Reports from the Department of Philosophy

Vol. 33

Addiction in Action

Susanne Uusitalo

Turun yliopisto
University of Turku

ISSN1457-9332
ISBN 978-951-29-6326-3 (PRINT)
ISBN 978-951-29-6327-0 (PDF)

Painosalama Oy, Turku, Finland 2015

Written by
LicSocSc, MA Susanne Uusitalo
Doctoral Programme of Social and Behavioural Sciences
Department of Behavioural Sciences and Philosophy/Philosophy
Faculty of Social Sciences
University of Turku, Finland

Supervised by
Professor Olli Koistinen
Department of Behavioural Sciences and Philosophy
University of Turku, Finland

Professor Juha Räikkä
Department of Behavioural Sciences and Philosophy
University of Turku, Finland

Reviewed by
Ph.D. Jessica Pepp
Center of the Study of Mind in Nature
University of Oslo, Norway

Ph.D. Olli Lagerspetz
Department of Philosophy
Åbo Akademi, Finland

Opponent
Ph.D. Jessica Pepp
Center of the Study of Mind in Nature
University of Oslo, Norway

Chairperson (custos)
Professor Juha Räikkä
Department of Behavioural Sciences and Philosophy
University of Turku, Finland

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

Acknowledgements

I wish to thank all my colleagues in the Division of Philosophy at the University of Turku for providing me with an inspiring and supportive environment to conduct my study. I am especially grateful for both of my supervisors Olli Koistinen and Juha Räikkä for their insightful comments, and patient and generous guidance. Special thanks are also in order for Veikko Launis for inspirational discussions and collaborations in bioethics, and for Hanna-Mari Salonen for providing assistance to any kind of problem I managed to come across. I also want to thank Olli Lagerspetz (Åbo Akademi) and Jessica Pepp (University of Oslo) for scrutinizing my manuscript and providing useful comments. Many of my colleagues are not just great colleagues but their support and companionship extends beyond collegiality. Among these are Marko Ahteensuu, Valtteri Arstila, Mika Hämäläinen, Hemmo Laiho, Mikael Melan, Kreeta Ranki, Rosa Rantanen, Juho Ritola, Helena Siipi, Jani Sinokki, and Valtteri Viljanen to name only a few.

I wish to express my gratitude for the National Doctoral Progamme in Philosophy, the Finnish Cultural Foundation – both the Varsinais-Suomi regional fund and the central fund –, the Finnish Academy of Science and Letters – Eino Jutikkala's fund, Turku Finnish University Foundation – Valto Takala's fund, Turku University Foundation, the Faculty of Social Sciences, and our division at the Department of Behavioural Sciences and Philosophy for financial support for research and travel. This thesis would not have been finished without these agents.

I am also grateful to the Brocher foundation for providing me with ideal means to conduct my research by the Lac Léman in 2012 and in 2014. Without my fellowships there, I would probably not have met Barbara Broers whose insights in treating addiction have been indispensable to my thinking, and with whom I have found a collaborator par excellence. Mikko Salmela and Janne Nikkinen are also my inspirational collaborators to whom I wish to express my warmest thanks.

I have been such a fortunate person to meet so many friends in academia and outside. In the academic world Anna A. and Outi

particularly have always been there for me, in times of need and in times of joy. My academic journey to complete this thesis has been long and I have often needed something to balance analytical thinking. Without Johanna and Hanna's passion for Bodycombat, I would probably not have found that balance. I also want to thank all my friends and other instructors at the gym, particularly Tiina who is my true partner in the quest for a perfect gym class. I do, nevertheless, have a life outside academia and gym, and I want to express my deepest gratitude to all my other friends for providing me with breaks from working (out). Thanks to Susanna, Anna E., the "Pori crew", Mona, and all my friends and like-minded relatives who have been such good company throughout my studies.

I am deeply grateful to my parents Marianne and Ilkka for their presence and support. Thanks also are due to my brother Mikko and his family, particularly my nephew Robin whose philosophical remarks about everyday life fill my heart with joy.

Finally I simply want to point out that this book would not have been finished without Sauli. Words fail to capture the importance of your presence in my life.

Abstract

As human action, drinking alcohol or smoking cigarettes, for instance, are phenomena that are familiar to most people. We recognise when people use drugs or gamble whether that happens in the television or around us. Sometimes we call these actions addictions. Addictive actions are actions that puzzle us.

This puzzlement has raised different kinds of views on addiction that describe the phenomenon in different ways. The proponents of the views pick features that they consider to be sufficient in capturing the phenomenon. The disease view emphasises that addicted individuals are not in control over their own actions, whereas the choice view highlights addicted individuals' capacity to act according to their own preferences. Some see addiction as a defect of will and addictive action is a manifestation of that. Sometimes they all insist on referring to the same group of people and describing the same actions with seemingly contradictory terms.

What happens when an addicted individual acts in accordance with his addiction? This thesis also tries to answer this question and make this kind of action and agency understandable. By showing that these three common views fall short of capturing the phenomenon, I will provide characteristics that jointly suffice for something to be labelled addiction, but which are not, however, individually necessary (or sufficient) for addiction. Those characteristics are strong desire, myopia, biased decision-making, and weakness of will. Furthermore, they should be understood in the framework of diachronic, active agency. They contribute to a view on addictive action that consists of different kinds of actions. Acknowledging the variety of nuanced human action, the understanding of addictive action is increased and this may also be utilised in addiction-related policies and treatment.

The emphasis of my study lies specifically on understanding addiction as action by the means of analytical philosophy.

Keywords: Applied philosophy, addiction, dependence, action, agency, desire, choice, weakness of will

Tiivistelmä

Alkoholin juominen ja tupakointi ovat ilmiöitä, jotka ovat tuttua inhimillistä toimintaa useille ihmisille. Samoin tunnistamme, kun ihmiset käyttävät huumeita tai pelaavat rahapelejä, tapahtuipa tämä sitten televisiossa tai lähellämme. Joskus kutsumme näitä ilmiöitä addiktioiksi. Addiktiivinen toiminta on jotain, joka voi askarruttaa.

Addiktiivista toimintaa on yritetty ymmärtää monesta eri näkökulmasta. Eri näkökulmien edustajat painottavat addiktiivisessa toiminnassa keskeisiksi näkemiään piirteitä ja pyrkivät kuvailemaan ilmiön näiden avulla. Sairausnäkemyksen mukaan addiktoituneet toimijat eivät hallitse omia tekojaan, kun taas valintateorian kannattajat korostavat, että addiktoituneet toimijat toimivat parhaaksi näkemällään tavalla. Joidenkin mielestä taas addiktiivinen toiminta johtuu häiriöstä toimijan tahdossa. Joskus näiden eri näkökulmien edustajat väittävät kuvailevansa samoja ihmisiä ja heidän toimintaansa keskenään ristiriitaisilta vaikuttavilla käsitteillä.

