 'push' the agent with a force she cannot oppose, but that they constitute a particularly stubborn source of motivation. Addictive desires often fail to be undermined by desire-incongruent evaluative judgements and relevant aversive past experiences —in other words, they are extraordinarily *recalcitrant*. As a result, the disposition to experience these desires is very persistent over the long-term, manifesting itself in particular episodes of occurrently wanting to use drugs that tend to recur with great frequency. Both the long-term persistence of these desires and their high recurrence rate, I argue,

https://encripdata.com/category/narcotrafico/carfentanilo/

² For more on the case, see the press report at https://www.telam.com.ar/notas/202202/582659-pacientes-externados-consumir-cocaina-adulterada-kreplak.html (retrieved April 11th, 2022). Agustín Ceruse, who covered the story for newspaper La Nación, independently confirmed with hospital sources that the reports by the Ministry of Health were in fact correct (I thank Agustín for generously sharing with me this and other details from his journalistic investigation). Laboratory analyses later revealed that the cocaine contained small traces of carfentanyl, an extremely potent (and hence potentially dangerous) opioid. How exactly those traces of carfentanyl came to be present in the cocaine (i.e., whether this happened intentionally or accidentally), how it was distributed, and whether the victims knew at the time that this was present in the drug they were using are all matters of investigation by judicial authorities as of January, 2023. Though personal information on the three people who used the tainted cocaine for a second time has not been made publicly available, I will assume for the purposes of this discussion that they suffered from addiction. For an in-depth coverage of the whole sequence of events and the ensuing investigation, see the articles at

play an important role in the explanation of the decrease in responsiveness to relevant reasons that speak against drug use.

The plan for the paper is as follows. In the next section I will highlight some features we need from an account of addictive desires by way of considering two *prima facie* appealing but ultimately unsatisfying approaches. Then, in section 3, I introduce some claims about ordinary, non-addictive desires as a contrast case for addictive desires. With this background in place, I turn to my main claims concerning addictive desires in sections 4 and 5.

2. An intriguing case

An important feature of addiction is that, in severe cases, it undermines agents' capacity to respond to relevant reasons when it comes to matters related to drug use (Burdman 2022; Sinnott-Armstrong 2013)³. Consider again our opening case. Having suffered serious health complications after using a drug is a forceful reason to refrain from using that particular substance again. Imagine for a moment the experience the users went through when, shortly after taking the drug, they first started to feel seriously unwell,

³ The concept of reasons-responsiveness is one I borrow from the literature on free will and moral responsibility (Brink 2021; Fischer & Ravizza 1998; Mckenna 2013; Nelkin 2011; Sartorio 2016; Vargas 2013). Following Fischer and Ravizza, a distinction is often made between two components of reasons-responsiveness: receptivity and reactivity, or the capacity to detect the availability of relevant considerations and the capacity to guide behavior in accordance with that realization. Though these components are conceptually distinct and may be dissociated, addiction often involves anomalies of both receptivity and reactivity. Describing them in terms of the more inclusive concept of reasons-responsiveness serves better the purposes of the present discussion.

and the fear they must have felt then. A few days later, after they were discharged from the hospital for the first time, the evidence was clear about the deadly potential of the substance. So, assuming they were not attempting to commit suicide, there were strong reasons for them not to use that drug again. They may have had some positive reasons for using it⁴. But the reasons for using the drug for a second time were clearly outweighed by the reasons not to. And yet, in spite of that, some of the people involved considered the prospect of doing it, and at least three of them ended up using it for a second time.

Why did they do it? Of course, we cannot hope to give a true account of what went through their minds at that time. But I submit that some reflection on this question is important, as it allows us to draw more general lessons about addictive agency.

A first possibility involves positing that some cognitive mechanism was working at the time in an infelicitous way. For instance, addicted agents are notoriously prone to denial about the consequences of continuing drug use (cf. Pickard 2016). So it might have happened that, despite the forceful available evidence, some of them failed to form the belief that using the drug was highly dangerous. Or else, it might have happened that they formed the relevant belief at some point, but then failed to stably adhere to it over time (cf. Levy 2014), oscillating between thinking that using the drug was inadvisable and believing it to be harmless. Suppose, however, that they had a clear awareness of the risks involved in using the drug again. It might then have happened that their

⁴ Some of the positive goals associated with (non-addictive) drug use include improving social interaction, facilitating sexual encounters, counteracting fatigue, and coping with psychological stress (Müller & Schumann 2011). In some cases, drugs may function as a sort of self-medication for people suffering from mental health problems (Khantzian 2003). All besides, of course, getting a kick out of it. These are important facts that any plausible theory of addiction should contemplate.

substance-related thought processes were otherwise distorted (cf. Sripada 2022a), for example, by giving too much weight to the positive consequences of using the drug, or by giving an unwarranted weight to the unlikely possibility of not experiencing any health-related complications this time around⁵.