Mitä tapahtuu, kun addiktoitunut henkilö toimii addiktionsa mukaisesti? Tutkimus pyrkii vastaamaan tähän kysymykseen ja tekemään tämänkaltaisen toiminnan ja toimijuuden ymmärrettäväksi analyyttisen filosofian keinoin. Osoitan, että mainitut kolme näkökulmaa kuvaavat ilmiötä osittain ongelmallisesti ja puutteellisesti. Tarjoan näkökulman, jossa neljä keskeistä piirrettä, jotka eivät ole erikseen välttämättömiä tai riittäviä, muodostavat yhdessä riittävän ehdon addiktiolle. Nämä piirteet – voimakas halu, lyhytnäköisyys, vinoutunut päätöksenteko ja tahdonheikkous – tulee ymmärtää jatkuvan ja aktiivisen toimijuuden viitekehyksessä. Piirteet muodostavat näkökulman, joka sisältää monenkaltaista toimintaa ja erilaisia tekoja. Tiedostamalla inhimillisen toiminnan moninaisuus myös ymmärrys addiktiivisesta toiminnasta kasvaa. Tämä ymmärrys voidaan hyödyntää ei vain addiktiota koskevassa teoretisoinnissa, mutta myös addiktioita koskevassa päätöksenteossa yhteiskunnallisella tasolla.

Avainsanat: Soveltava filosofia, addiktio, riippuvuus, toiminta, toimijuus, halu, valinta, tahdonheikkous

Contents

1. Introduction

As human action, drinking alcohol or smoking cigarettes, for instance, are phenomena that are familiar to most people. We recognise when people use drugs or gamble whether that happens in the television or around us. Smoking, drinking, using drugs, and gambling are actions that we can usually identify without effort or difficulty. Sometimes we call these actions addictions. In general, we are able to attribute addiction descriptions to individuals who smoke, drink, gamble, use drugs, spend all their time online and so on, and we do this effortlessly too.

A gambler probably knows that his lucky streak is running out and all things considered he should stop while he is still winning.[1] A drinker may have one more in the pub even if he knows he will be sorry for it the next day. The addicted individual focuses on the instant rewards of the near future. Even in the face of harmful consequences, he struggles to find motivation to change his behaviour. Sometimes, say, a smoker has come to the conclusion that he does not want to continue smoking. Yet he smokes even if he does so unwillingly. As for a willing addicted individual, it may be that everything else is secondary. A player of World of Warcraft or another online game may decide to skip work, meals or sleep in order to play. For a non-player these decisions just seem wrong because of the priorities they contain.

Addictive actions are actions that puzzle us. Addiction is a phenomenon that triggers a desire to understand addicted individuals and their action. On some level addictive action does not make sense. It is sometimes difficult to understand why addicted individuals act the way they do. It is sometimes difficult even for addicted individuals to understand their own behaviour.

[1] I will use the masculine for the third person singular, since Gene Heyman once pointed out to me that statistically speaking most addicted individuals are male.

This puzzlement has raised different kinds of views on addiction that describe the phenomenon in different ways. The proponents of the views pick features that they consider to be sufficient in capturing the phenomenon. The disease view emphasises that addicted individuals are not in control over their own actions, whereas the choice view highlights addicted individuals' capacity to act according to their own preferences. Some see addiction as a defect of will and addictive action is a manifestation of that. Sometimes they all insist on referring to the same group of people and describing the same actions with seemingly contradictory terms. What happens when an addicted individual acts in accordance with his addiction? The answer which I am about to provide also tries to make this kind of action and agency understandable. By showing that these common views fall short of capturing the phenomenon, I will suggest a characterisation in which certain characteristics jointly suffice for something to be labelled addiction and which covers most of the features the above mentioned views focus on.[2] By arguing for joint sufficiency, I leave room for other kinds of accounts of addiction that may, in some cases, include none of the characteristics that I have identified here.[3] The reason for this stems from my wider concern for understanding agency and human action: a more nuanced view on action is called for in order to understand why addicted individuals

[2] My account to understand and explain addiction highlights the point that addictive action seems to take many forms and yet can be identified as addictive action. This view resonates with the psychiatric diagnostic manuals (e.g. ICD-10 & DSM-5) which list various criteria of any combination of three is then diagnosed as addiction. However, for my account, it is important that the characteristics are understood in continuing, active motivation by the agent and unlike the diagnostics manuals, my view allows the possibility that there may be addiction that satisfy none of the characteristics that I identify as jointly sufficient for addiction.

[3] It could be argued that because of this my characterisation fails to identify the ultimate core of addiction, but in my view, there might not be such core to be captured that could then flawlessly rule out all non-addictive actions at a time. Once we appreciate the complexity of human agency and variety of action, we are able to understand addictive action in a way that simultaneously highlights its similarities to non-addictive action and also distinguishes it from it.

act the ways they do and how their actions do not conform to a single action type. The emphasis of my study thus lies specifically on understanding addiction as action.

I conduct my study with the views mentioned above, using them as means to flesh out the characteristics of addictive action. The views serve as proof that these characteristics are quintessential in attempts to understand the phenomenon, but with their shortcomings they also showcase the need for better understanding of addictive action.[4] I begin my analysis with the disease view and take Louis C. Charland as a proponent of this kind of view concerning a prominent characteristic of addiction, namely strong desires. By showing problems with this kind of stance, I hope to illustrate not only the challenges of understanding addiction in terms of desires, but also to provide proof that it is indeed justified to discuss strong desires as one of the prominent characteristics of addiction. I argue that addictive action sometimes involves strong desires. The addictive desires are strong in the sense of being persuasive, resilient and intense. Nevertheless, the desires do not bypass the agent, nor are they necessary for addiction. The addicted agent has the kind of control agents have in cases in which his mental events and states result in action.[5] Of course, if the addicted individual loses control altogether, there is no point of talking about the agent or action in a meaningful sense. The phenomenon can then be described resembling reflexes or seizures and this hardly is a typical case of addiction. I maintain that addictive behaviour is action and addicted individuals are agents.[6]

---

[4] These views claim to cover all instances of addiction; whilst I disagree with this point, I take it that the salient characteristics in these views cover most of the instances of addictive action, and by utilizing the characteristics these views find to be necessary, I argue that as they fall short of providing necessary characteristics, at least all together they will suffice for addiction.

[5] The notion of control is highly ambiguous and it will receive more nuanced and closer attention in the following chapters.

[6] Furthermore, this agency is not merely reactions to the situations at hand, but is in some sense proactive regarding addiction.

Second, I discuss the so called choice view by discussing the addiction account of Gene M. Heyman with the help of influential account of George Ainslie's hyperbolic discounting and illustrate the challenges this kind of account faces, especially in terms of rationality and commensurability of rewards.[7] By fleshing out this account, however, I also hope to argue that, first, addiction is characterised by myopia. A myopic view on one's action exposes addicted individuals' deficient rationality. The addicted individuals do not engage in diachronic agency, but prefer to choose self-indulgent instant goods in their action. This kind of short-sightedness is a form of irrationality and addicted individuals are easily subjected to change of heart. A drinker may appreciate his drink on a Friday night but regret it the morning after. Yet, in the evening he may appreciate the drink again. Addictive desires are typically cue-dependent; they are fixed on social environments, times of day, modes of behaviour and people and thus inciting to engage in myopia by providing addicted individuals with promises of cue-triggered instant rewards.

Another characteristic of addiction that concerns rationality deals with weighing the pros and cons of the addictive action. This comes clear in the choice view and this is the second characteristic I hope to justify with my discussion of Heyman's account. It seems that despite considerable harm, addicted individuals may still regard addictive action as worth performing. I call this biased decision-making. Addicted individuals either seem to be deceiving themselves or have peculiar views on the kind of life is worth living. The more intense the addiction, the more it eats from other spheres of life. It can be a form of excess. A smoker may skip a visit to a non-smoking friend or miss a tight connection flight in order to have a cigarette.

[7] The theorists in question are not strictly limited in philosophy, but both come from psychology and influenced by economic thinking. However, Ainslie as well as Heyman are both concerned with the conceptual aspect of addiction. As the research in addiction is multi- and interdisciplinary endeavour, I do not think the domestic academic field of these academics is a reason to reject them from being representatives of account of certain kind of philosophical thinking.

The disease view and the choice view are typically regarded as opposites, but I argue that they, in fact, are not, as they operate on different notions of desire. I elaborate on this after my discussions of the accounts of both Charland and Heyman, in turn. At this point I hope to have shown the challenges of both of the discussed views face when arguing prominent characteristics to be necessary conditions of addiction and present yet another view. By discussing R. Jay Wallace's account of addiction as an exemplar of a view on addiction that rests on the idea of addiction as a defect of will, I hope to highlight yet another, in my view, important characteristic of addiction, namely weakness of will.[8]

The fourth characteristic that I discuss is *akrasia*. The addicted individual's attitude towards an action and his actual action are not always in harmony; it can be a case of akrasia. In typical human action, the agent is assumed to act according to his better judgment what he ought to do. In contrast, for instance an unwilling individual addicted to drugs acts against his better judgement of not using the drug.[9] Addicted individuals' self-control may be consumed when they fight against the triggered desires or they may fail to be motivated to act against addiction even if they find reason to do so. However, with my discussion I also hope to illustrate that reducing addictive action merely to instances of weakness of will does not suffice for understanding addiction and addictive action. This actually plays into the important aspect of continuity. Addiction is not repeated acts of weakness of will; rather, the action seems to involve a stronger commitment and diachronic motivation to the addictive action.[10] In fact, the four

[8] For the time being, I treat weakness of will and akrasia as synonyms though they can technically be distinguished from each other. I discuss the issue in Chapter 5.

[9] There is a famous distinction of drug-addicted individuals on the basis of their attitudes to addictive action: unwilling addicted individuals have a second order desire not to use drugs, but their effective first-order desires to use drugs win, while willing addicted individuals have second order volitions to use drugs; their desires of different order are in concord. See Frankfurt 1988.

[10] It does not suffice that the agent is merely exposed to temptation and he then caves in, but he is active in maintaining the addictive actions.

characteristics need to be understood in the framework of continuity that stems from the agent's intentions, his own active agency, in order to be jointly sufficient for addiction.[11]

The rough conditions I provided above as such definitely call for clarification and the following chapters will offer more insight into my account of addiction that emphasises action. With the means of analytical philosophy, the preliminary characterisation of my account will become justified and more detailed as I compare the common ways of portraying addiction with my characterisation in the following chapters, focusing on features that concern action. As mentioned, I identify three typical views on addiction, namely addiction as a disease, addiction as a choice and addiction as a defect of will, some positions of which seem to be untenable when considered from an action theoretical point of view. One could argue that there are many other views on addiction, but I take these to cover the features of agency that are salient in understanding addictive *action*.[12]

In general, I consider addictive action to be human action that captures features of human nature as well as norms of human agency. It is action that does not rule out planning or reflection, but still seems to challenge our conception of it being normal human action in the sense that it calls into question norms with which we usually understand desirable human agency. For instance, addictive action is controlled in the sense that it is action that it is formally conducted by the agent. Addicted individuals do not typically have problems with controlling their movements. They also seem to be able to plan their action and decide to follow those plans.

[11] It could be argued that this kind of characterisation is too loose; it does not rule out phenomena that we do not typically call addictions such as romantic love, but I argue that in cases of romantic love when there are frequent instances of akrasia, myopia and biased decision-making, we actually may be inclined to recognise the person as being addicted to love.

[12] In order to be able to start explaining addictive action, one needs to describe the explanandum and this is indeed my pursuit here. My characterisation of jointly sufficient features provides a view on addiction that can be used as a point of comparison for action that is suspected to exemplify addictive action but nonetheless does not satisfy all these features.

Furthermore, they seem to be concerned and motivated to continue their addictive action in the way that cannot be understood merely in terms of repetitively caving into temptation, for instance. They can be regarded as agents responding to reasons too. It is just that the decisions that they actually make might be questionable according to some norms of human agency. In fact, their way of living may be far from optimal when it is evaluated all things considered.

1.1. On the nature of addictive action

Before analysing addictive action, a little more needs to be said about action and agency, in general, and their relation to addiction. As my aim is to provide a characterisation of addiction that sheds light on the way in which people act when we label them as addicted individuals by identifying prominent characteristics involved addictive action, I need to provide a description of what I mean by action and agent in general. This may be easier said than done given the complexities and subtleties of philosophy of action,[13] but here I wish to lay out a rather rough introduction to the kind of issues regarding action that I will discuss in the following chapters. These issues are mainly metaphysical questions that bear relevance to the analysis of addiction.

In ordinary, everyday language, single action cannot usually be addiction on its own, but it always requires repetition.[14] On the whole, there seems to be a great diversity of addictive action not only with respect to the person and the object of addiction but also

[13] For instance Constantine Sandis (2012) problematizes the idea that there is a single conception of what action is that covers all the varieties of human action. See also Millgram 2013.