It is not my intention to argue against any of these explanations of the case. Indeed, I believe that a cognitive approach has a strong claim to capturing important aspects of the psychology of addiction, and the suggestion I will pursue in what follows is consistent with cognitive factors playing a role in this particular case. For present purposes, however, I want to focus on addictive desires, and that for two reasons. First, because a plausible theory of addiction is bound to include a theory of addictive desires, no less than of addictive thought processes. As I will argue in later sections, addictive desires play an important role in the explanation of reduced reasons-responsiveness when it comes to matters related with drug use. Second, because some reflection on the case at hand suggests that the puzzling element in it is not simply that the people involved failed to react appropriately to the serious risks involved in using the drug. A prior, maybe more pressing question is 'why would they continue to want to use this

⁵ The police investigation of the case included wiretappings of conversations between people thought to be involved in the illegal distribution network through which the drug circulated, some of whom were cocaine users themselves and suffered from the consequences of using the tainted drug. One of those conversations contained the following exchange:

[&]quot;—'The Dog' and Mocho's brother both tried it and ended up in the hospital.

[—]Tell them to share some with me.

[—]No, baby, you know how you end up, in really bad shape.

[—]Come on, love.

[—]Do you know how sick they were when they went into the hospital?

[—]In my case, it's gonna be fine".

See https://www.lanacion.com.ar/seguridad/el-cd-385-la-escucha-telefonica-de-la-bonaerense-que-pudo-haber-evitado-las-24-muertes-por-la-nid27022022/ (retrieved June 7th, 2022).

particular drug *at all*?'. A focus on this latter question suggests that we take a closer look into some of the features of addictive motivation.

What is remarkable about addictive desires? Philosophers working on free will and moral responsibility have often portrayed addicted agents as subject to desires that are *irresistible* (e.g., Fischer & Ravizza 1998 p. 35; Frankfurt 1971; Watson 1977 p. 325)⁶. This suggests a possible explanation of the case: the people involved may not have been able to refrain from acting on their drug-related desires. As a consequence, they may have been unable to act in accordance with the realization that using the drug was highly dangerous, regardless of what their thoughts were concerning the risks involved.

However, the claim that addicted agents experience urges or desires that they are literally unable to prevent from materializing into action is easily refuted by both ordinary observation and the available empirical evidence. Ordinary observation indicates that addicts typically retain the capacity to refrain from using under certain circumstances. At the very least, addicts are generally able to regulate circumstances of use. And the empirical record also speaks strongly against the literal irresistibility claim, as both experimental (Hart et al. 2000) and clinical evidence (Cohen et al. 1971; Griffiths et al. 1977; Petry et al. 2017) testify to the fact that addicted agents typically retain the ability to refrain from using when faced with the right kind of incentive structure.

⁶ To be fair, these and other texts in the free will and moral responsibility literature are not in the business of giving an empirically adequate theory of addiction, and often refer to it simply as a placeholder for a condition under which agents enjoy poor control over their conduct. Watson later defended a much more sophisticated view of addiction in his (1999a, 1999b).

Now consider a second, related approach, which promises to capture the basic insight behind the idea of irresistibility while avoiding some of its pitfalls. According to this view, addictive desires tend to dictate behavior because they are *unusually strong* (e.g., Butlin & Papineau 2017; Holton & Berridge 2013). Imagine, then, that the agents in our case experienced unusually strong desires. While they were not literally unable to prevent these desires from dictating their actions, the fact that these desires were so strong plausibly posed a great challenge for their capacity for self-control. Given the inherent difficulty of sustaining the self-control effort, a subset of the people involved eventually failed to do it successfully and ended up using the drug for a second time.

There are three main problems with this suggestion as stated. The first is that it is importantly underspecified. There are several dimensions along which the strength of a desire can be assessed, including phenomenological, evaluative, and motivational aspects, and possibly others besides these (Burdman, forthcoming). For instance, a phenomenologically strong desire might not be motivationally strong, and vice versa. Therefore, some more work needs to be done to identify exactly what is the relevant measure of desire strength that is at stake.