[14] This is a condition of habits (Polard 2013, 77). There are views on addiction that rest on the notion of habit (see e.g. Loewenstein 1999, 235). I argue that repetition is not enough, but there need be continuity that cuts through the variety of different kinds of acts that realise the agent's addiction. Nevertheless, if addictive action is understood only to refer to, say, excess, then one time may be enough to claims of getting hooked in some new activity.

to the stage of addiction. Addiction is a process; it is a matter of degree in the sense that it seems to evolve similar to other kind of processes that people engage in such as language acquisition or learning to walk.[15] In this sense, it is more than repetition; there is continuity which the agent seems committed on some level.[16] As addiction is a process rather than an identifiable event with a beginning and an end involving the kinds of action types that I articulated in the previous section, it is important to notice that I can still talk about addictive action even if in my view there is no single distinct action type covering the action the agent engages in when he has an addiction. In what follows, it becomes clear that any account of addiction that tries to accommodate a single action type with addiction understood as a process will face great problems explaining the addicted individuals' action in a way that does not leave some of their addiction-related actions outside the scope of addictive action. For instance, accounts that regard addictive action as rationally coherent action fail to accommodate the actions of unwilling addicted individuals who simply act irrationally, and those accounts that prescribe addictive desire as the determiner of action struggle accommodating addicted individuals who rationally govern their addictions on the basis of, say, financial reasons.[17]

---

[15] Unlike language acquisition, however, addiction seems to lead to an increasing degree to obscurity; while it may be difficult to point a time in which a small child utters his first word or the point in which he "acquires a language", the more the acquisition proceeds the more sense the agent makes. In addiction, the "progress" seems to be reverse: the more it proceeds, the more difficult it is to make sense as (rational) human action.

[16] This commitment is activity on the agent's part; He is not just subjected to a situation to which he then reacts, but is proactive in his addictive action by making plans, for instance.

[17] The challenge is analogous to challenges of defining concepts in natural languages in the sense of providing sufficient and necessary conditions; as the natural language is so abundant and versatile, one can always come up with a counterexample to the definition if it is meant to define something that has not been constructed by the definition. In order to appreciate the diversity of addictive action, but at the same time to call for a concept (of addiction) that makes sense and explains people's action, I suggest that the characteristics are

1.2. On the scope of addiction

So what is it exactly that we refer to when we discuss addictive action or behaviour?[18] A pathological gambler places a bet with the money that he intended to pay his rent with. What is it that we want to understand and explain in these kinds of cases? It seems clear that on some level we already understand the action; we name it addiction, but what is it that we want to make sense of? It is not about the causal mechanisms that makes the gamblers hand move when he places the bet nor is it just about the idea of gambling. The discussion about action and agency in philosophy of action illustrates my concern about the discussion about addiction and action. There is and has been a great deal of discussion whether philosophising about action is about understanding action or explaining it. Roughly, understanding emphasises the way in which we rationalise action, how we see meaning in it; while explaining action could be regarded as to concern more scientific enquiry about its aetiology and the nature of causality involved.

Focusing on the understanding of action is not to deny that actions have causes, but to argue that actions and happenings can be told apart for instance by considering whether the event in question is under the agent's guidance (Frankfurt 1997, 45). It is constitutive in the sense that the agent contributes to it by having control over it – however control is understood. This kind of view seems to rule out accounts of agency that cover inanimate agency (e.g. Alvarez and Hyman 1998). Indeed, it seems clear that if we focus on causality in action (in terms of tracing the proper origin of the action), the discussion on agency and action takes a much broader scope than if we consider action that is under the guidance of the

---

jointly sufficient for addiction while maintaining that none is necessary – as long as they are understood to involve a certain degree of continuity in the agent's actions.

[18] I intentionally leave the discussion about addicted individual's tendencies and (pre)dispositions to addictive action aside and concentrate on addiction in action.

agent. Guidance involves what has been called "the critical appraisal" (Hempel 1961–62, 5). This normative characteristic of rational action indicates that the action was the thing to do given the reasons (ibid. 11). There is more to the understanding of action than mere causal forces. It, furthermore, brings "good reasons" into the picture in the sense of concerning the desirability or value of action (Wallace 2009).[19] In considering addicted individuals' action we can consider whether their reasons for action are good reasons in the sense that given the context those reasons provide the optimal means to achieving the objectives and, indeed, in light of these kinds of criteria for rational agents, addicted individuals seem to express exemplary skills in achieving to maintain their addictions. Proponents of causal explanation of action argue that rational action is explained by motivating reasons which subsume the explanandum, i.e. an action, under covering laws (e.g. Hempel 1961–62, 18).[20] The puzzlement in everyday life that arises from observing the action of an addicted individual seems to rely more on the former kind of understanding of action than the latter kind of causal explanation of why the action took place.

This distinction is, however, easily blurred. The positions are not necessarily contradictory; they just seem to explain different things. This has been acknowledged for instance by Donald Davidson and incorporated into his account.[21] Davidson (1980a, 45) argues that an action can be intentional under some description without being so in another. Depending on the perspective we take, we can have several descriptions for the same action. This is relevant in the discussion about whether addiction is a choice or not. If the notion of choice refers to instances, for instance, in

[19] I will discuss rationality and reason in more detail in Chaper 3.

[20] Hempel (1961, 18) gives a brief description of these covering laws as either "strictly universal or statistical" and states that the subsumption is "deductive or inductive-probabilistic in character."

[21] Davidson's account of action is a prominent account in the philosophy of action and it will provide the action theoretical framework for my discussion even if there may be points in which my view challenges Davidson's general account as insufficient to capture the nuances I consider important.

which an individual addicted to heroin is faced with a possibility to use drugs, it can be described as a choice where the addicted individual sees the reward of getting high greater than any other alternative (e.g. Heyman 2009) or it can be described as a neuroscientific process of attentional bias in the addicted individual triggering and enforcing subjective craving by means of classical conditioning (e.g. Field & Cox 2008) and bringing about the consumption of the drug.

The kind of description or explanation we give for the action depends on the distinctions and perspectives we take; it is important to recognise, for instance, that merely focusing on a synchronic action of, say, injecting drug into oneself does not provide us with an exhaustive explanation of addiction as a diachronic phenomenon with more complex motivation than mere reference to recalcitrant desire and varied actions. In light of this, still, it seems important to explain an addicted individual's action by his motivation for performing it (Smith 2013, 153), but, in what follows, I argue that understanding addictive action with exclusive references, for instance, to addictive desires simply falls short in capturing the whole phenomenon.

All in all, when I am looking for an adequate description of addictive action, I am also calling for a theory of action that can distinguish different kinds of actions from each other. In another words, the thing that is of interest is not so much why the agent acted the way he did regardless of the actual action, but why the agent acted the way he did given the supposed alternative way of acting available for him. In other words, I am not looking for a causal explanation of what happens in addicted individuals to bring about the addictive behaviour but more to understand (and later explain) the intentional action which we identify as addictive action. In what follows, I hope to provide an account of (addictive) action which can also be harnessed for practical purposes of making sense of addicted individuals' action in societal, social and moral domains, for instance.

2. The role of desires and critique of the disease view

My analysis starts off by introducing one of the prominent views in the field of addiction. I do this in order to introduce my first characteristic of addiction, namely strong desire, which as such I neither take to be sufficient nor necessary for addiction, but which nonetheless is typically taken to be characteristic of addiction. One of the common views on addiction is to see it as a kind of disease. The view of addiction that can be labelled as the disease view rests on the idea that the agent has lost all or most of his control over his use of drugs (or other addictive behaviour) (Henden, Melberg & Røgeberg 2013). The proponents of the so-called disease view regard the addicted individuals as helpless victims in the face of their addictions (e.g. Charland 2002, Hyman 2007, Kalivas & Volkow 2005, Leshner 2005). Addiction as a brain disease is characterised as compulsive and relapsing drug use (Henden et al. 2013, 1). This is explained with a reference to changes in the brain, especially in the areas that are involved in motivation concerning action. According to the proponents of this view, addiction shapes the addicted individual's brain neurobiologically in the way in which quitting becomes, if not impossible, then too difficult. Typically this kind of stance is defended with empirical results of addicted individual's brain (mal)functioning. The view may embrace a strong naturalistic reductionism in which agency is nothing more than brain reactions to stimuli.[22] With this kind of view at hand, I will discuss the different kinds of problems that arise from the conceptual commitments and assumptions that the proponents of the disease view make concerning addictive action. I do this with a particular focus on the notion of desire, as I argue that it is one of the characteristics that jointly suffice for a phenomenon to be addiction. Yet, I start with a wider framework of

[22] For a brief description of this kind of view of action and agency see Sandis 2012, 2–3.

philosophy of action and agency in order to give my discussion a framework.

In the language of philosophy of action, motivation that is concerned in action can be named 'desire' in a wide sense. When I am feeling hungry, for instance, I have a desire to eat. Also, if I am motivated to learn Japanese, I have a desire to learn the language. If I have a tendency to do something, it can be phrased in the language of desires.[23] Addiction as a disease rests on a particular type of desires that result in compulsive action and relapses. It is little challenging to find philosophers who fully commit themselves to this kind of view.[24] However, I take Louis C. Charland (2002) to be a proponent of this kind of view, more or less, and in this chapter will discuss the disease view with his notion of addictive desire, but first I will give a brief overview of the role of desires in action in order to shed light on the role of addictive desire in an addicted individual's action. The purpose of the chapter is to show that even if desire is a prominent feature of addiction, understanding and explaining addiction simply with a notion of addictive desire falls short of capturing the phenomenon when looked at in detail. There may well be addictive action that does not involve strong desire at all.

[23] Davidson 1980a. For a nice and short synopsis of Davidson's view see Velleman 1992a

[24] For instance, James Stacey Taylor (2005) does not commit himself to this kind of view, but he discusses whether addictive desires are irresistible in relation to Harry G. Frankfurt's influential discussion of different kind of addicted individuals. Taylor categorizes these irresistible desires to two different groups; in one group the desires are strongly irresistible, which basically means that when the agent experiences the desire, he satisfies it (ibid. 242). The desires in the other group are weakly irresistible, which means that the agent will eventually satisfy the desire, but he is able to resist it occasionally. For instance, a smoker may feel compelled to smoke, but he may successfully resist the desire if he is in a meeting at that moment and smokes the cigarette only after the meeting has finished.

2.1. Desires in action

Desires are a factor that is a very common feature in explanations of action. In relation to action, desires usually serve as a motivating force to bring about an action. For instance, Donald Davidson (1980b, 4) discusses pro-attitudes "of an agent directed toward actions of a certain kind" in his seminal article "Actions, Reasons and Causes". Pro-attitude is a broader notion than what is usually meant by the term 'desire' or a passion in a narrow sense, covering other kinds of motivational sources ranging from aesthetic principles and economic prejudices to urges. In this chapter, I will focus on desires in the narrow sense in particular even if maintaining addiction may, and arguably does, stem from other kinds of pro-attitudes, too.

In Davidson's model, the strongest desire and belief cause an action in a particular way. Given that the causality involved is not deviant, this pair brings about bodily movements that are the action. This kind of causalist explanation of action portrays reasons for action as causes for action and it is usually referred to as the standard view (see Sandis 2009, 3). Desires can be regarded as such reasons and, in this chapter, I am particularly interested in the nature of these desires in the context of addiction. Addicted individuals' behaviour is occasionally explained by a strong desire[25] and its role in the disease view of addiction is the focus of the chapter.

Desires are typically considered to be mental states that have a constitutive role in the realization of action. For instance in the standard view stemming from Davidson's claim to revitalise the ancient view of reasons playing a role in causal explanations of action, the strongest desire with an appropriate belief results in

[25] For instance, the Finnish National Institute of Health and Welfare defines addiction in terms of desire on its website. Furthermore, DSM-5 (2013, 483) provides a general characterisation of substance-related disorder in the following way: "The behavioral effects of these brain changes may be exhibited in the repeated relapses and intense drug craving --."

action. In Davidson's (1980c, 23) own formulation it goes in the following way:

> "If an agent wants to do *x* more than he wants to do *y* and he believes himself to be free to do either *x* or *y*, then he will intentionally do *x* if he does either *x* or *y* intentionally."

Wanting and believing are involved in the intentional action. Wanting more is the indication that, unless the agent is prevented by something or someone, he will do the alternative that is subjected to more of the agent's wanting. In this case, the alternative is *x.* How does addictive action look in this light?

As the proponent of the disease view, Louis C. Charland (2002) argues that "[h]eroin addicts suffer from a compulsive need to seek and use heroin. As a result, they have an impaired decisional capacity to make choices about heroin." This seems to discord with Davidson's second point if the addicted individual acknowledges that he has a compulsive need of this kind. The proponents of the disease view consider the desire pathological and at the core of addiction as a disease. The addicted individual simply cannot resist the desire. Charland (2002, 37) quotes Cynthia, an individual recovering from heroin addiction, who says, "If you're addicted to heroin, then by definition you can't say 'No' to the stuff."[26] If we take her words at face value for the time being, it is clear that in her experience she cannot resists the desire. She does not think she is free to choose something she might want more (which she probably does not, as the drug makes her want it more than anything else). This is a key feature in the disease view. The view concerns the idea that the addicted individual is unfree regarding the desires he acts on. I will come back to this point below.