I take it that the view under consideration is that these desires are *individually* very strong, as experienced at particular times. This brings us to a second problem, as there is some presumptive evidence that particular instances of addictive craving are not necessarily very strong⁷. There are a number of complex methodological issues surrounding how craving strength is measured in addiction research, starting with how

⁷ Some people prefer to make a distinction between desires and cravings (e.g., Schroeder & Arpaly 2013), or think of addictive cravings as a specific kind of desire (e.g., Lavallee 2020). For the purposes of this discussion, I will not assume a distinction between these concepts, and I will speak of addictive 'desires' and 'cravings' interchangeably.

exactly the concept of craving strength is defined (Tiffany & Wray 2012). Nevertheless, there are many studies that measure craving strength in addiction, and they rarely come up with estimates on the higher end of the spectrum available on rating scales (see, for instance, Helstrom et al. 2016; Keyes et al. 2011; Richardson et al. 2008)⁸. So this casts some doubt on the otherwise highly intuitive claim that individually strong desires play a major role in explaining addictive behavior.

A third challenge for a simple 'strength of desire' explanation comes from the observation that some desires may apparently possess great strength without compromising the agency of the person who has them in the way addiction does. Consider, for instance, a professional tennis player aiming to win her first big tournament. Regardless of how exactly we think about desire strength, this will arguably be a remarkably strong desire. Its satisfaction would bring great joy to the player, it is likely something she has been daydreaming about for years, and it is a powerful source of motivation to engage in many kinds of costly and effortful activities. However, the thought that cases like this resemble addiction, while maybe suggestive in certain respects, does not really run very deep. What seems to be missing here is a challenge to the agent's control over the relevant behaviors, the sort of phenomenon that has led many theorists in the past to think of addiction as involving a kind of compulsion. In other words, what we need is a clearer picture of how addictive desires contribute to a decrease in reasons-responsiveness.

⁸ This point is highlighted and discussed in Chandra Sripada's recent work on addiction (Sripada 2022a, 2022b). I take it that Sripada's view is that the evidence speaks quite generally against desire-based theories of addiction. My suggestion is that this evidence only poses a problem for accounts that focus on the strength of particular desire episodes.

On the view I put forward in later sections, the key feature of addictive desires is their exceedingly high degree of recalcitrance: they are very resistant to being undermined by the sorts of factors that typically can undermine desires. As a result, the disposition to experience these desires is remarkably persistent over the long-term, and it tends to be manifested in particular episodes of wanting to use drugs that recur with tremendous frequency. This view is well-poised to make sense of the tainted drug case, as it highlights how the substance-related desires experienced by addicted agents often fail to be undermined by aversive experiences and by desire-incongruent evaluative judgements. And this account fares much better in the three respects just discussed in relation to the 'strength of desire' view. It relies on a clearer picture of what the properties are that addictive desires possess to a greater degree than ordinary desires. It is consistent with the observation that individual episodes of drug craving may not be particularly strong. And it allows for an explanation of how these features of addictive desires contribute to a decrease in reasons-responsiveness⁹.

My claims rely on a view of how desires generally work. I will discuss such a view next, to come back to addictive desires in the following section.

⁹ It is possible to see the account I defend here not as opposing a 'strength of desire' view, but as advocating for a different measure of desire strength —one that focuses on the strength of the lasting disposition to experience addictive desires, rather than on the strength of individual desire episodes. I remain open to that possibility, but I will not attempt to articulate it here. For present purposes, it suffices to say that my view is importantly different from the standard 'strength of desire' approach.

3. Modulating influences

Allow me to introduce a distinction that will be important going forward. *Occurrent desires* are the ones that are experienced by agents at particular times. They often involve an affective dimension, and they play a role in canonical explanations of intentional action, as they typically constitute motivation to engage in behaviors conducive to their satisfaction. Occurrent desires may arise on a one-off basis, but there are often regularities in the sorts of things that an agent occurrently desires over time. It is possible, for instance, that somebody wants ice-cream now, never to experience ice-cream-related desires again. However, probably more typical is that desires to eat ice-cream now are a manifestation of an enduring disposition to experience ice-cream-related desires from time to time. We may speak of *dispositional or standing desires* as the lasting complex dispositions that include, among other things, a disposition to experience occurrent desires with a particular content¹⁰.

Standing desires play a crucial role in understanding human agency. Many of our long-term plans rely on our disposition to continue to experience desires with similar contents over time. And standing desires, as lasting dispositions, have some properties that are important in the context of this discussion. One of them is that they are normally susceptible to being regulated —either strengthened or weakened to some extent—by certain modulating factors.

¹⁰ Some people may argue that only occurrent desires are properly deserving of the name, and may thus prefer to replace talk of standing desires with talk of dispositions to desire different things. I will continue to refer to standing desires as desires, but nothing in my argument hangs on this labeling, and I could easily retreat to talk of dispositions to experience particular desires. For discussion of the distinction between occurrent and standing desires, see Döring & Eker (2017) and Mele (2003), p. 30 and ff.

Consider, first, the way in which the congruence or lack thereof between an agent's desires and her evaluative judgements may come to strengthen or weaken an agent's disposition to experience desires of that sort in the future. By way of example, consider the case of Emilio. He grew up in a rural area, and as a kid and later as a teenager he used to truly enjoy going hunting with his father. The two of them would spend entire days in the woods going after some prey, and he used to really long for those moments when for some reason he was not able to join. After he left home for college, however, he gradually began to develop a new sensibility about the very idea of hunting as a sport, and he grew increasingly uncomfortable about it. Now, it is not only that he thinks the practice is morally objectionable. The truth is he no longer experiences the inclination to do it. As his view of the matter changed, his huntingoriented desires weakened more and more. (By contrast, it is easy to imagine how those desires might have continued to be strong if his evaluative beliefs had not changed. Had he eventually become a strong advocate of hunting as a sport, his hunting-oriented desires would likely have been strengthened as a result of being endorsed by his evaluative outlook).

Two sorts of considerations are at play here. One is normative. The congruence or lack thereof between an agent's standing desires and her evaluative judgements raises issues of internal consistency. If Emilio had continued to be strongly inclined to go hunting despite his desire-incongruent evaluative judgements, he would have been open to a particular kind of rational criticism. The force of the relevant consistency norm is arguably much weaker than in the case of beliefs, partly as a reflection of the fact that desire-based implicit appraisals and evaluative judgements are importantly different kinds of states. But if the discrepancy were strong enough and persisted long enough, it

would become increasingly plausible to see Emilio's case as involving a particular sort of failure of coherence¹¹.

The second sort of consideration at play is factual or psychological. I submit that it is in fact unusual for human agents to continue to hold attitudes that are *so poignantly* in tension with one another for long periods of time. We are all susceptible to local failures of rationality, that much comes as no surprise. But there would be something odd about that situation persisting unchanged in the long term. As the long tradition of research on cognitive dissonance has shown, human psychology has a powerful drive for coherence (Cooper 2007). This also undergirds the expectation that Emilio will not continue to experience strong desires to go hunting in the long term. As a matter of fact, people typically do not continue to hold such incongruent attitudes in the long run¹².

Let me now turn to a second kind of modulating influence over standing desires. There are certain relationships that we normally expect to obtain between what people want and the nature of the experiences they went through in satisfying similar desires in the past. Desires are probably not always and necessarily tied to an expectation of pleasurable outcomes, but a person's disposition to experience a particular kind of desire is normally modulated —either weakened or strengthened in the long run—by relevant past experiences. In particular, there would be something odd about a person

¹¹ For related views, see M. Smith (1994), A. Smith (2005), and D'Arms (2013).

¹² The dissonance between Emilio's attitudes would also be resolved by a suitable change in his judgements, as in cases of motivated reasoning. Moreover, there are no principled reasons to presume that the rational way to deal with conflicts of this sort always necessarily involves aligning one's desires with one's judgements, rather than the opposite (Arpaly 2000). My present argument only requires that, as a matter of fact, the drive for coherence in human psychology be strong enough that people seek to resolve such tensions in the long term.

being strongly and persistently disposed to experience desires for something when time and again the satisfaction of similar desires in the past resulted in aversive experiences.

Suppose Ann is really into heavy metal music. Although she has fancied to go to a live concert for a long time, she has never done it. When she finally goes to a concert, however, she does not enjoy herself at all. The music is way too loud, the venue is too hot for her, and she finds that standing in the middle of this huge, chanting crowd just gets in the way of her actually enjoying the performance. If that continues to be her reaction the next few times that she attends, we would find it hard to understand if she still reported strong desires to go to another concert at the next available opportunity. Plainly, if her desires to go to these concerts consistently resulted in her having a bad time, we would expect that to have an impact *ceteris paribus* on the strength of her disposition to want to go such concerts again.

An analogy with the emotions is useful in this regard. Consider the famous experiments on decision-making by Bechara and colleagues using the Iowa Gambling Task (Bechara et al., 1997). In these studies, subjects suffered negative consequences from taking certain actions in the experimental task, and subsequently developed a negative emotional response to considering the prospect of making similar choices again —even before they fully understood what the rules governing the task were. Having experienced the negative consequences of some choice before, subjects became reluctant to make the relevant choices again, as they felt in their guts that something was off. Briefly put, they were *learning*: their emotional responses were suitably modified by their experiences. We normally expect desires, I submit, to display something analogous to that pattern of response. If the satisfaction of a certain desire has repeatedly led to aversive experiences in the past, we expect the disposition to

experience desires of that sort to be weakened as a result (and conversely, if it has led in the past to positive experiences).