Charland (2002, 40–41) explicates Cynthia's response by arguing that addiction involves not only the compulsive drug use,

[26] Of course, we can always question the addicted individual's first person authority by claiming that either she is lying or deceiving herself.

but also, in relation to heroin at least, intoxication and withdrawal. Charland refers to a report by the United States of America's National Bioethics Advisory Commission when he argues that intoxication resembles delirium.[27] He further suggests that, according to the report, withdrawal can also been seen as an instance of delirium and may be considered equal to it when considering the impairment it imposes on an agent's decisional capacities. In fact, Charland argues that the impairment addiction imposes on an agent is two-fold because of these different aspects it involves. He further suggests that these impairments can be translated in folk psychological terms in the following way: "[C]ompulsion results in disordered desires, while delirium [i.e., a state that equals to intoxication and withdrawal] results in disordered beliefs" (ibid. 41). Given Davidson's formulation of action, Charland's description of problems in addiction problematizes an addicted individual's action in light of both of the points involved in intentional action. I will discuss the points starting with the first point of wanting to do something more than some other thing first in the following section and then move to the second point of the agent's belief to be free to do either after that. I do this not only in order to explicate the nature of addictive desire and its relation to addicted individuals' actions, but also to show that for understanding *addictive* action we need a more nuanced understanding of action that is provided by the general framework of standard view of action.

2.2. Disease view and intentional action:

Even if the proponents of the disease view generally reject the idea that simplistically all addicted individuals are zombie-like agents just roaming through their lives trying to satisfy the hunger inside

[27] Oxford English Dictionary gives a definition for 'delirium' as "[a] disordered state of the mental faculties resulting from disturbance of the functions of the brain, and characterized by incoherent speech, hallucinations, restlessness, and frenzied or maniacal excitement." (OED, s.v. 'delirium').

themselves, it seems clear that there are compatibility problems with Davidson's account of intentional action and Charland's account of heroin addiction (or other accounts representative of the disease view). Charland (2002) seems to maintain that addicted individuals do act intentionally even if he denies their ability to engage in voluntary decision-making concerning heroin. Let us see how that is possible.

The first condition in Davidson's formulation simply states that the agent wants to do *x* more than *y*. On a simple reading, the strongest desire wins out. However, this may be too simplistic. For instance, Harry G. Frankfurt (1988) has distinguished between different types of addicted individuals on the basis of their second order desires that are directed to the first order desires. Without this second level, it would be challenging to distinguish between addicted individuals who are willing and unwilling regarding their addiction even if they both engage in addictive action.[28] However, even in Frankfurt's account it is the competing first order desires, the strongest of which then results in action. According to Frankfurt (1988, 12), agents have first order desires that concern "wanting and choosing and being moved *to do* this or that". If wanting is understood to be taking place on the level of first order desires, the strength of the desire determines which action *x* or *y* the agent wants more. It is an effective first order desire, i.e. a desire that results in action (ibid. 14). As it hopefully became clear above, the disease view maintains addicted individuals want to use drugs and usually do so, but it seems that they fail to make the distinction between willingness and unwillingness that Frankfurt for instance is able to make. What kind of problems this failure results in regarding the agency and action of addicted individuals?

[28] The views of Davidson and Frankfurt on action will follow my discussions of addictive action throughout the whole thesis. This is because, as mentioned, Davidson's view represents the standard view of action, but as it is very general, Frankfurt's view will give more depth to the action theoretical picture.

2.2.1. The problem of conceptualising compulsion in addiction

The disease view rests on the idea of strong desires that Charland traces back to compulsiveness of the desires. This suggests that unlike Frankfurt's agents, addicted individuals do not choose to do this or that. In this context, compulsion is a feature that makes addictive action a form of disease. In fact, viewing addiction as a disease rests on assumptions about irresistible desires and compulsive behaviour (Henden et al. 2013). The view of addictive desire as pathological in the sense that it is irresistible brings problems. As it has been pointed out, this kind of notion of psychopathology itself is problematic, as in human behaviour or action, it is hardly the case that there is literally no possibility of acting otherwise (e.g. Pickard 2013). Literally irresistible desire would amount to something passing over the agent. An example of this could be a case when an individual tries to fight sleep off, but fails and falls asleep, in spite of himself. Of course, if the irresistibility is understood in the sense of the desire having a propositional content of which the agent just cannot refuse without being unintelligible, I would then argue that the talk about *literally* irresistible desire makes our conception of phenomenal desire to something that it is not, an instance of practical rationality the nature of which is not typically spelled out in terms of desires in this sense.[29] Employing the idea of irresistibility suggests that, in light of Davidson's account of action, an addicted individual does act according to his addictive desires, unless, of course, there is a stronger irresistible desire involved. It is not about the control the agent has, but about the strength of the desire. This fits the disease view: Charland (2002) and other proponents claim that addicted individuals engage in compulsive behaviour in their attempts to feed their addiction (e.g. Leshner 1997, Charland 2002, Hyman 2007). This is partly due to the strong desires.

[29] I will come back to my claim that addictive desire is typically in this context a phenomenal desire later in this chapter.

Charland regards the desires as disordered, as they seem to gain a role in the addicted individual's action that is not under his control. It is argued that insofar as other activities with strong desires such as sweet food or exercise may cause similar effects on the brain in terms of neurotransmitter levels and synaptic action, addictive action and its strong desires differ from the other action in the sense that addictive desires remove addicted individuals' abilities to control their behaviour. (Henden et al. 2013, see also Dill & Holton 2014.) This cannot, nonetheless, be conceptualised with a total loss of control, as the action still seems to be action and not mere movements by some alien forces, bypassing the agent altogether. Addictive drug taking, and drinking, for instance, seem to be intentional by nature and this means that the agent is involved in his actions, at least to some extent. Addicted agents are said to be unlike unsuccessful freedom fighters but rather more resigned collaborationists in relation to their own action (Watson 1999, 7). They are not totally defeated, but remain in some control over their actions.

Indeed, as it has been plausibly argued, this kind of motivational compulsion needs to be conceptualised distinctively from, for instance, intrapersonal physically compulsive forces such as seizures but also from interpersonal physical coercion (Watson 1999). These two latter threats to the person's agency differ from the threat imposed by motivational compulsion. A distinctive difference is that the agent subjected to motivational compulsion cannot whole heartedly resist the force in the same manner as he can when faced with, say, a rolling stone or a bouncer in a night club. Intrapersonal physical force, external physical forces (of nature) and interpersonal successful physical coercion all seem to take away the person's freedom: No matter what he does, the superior, overpowering force overrides the person in a way that leaves (almost) no choice for him to act according to his intentions. Of course, in the case of interpersonal physical coercion the person does have a choice between resisting and not resisting, but what the person lacks is the chance of making a difference to the outcome of

the event. So for instance in the case of a bouncer throwing the unwanted customer out of the night club, whether the customer resists the action or not does not affect the fact that he was thrown out. It merely affects the way in which the customer is removed from the premises.