These are plausibly matters of degree. It is, of course, possible for people to desire something that is at odds with what they believe to be good, and also to continue to want something whose attainment in the past resulted in negative experiences.

However, the picture of standing desires that emerges from this discussion highlights the way in which we normally expect the strength of the disposition to experience particular desires to respond to certain modulating influences.

With this background in place, it is now time to go back to addictive desires.

4. Recalcitrance

Addictive desires occur at particular times, and they have the potential to influence decision-making and behavior when experienced. But perhaps more important to understanding addiction are some of the properties of *standing* addictive desires, that is, of the lasting disposition to experience addictive desires at particular times. A remarkable thing about standing addictive desires is that they appear to be particularly resistant to being undermined by things like desire-incongruent evaluative judgements and aversive past experiences. In other words, they are extraordinarily *recalcitrant*¹³.

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¹³ A related view is defended by Holton & Berridge (2013), although they do not frame it in terms of recalcitrance. My use of the term 'recalcitrance' here is different from others in the literature. For instance, D'Arms and Jacobson (2003, this volume) characterize as recalcitrant episodic bouts of emotion that are synchronic to an incongruent evaluative judgement, and they

Recalcitrance is a matter of degree. The less susceptible the strength of the standing disposition is to being influenced by relevant modulating factors in the long term, the more recalcitrant that desire is. Ordinary, non-addictive standing desires may also be recalcitrant to some degree. It is not such a rare occurrence for people to have desires that they do not fully identify with, or that they themselves see as rationally criticizable. Addictive desires, however, stand out for being remarkably unresponsive to the relevant sorts of modulating factors. Even if we picture the contrast with ordinary desires as a matter of degree and not as a fundamental difference in kind (Dill & Holton 2014), attending to the ways in which addictive desires are so exceedingly recalcitrant is important for illuminating some puzzling aspects of addictive behavior. As I will argue in the next section, this feature of addictive desires plays an important role in explaining the way addiction undermines reasons-responsiveness when it comes to matters related with drug use¹⁴.

speak of 'stable recalcitrance' to refer to the disposition to experience bouts of recalcitrant emotion. Unlike D'Arms and Jacobson, my main concern is not with the recalcitrance of particular episodes of desiring to use drugs (that is, with the fact that someone may experience such a desire at a particular time even while simultaneously holding evaluative judgements that are in conflict with that desire), but with the recalcitrance of the disposition to experience such desires (that is, with the fact that this lasting disposition fails to be undermined by the relevant sorts of desire-undermining influences over time). My set of potentially desire-undermining factors is also broader, as I consider both past experiences and desire-incongruent evaluative judgements.

¹⁴ This is not to say that it is *only* addictive desires that show high degrees of recalcitrance. As noted in the main text, all sorts of desires may be recalcitrant to some degree, and the same goes for emotions and possibly other kinds of psychological states. Further, non-addictive desires and emotions may sometimes be *highly* recalcitrant, though I would argue it is only in rare cases that they are *as highly* recalcitrant as addictive desires may be. My claim, however, is not that being exceedingly recalcitrant is a feature only addictive desires show. It is rather that this is an important and under-appreciated feature of addictive desires, and that it is on this feature —and

A high degree of recalcitrance is one of the striking elements in our opening case. We can only imagine the extremely unpleasant experience that the people who used the tainted drug went through, as they felt so unwell that they sought emergency medical assistance. And it seems likely that, after learning all the available evidence a few days later, they were sufficiently aware that the drug was highly dangerous before they went on to use it for a second time. But still these things did not substantially subtract from their continuing desire to use this drug again.

The story is, I submit, revealing of some important features of the psychology of addiction more generally. Consider, for instance, the decoupling that many addicts experience between their continuing desires and their considered beliefs and value judgements concerning drug use. This is typically the case of people seeking for treatment, who have come to disvalue drug use and yet continue to be strongly motivated to engage in it. The point holds true also for many currently using addicts who are not seeking for treatment. It is not unusual, for instance, for people addicted to nicotine to be of the opinion that smoking is bad for them.

Of course, not all addicts hold desire-incongruent judgements. Some may be 'willing addicts' 15. In other cases, denial is involved, and judgement is biased in a way

not, for instance, on the motivational strength of particular desire episodes—that we should focus on in order to build an account of the ways in which addictive desires undermine reasons-responsiveness. I thank an anonymous referee for pressing me to clarify this point.

¹⁵ See Frankfurt (1971). Though I would argue that this is likely not the typical situation in severe cases of addiction, my account of recalcitrant addictive desires is consistent with there being addicts who fully endorse their first-order drug-related desires. In the willing addict's case, the recalcitrance of his desire in the face of desire-incongruent judgements is simply not put to the test. That is consistent with the claim that these desires are extraordinarily recalcitrant even in the willing addict's actual situation. In the willing addict's case, the unresponsiveness

that prevents the formation of the relevant desire-undermining beliefs. For instance, heavy coffee drinkers have been shown to be much more reluctant to believe purported medical reports of negative effects of caffeine ingestion on long-term health (Kunda 1987). However, it is possibly more striking that some addicts are acutely aware of desire-undermining considerations, and yet these fail to have the expected effect on their disposition to experience these desires in the long term.

Some people addicted to nicotine do have an appreciation of the long-term effects of smoking on their health and may even be already suffering from smoking-related health problems (while having at the same time a desire to feel good and live long and healthy lives), whence they arrive at the conclusion that smoking is bad for them—and yet they continue to be strongly motivated to smoke, all that notwithstanding. As noted before, it is not unusual for people to fall prey to local failures of coherence. But some addicted agents continue to hold these desire-incongruent judgements for years without this having any significant effect on their continuing disposition to experience desires for their drug of choice. They may regard this as an unhealthy habit, and even see themselves in a negative light for not being able to quit. And yet this fails to significantly undermine their persistent disposition to experience the relevant desires ¹⁶.

of these desires would need to be tested counterfactually. My account predicts that these desires would fail to be undermined by a conflict with the agent's evaluative judgements in the counterfactual scenario in which this conflict presented itself.

¹⁶ Cases where a person judges her drug use as non-instrumentally bad, and yet continues to be strongly disposed to experience drug-related desires, provide evidence in support of the claim that addictive desires are exceedingly recalcitrant. That evidence is especially significant, given that the relevant sort of conflict between judgement and desire is not unusual among people suffering from addiction. However, the claim that addictive desires are exceedingly recalcitrant

In other cases, persistent use of certain drugs can have strongly disruptive effects on life-projects and relationships, interfering with the pursuit of other goals highly valued by the agent. In some cases, consequences can include serious, even dramatic events —losing a job, losing a home, damaging important relationships, running out of money— that the person herself attributes to her continuing drug use (cf. Hammer et al. 2012). As a result, some addicted agents tend to develop fatalistic self-narratives to cope with the fact that they continue to feel so strongly motivated to engage in behaviors that they know by then have consequences that they value very negatively (McConnell & Snoek 2018)¹⁷.

The extraordinary recalcitrance of addictive desires also shows up in their unresponsiveness to associated negative experiences. Drug use leads in many cases to pleasurable experiences, but the phenomenology of addiction involves many sources of displeasure and outright negative emotions as well¹⁸.

There is evidence that addictive drug use can persist in some cases well after the point where the agent is no longer obtaining significant pleasure from using. A series of well-known experiments by Robinson, Berridge and colleagues supports the conclusion that wanting and liking drugs may be dissociable in addiction, and that addicted

⁽i.e., that they would fail to be undermined in the presence of the relevant sorts of desire-undermining factors) is meant to be widely applicable, and is not restricted to cases of addicted agents who in fact hold desire-incongruent judgements. See note 15 above.

¹⁷ Cases of this sort resemble Kennett's (2013) 'resigned addict' type.

¹⁸ Interestingly, a sub-group of people suffering from addiction in the study by Kennett, Matthews, and Snoek (2013) reported that drug use was never really about pleasure for them, not even in its early stages. Instead, they tended to think about it as a means for attaining relief or just as a way to 'feel normal'.

individuals may continue to be strongly motivated to seek drugs even when they no longer experience pleasure from using them (Robinson & Berridge 2003, 2008).

Though Robinson and Berridge's evidence comes mainly from animal models, there are reasons to think that their claims are descriptive of what happens to many human agents. At least a significant subgroup of addicted people report that, after an initial 'honeymoon' phase, drug use ceased to be pleasurable for them. Some of them describe the reasons why they continue to use drugs as something of a mystery, while others cite the addiction itself as a motivating force that they conceptualize as distinct from desires for pleasure or relief (Kennett et al. 2013).

Furthermore, in some cases, the resulting experiences may not only fail to be pleasurable, but actually involve poignantly negative affect. Feelings of shame, guilt, and other forms of negative self-appraisal often follow after the person gives in to desires she no longer identifies with (e.g., Macdiarmid & Hetherington 1995; Snoek et al. 2021). Consider, for instance, that it may happen to some addicted individuals to use their drug of choice until they experience a blackout, later to wake up and find themselves in very bad shape or under quite dramatic circumstances. Needless to say, these are experiences that the person herself finds deeply distressing and may later elaborate on with feelings of shame and regret. Even in such extreme cases, going through those experiences may fail to have a reflection in a decrease in the desire to use drugs again. One of the people interviewed by Hammer and colleagues summarized this as follows: "I would wake up, and I would be hung over and miserable and puking, and I would drink again" (Hammer et al. 2012 p. 725). The agents who went on to use the tainted drug for a second time in our opening case were probably experiencing something similar.