Charland and other proponents of the disease view still insist that there is compulsion involved in addiction. The question is then how to conceptualise this in a plausible manner. There has been criticism about philosophers' attempts to conceptualise addicted individuals' compulsive behaviour in terms of the metaphysics of free will instead of, say, definitions found in clinical practice (Henden et al. 2013, 3).[30] In this kind of criticism it is claimed that the metaphysics of free will is a wrong starting point in understanding addicted individuals' behaviour. Instead, it is suggested that conceptualisation should employ three characteristics which are typically present in clinical descriptions of compulsive behaviour. First, the behaviour is strongly cue-dependent. This means that the agent's behaviour is regularly triggered by the context such as situations, places and people that is associated with the kind of behaviour in question. Charland (2002, 40), for instance, maintains that this is one of the factors that bring about compulsive behaviour in heroin-addicted individuals. He also acknowledges that the cues may involve social and personal factors and that these factors "only make those compulsions more acute" (ibid.). However, it is clear that this kind of characteristic does not take away the agent's control; rather, it may guide the agent to actions that he may not have planned.[31]

Second, the agent feels driven to perform the compulsive behaviour and the feeling may be something with which the agent does not identify himself. The addicted individual behaves in an addictive way "in spite of himself" (Henden et al. 2013, 3).

[30] This is the same problem that I mentioned Pickard to be concerned about above.

[31] It should be noted that addictive action is not always cue-triggered instant actions, but may involve planning that is not brought about by cues and which does not seem to involve strong desires either.

Charland (2002, 42) discusses this with a reference to the kind of values addicted individuals have behind their drug use and how, typically, these values change if the addicted individuals abstain from the use. Charland (2002, 41), however, probably has mainly "willing" addicted individuals in mind in his discussion of the change in the agent's values, as he argues that addiction "results in fundamental changes in personal values. They [i.e. fundamental changes in personal values] usually last as long as the person remains actively addicted." Charland seems to imply that addiction requires altogether different set of values in order to be "in action", but in my view, it is far from obvious that, for instance, a person who states to use heroin in order to feel normal has necessarily undergone changes in personal values. However, I will come back to this kind of compulsiveness in the next section when I discuss beliefs in more detail.

The third point in conceptualising compulsive behaviour from a clinical point of view is that the compulsively behaving agents report that resisting the compulsive motivation becomes over time increasingly difficult (Henden et al. 2013, 3).[32] The resource for self-control is affected by the continuous compulsive motivation. Charland (2012, 51) acknowledges this, too. In fact, he is critical of reducing the compulsion of addiction merely to philosophical notion of desire, but at the same time argues that "there appear to be compulsions that make it *practically* impossible for those individuals [i.e., addicted individuals] to successfully curb or control their drug use *for a period of* time" (ibid., emphasis in the original). Whether or not addictive action actually fits this kind of description, is of course an empirical question, but on the whole

[32] Henden et al. (2013, 2) actually question whether this kind of behaviour equates with the philosophical concept of irresistible desires and argue that the compulsiveness of addiction relies on a different aspect from those involved in these kinds of desires. I leave the question of irresistible desires aside for time being and consider it in relation to whether addictive action differs from non-addictive action in terms of freedom like in the traditional philosophical discussion about free will that Henden and his colleagues as well as Charland (2012), for instance, reject in this context.

this kind of view of compulsive behaviour connects to desire as a phenomenal factor and suggests that the disease view relies on a phenomenal notion of desire in its account of addiction. This kind of phenomenal desire may make it difficult to the agent to resist it and thus it may pose a problem to one's autonomy (see e.g. Caplan 2008).

2.2.2. The problem of autonomy and difficulty in addiction

The proponents of the disease view support the idea that addicted individuals are not autonomous. Some would even go so far as to impose mandatory treatment for addicted individuals to enhance and promote their autonomy (Caplan 2008). Charland (2002) also questions addicted individuals' abilities to make decisions concerning the object of their addiction. What is exactly the problem concerning an agent's autonomy and the kind of desire we have been discussing so far?

If not literally irresistible, the addictive desire can be very difficult and costly (Pickard 2013, 3). Nevertheless, it does not have to deprive the agent from his powers. What does this mean? If something is difficult, it does not mean that it necessarily questions one's self-governance. (See also Uusitalo 2013a, 49–50.) Self-governance refers to being autonomous and acting accordingly. By autonomy I roughly mean a procedural notion of having abilities and possibilities to execute one's will free from controlling influences.[33] In any case, it is possible to make a conceptual difference between difficult issues that undermine one's autonomy, on one hand, and issues that are difficult, but do not pose a threat to one's self-governance, on the other.[34] This distinction does not seem to be obvious to everyone.

[33] For a compact taxonomy of different notions of autonomy and their relation to addiction, see Levy 2006a.

[34] This point is a modification of my open peer commentary "Autonomy and DBS treatment for addicts" in *AJOB Neuroscience* 2013; 4(2), 49–50.

For instance, Charland (2002) seems to equate these two in his account when he discusses the idea that it may be challenging to gain informed consent from addicted individuals in relation to research in which drugs are prescribed to the individuals. In fact this kind of equation seems common (see also Müller et al. 2012, 7; Henden 2013, 395). This comes down to the idea that addiction has been associated with poor decision-making and diminished autonomy. The reason for addiction undermining one's decision-making and autonomy has been explained by referring to compulsive substance use in addicted individuals and deficient rationality in their decision-making. (See for instance Charland 2002, Müller et al. 2012, 7; Henden et al. 2013, 3.) These result in loss of autonomy because of the addicted individuals' inadequate competence to engage in this kind of activity in a sufficiently correct manner. They may fail to take into account reasons in their decision-making that should typically be taken into account, for instance.

If we accept that difficult issues that undermine one's autonomy can be distinguished from difficult issues that do not pose such a threat, we need to consider what it means in relation to addiction and its effect on agency. Charland (2012, 51), too, calls for a more nuanced picture of addiction than merely discussing addiction as an all-or-nothing issue that derives from the metaphysical discussion of freedom as opposed to compulsion even if he does not make the kind of distinction that I do. In some sense, he seems reluctant to give up the talk of irresistible compulsion of addiction when he discusses the difficulty that addicted individuals face in their own actions. However, the progress in his work on addiction reveals that the irresistibility he in Cynthia's case placed in desires and motivation has focused more and more on affective states and values as the time has passed (see Charland 2002, 40–42; 2007, 20–21; 2012, 50–51). It seems to be an attempt to capture more nuances of the phenomenon.

My reason for conceptually distinguishing between difficult things that are a threat to one's autonomy and difficult things that

are not seems to stem from the same kind of frustration Charland (2012) and others (e.g. Levy 2013a, Henden et al. 2013) have on the discussion about free will in relation to addiction. It seems that this difference between different kinds of difficulties is important in questions concerning for instance the treatment of addicted individuals. Take, for instance, one of novel ways of treatment for addicted individuals, deep brain stimulation, as an example (Müller et al. 2012). As the need for treatment for addicted individuals is a focal issue in the current society and new forms of treatment are called for (see Müller et al. 2012), the preliminary results of deep brain stimulation (DBS) as effective treatment for addicted individuals offer promise.[35] In fact, the treatment is seen as a means to individuals suffering from these disorders to "gain full autonomy" (Müller et al. 2012, 7) or "allow their true selves to be assumed again" (ibid. 8). In light of these references to autonomy and self-government with the DBS treatment related remission in substance use, it should be considered whether the absence of craving then actually makes the agent more autonomous. Is the subjective craving such that it threatens the agent's autonomy?