5. From recalcitrance to decreased reasons-responsiveness: persistence and recurrence

It seems immediately plausible that an agent with exceedingly recalcitrant desires will tend to act in ways that are less responsive to reasons when it comes to desire-related matters. It is important, however, to take a closer look into what exactly is it about a high degree of recalcitrance that might lead to a decrease in reasons-responsiveness. I will offer two possible explanations, which are not mutually exclusive and which, I suggest, are in a position to make sense of important facts about addiction. The first focuses on the long-term persistence of addictive desires, while the second concerns the recurrence rate of particular occurrent desires that are a manifestation of this disposition.

Consider long-term persistence first. Highly recalcitrant addictive desires are not easily undermined by desire-incongruent modulating factors. As this natural way for desires to subside becomes unavailable, addictive desires tend to be extraordinarily persistent in the long run. The disposition to experience drug-related desires is a continuing affair for most addicts over long periods of time, even for those who manage to stop using. This is plausibly related to the fact that relapse rates for people recovering from an addiction are remarkably high, and relapse can occur even after years of hardwon abstinence (Kirshenbaum et al. 2009). On these grounds, addiction has often been depicted as a chronic condition, something that someone can continue to suffer from even after extended periods of sobriety (e.g., McLellan et al. 2000).

An agent who experiences such a persistent, stubborn inclination towards particular actions is thereby in a worse position to guide her conduct in a way that is receptive and reactive to relevant reasons. Such an agent will repeatedly find herself in the position of feeling the inclination to act in desire-appropriate ways, regardless of

what reasons she may have to take a contrary course of action. And desire-favoring reasons and considerations will continue to have a tendency to capture her attention and bias the weighing of reasons towards drug-taking outcomes (Cox et al. 2016), no matter how strongly committed to refrain from using she happens to be.

The picture emerging from this suggestion is the following. Desires do not dictate behavior, but they do *incline* the agent to act in ways that are conducive to their satisfaction. There are, however, mechanisms that are critical to agent's capacities to regulate desire-driven behavior. Self-control mechanisms may be recruited in cases of motivational conflict, working to prevent the direct translation of desires into behavior. But there are also the different ways in which the strength of the disposition to experience particular desires gets regulated over time. Sometimes an agent comes to want something less, on account of relevant past experiences, or of certain things the agent has come to believe. This amounts to a form of behavioral regulation that does not rely on actual exercises of self-control, as it operates in an earlier link in the chain. It is the mechanisms responsible for this sort of desire regulation, I have argued, that are working in an anomalous way in an important range of cases of addiction.

Human decision-making capabilities are not meant to deal with desires that stubbornly persist in the long-term, even in the face of considerations that would undermine ordinary desires. The particular challenge faced by addicted agents in this regard is to recurrently have to make decisions in the face of a stubborn inclination towards particular behaviors, where the persistence of that inclination in the long term is itself largely unresponsive to relevant considerations. That amounts to an important way in which an agent's ensuing behavior may turn out to be overall less responsive to reasons, as compared to the behavior resulting from decision-making processes that are not carried out under the influence of such a persistent unresponsive inclination. The

persistent tipping of motivational scales towards drug-using outcomes increases the likelihood that the agent will eventually act in desire-appropriate ways, even when she has strong reasons not to.

Recalcitrance is also reflected in another important feature of standing addictive desires, which is the frequency with which the disposition to experience these desires is manifested. Considered individually, as experienced at particular times, these desires are not always intensely felt. Sometimes they involve an intense affective dimension, but often they amount to no more than a fleeting thought or image that can be easily disregarded (Kavanagh et al. 2009). In other cases, a simple distraction strategy can be effective to diminish presently experienced craving (Hamilton et al. 2013; May et al. 2010). However, a remarkable feature of occurrent addictive desires is that they tend to recur throughout the day with enormous frequency. This may amount to something obsession-like, akin to the thoughts and impulses experienced by people suffering from obsessive-compulsive disorder (Anton 2000; Modell et al. 1992).

The great frequency with which addictive desires are experienced is related to the fact that they are typically susceptible to being triggered by all sorts of things that a person might have come to associate with drug use, including perceptually available items (Cooney et al. 1987; Skinner & Aubin 2010) —even if subliminally presented (Ingjaldsson et al. 2003)—, contextual factors such as time of the day (Palij et al. 1996), performing certain particular actions (Burton & Tiffany 1997), or psychological factors such as negative mood or stress (Sinha et al. 1999).

The high recurrence rate of these episodes is a further manifestation of an unusually recalcitrant, unresponsive disposition. These desires often present themselves with an intrusive character, as they are often unwanted by the person experiencing them.

And they continue to be experienced even when they fail to reflect the agent's

considered judgements as to what is best for her. As a result, an addict may find herself constantly drawn to thinking about drugs and considering the prospect of using them, even if this happens to be directly contrary to her all-things-considered judgement as to what she has most reason to do.

The recurrent experience of these desires does not dictate decision-making or action-selection processes, but it does amount to an anomalous factor that is persistently exerting influence over them. A major way in which this occurs is given by the influence that these desires exert over the allocation of attention. A feature of desires generally is to bias attention as to make certain desire-related features of the situation more salient (Scanlon 1998; Wu 2011). In the context of deliberation and decision-making, occurrent desires often direct attention toward desire-congruent considerations. The cumulative effect of these attentional biases operating at high recurrence rates may effectively make it much harder for addicted agents to bear in mind considerations that speak against drug use. In some cases, this might result in outright denial or in the formation of strongly motivated beliefs. But it may also happen to an addict to endorse a belief that she should refrain from using drugs, and yet be constantly drawn to rehearse the force of desire-congruent considerations¹⁹.

Consider another way in which the story may play out. The highly recurrent experience of these desires can lead to a kind of exhaustion. Craving experiences often have an aversive character, especially in abstaining addicts. In some cases, this may be

¹⁹ A classic finding of delay of gratification experiments is that children who remain focused on the properties of the desired targets are much less successful at exercising self-control (Mischel et al. 1989). A plausible interpretation of these results is that sustained attention directed towards the appetitive target causes the issue of what to do to re-surface, leading to a reconsideration of previously settled intentions (Holton 2009 p. 126).

enough in itself to incline the agent to attempt to get rid of them by giving in, thus overshadowing considerations that favor restraint²⁰.

The main available alternative is to exercise self-control. But such recurrent engagement of self-control mechanisms to deal with highly recurrent cravings may cumulatively undermine the effectiveness of such attempts. This may come about as a result of mere mechanistic fallibility, as the repeated exercise of a mechanism governing a complex process may eventually fail to deliver expected results (Sripada 2018). Or it may be the result of a kind of exhaustion produced by the repeated recruitment of these mechanisms, as exercises of self-control are often effortful and accompanied by an aversive phenomenology (Sherman et al. 1986) or may be otherwise costly for the agent as they continuously call into use resources that become unavailable for other valuable pursuits (Kurzban et al. 2013).

6. Conclusion

Addictive desires are in some ways different from ordinary desires. One important difference between them is that the former are much less susceptible to being undermined by things that tend to undermine ordinary desires. Though this is a difference of degree, it is an important difference nonetheless. Addicted agents find

²⁰ Of course, in a relevant sense of 'reason', to get rid of these cravings may be a reason to use drugs. Indeed, it allows us to make sense of the relevant behaviors in terms of a davidsonian 'primary reason'. Importantly, my claim is not that addicts have no reason to use drugs (see note 4 above), but that they appear to be less receptive and reactive to relevant reasons that favor restraint. As a result, their drug-related behavior is overall less responsive to reasons than the behavior of non-addicted agents.

themselves in the situation of having to make decisions under the influence of an inclination to use drugs that is itself unresponsive to relevant experiences and to the agent's own evaluative judgements. As these desires fail to be undermined, that situation tends to resurface with great frequency, and it tends to persist in the long run. In that way, a high degree of recalcitrance is a contributing factor to a decrease in addicts' reasons-responsiveness when it comes to matters related with drug use. Such an account, I have argued, is able to provide a plausible explanation of the tainted drug case, and it does so by highlighting some important properties generally descriptive of the psychology behind addictive agency.

Addiction is a complex phenomenon. A comprehensive account of the psychology of addiction would need to consider many important issues that have barely been touched here, including the role of self-identity, of cognitive biases, of negative emotions and stress. The comorbidity of addiction with other psychiatric conditions is also an important fact that a theory of addiction should pay close attention to, as are different kinds of non-psychological facts about peoples' circumstances —including restricted financial means, the lack of social support, or the unavailability of opportunities to pursue alternative life-paths— that also have important roles to play in the explanation of addictive behavior. The view of addictive desires I put forward here is not meant as a comprehensive theory of addiction. I think, however, that a properly developed, empirically adequate account of addictive desires might give us an important piece of that puzzle²¹.

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