As it has been argued, the felt cravings do not necessarily make it *impossible* for the agent to choose to refrain from satisfying the urge, but rather, it is more difficult to do so (Pickard 2012). If we accept, like we should, that there are individuals with little self-control and tendency to choose according to whatever is the most convenient way of acting, this novel form of treatment surely facilitates their chosen path of not satisfying the desire to feed their addiction, as the desires will be reduced. The question that is of interest is whether this removes coercion. Distinguishing difficulty from coercion in this context is important, and this bears relevance to the agency of addicted individuals. (Uusitalo 2013a.)

[35] In deep brain stimulation, electrical stimulation devices are being inserted into the brain by surgical interventions. The overall net effect of the treatment in target region may be excitatory or inhibitory. It also depends on "the quality of afferent neurons coming into the target region as well as the quantity of inhibitory interneurons in the given region" (Müller et al. 2012, 3).

Consider, if I do a difficult Sudoku, a Japanese puzzle, my autonomy is not diminished because of its difficulty. It just takes more effort, but my decision to engage in that task is no less autonomous than with an easier Sudoku. Having less autonomy can here refer to two things. First, the difficult Sudoku would deprive me of alternatives available for me, but this is not the case. I am as free to engage in filling the Sudoku as I would be, were it an easier one. Second, the difficulty of the Sudoku would impose a controlling influence on me. Maybe I would be so scared of the difficulty that the emotion contemporarily defects my abilities to act autonomously. Even if this could be the case, Sudokus and their levels of difficulty probably do not bring about such reactions. Of course one could argue that had I more skills and in this way had more autonomy, it would be less difficult. The more skills that I have, the more Sudokus I can solve and this improves my autonomy by opening new possibilities for me. In any case, the example of having skills to solve puzzles does not concern coercion, but it is a case of difficulty. (Uusitalo 2013a.) And difficulty does not always amount to threat to one's freedom.

The same distinction applies when I try to write this chapter and my colleague is constantly asking questions while I am writing. The disturbance does not exhaustively prevent me from finishing this, but it affects the way in which I do it. If I want to compare this to the disease view, Charland (2012, 51) argues that compulsions in addiction "make it *practically* impossible" for addicted individuals to control their drug use. So the circumstances may make it such that it may take more time from me to finish the chapter and I have to use more effort to focus on the things I wish to express here. The effort to engage in thesis writing requires more, but my colleague's enquiries do not undermine my autonomy. Furthermore, I find it implausible that the mere addiction-related "compulsion" would make it impossible for an addicted individual to react in a different matter even if I am willing to grant that the circumstances may be such that in practice it would be impossible to resist these compulsions. This is to say that the mere compulsions, if we use the

language that Charland does, do not suffice for losing one's autonomy here.[36]

I agree with a view that the challenges addiction imposes on agents are not overpowering forces that merely sweep over the agent, i.e. diminish their autonomy in this way (Pickard 2012).[37] In this context it has been suggested that people who actually seem to suffer from loss of control in addiction tend to suffer from psychiatric comorbidities and these people typically use the substances to alleviate their distress (ibid.). This harnesses the drug consumption into a rational framework. The substance use is rational and not compulsive. Charland would reject this, as he does not believe that rationality and compulsion are a dichotomy that is at work here, but that addicted individuals' action is rational in the sense that they have a goal and they use their means to achieve that goal, it is just that it is not voluntary action.

In contrast, there are views that addiction alone does not amount to a problem for one's agency (Pickard 2012). In this view it is maintained that addicted individuals are agents and their addictive action is purposeful whether it is self-medication, pleasure seeking or something else. It does not have to be driven by strong desires. This does not seem to translate to and accord with the ideas behind the DBS treatment for addicted individuals. With the DBS treatment related remission in substance use (Müller et al. 2012), one could think that the full-blown human agency of addicted individuals is restored. This would be to assume that the absence of craving actually makes the agent more autonomous. It seems plausible to imagine that the remission or lack of craving

[36] My example is an analogy to drug-related attentional bias understood as "noise" (cf. Watson 1999, 10). I will discuss this issue more in Chapter 5 in which I deal with features of addiction that impose challenges to the way in which we typically explain action.

[37] Charland (2012) is critical of Pickard's view, as he seems frustrated by the assumption that Pickard seems to sign, namely that addicts must have free will. I take Pickard's view to be similar to that of Rogers Albritton (2003) in his "Freedom of will and freedom of action" in which he discusses the case of alcoholism.

makes the decision-making and everyday living easier. Nevertheless, whether it actually makes a difference in the ways in which the addicted individual reasons, is a stronger claim. Addicted individuals' reasons for action cannot simply be reduced to cue-related impulsivity (cf. Neale et al. 2012). Of course, cue-related impulsivity may occasionally play a role in addiction and that would give us reason to consider it as compulsive behaviour according to the clinical characterisation I discussed in the previous section (see Henden et al. 2013), but it is important to notice that there may be other reasons for action. Various reasons for action can be laid out in discussing the purpose of addiction (Pickard 2012). Consequently, the motivation that addicted individuals may lack in getting rid of addiction may be difficult to gain by merely eliminating craving.

It could also be asked that if the reasons for action are other than the addictive desire or craving and they remain unchanged, how likely is it that addicted individuals will change their behaviour? Again, it seems that the problem of addiction is not a question of freedom in the sense that the strength of the desire is a controlling influence on the agent in the sense that the agent has no control over it (Uusitalo et al. 2013). This kind of point may pose a problem for the disease view when the proponents insist that the phenomenal desire with its cue-dependent intensity is something that amounts to the kind of difficulties that undermine the agent's autonomy (e.g., Caplan 2008).[38]

In my discussion of the problems of autonomy and difficulty I already characterised the next problem in the disease view, namely the insistence that the actions of an addicted individual revolve around the phenomenal desire. Charland (2012, 51) is in some sense willing to reject this focus as the sole one, as he insists on "the complex, dynamic network of interwoven mental and bodily phenomena that come to form addiction." It is, however, enough for me that he highlights the bodily phenomena such as craving and withdrawal for now to carry on discussing the problems

[38] I will return to this question in the following chapters.

of the disease view in relation to the phenomenal desire in order to continue illustrating the problematique of desire as a sufficient characteristic in addictive action.

2.2.3. The problem of phenomenal desire as the core of addiction

The disease view faces many problems and the empirically and conceptually based criticism it has received is in parts quite definite (Henden et al. 2013). For instance, it is simply not true that addicted individuals are not sensitive to other incentives. The disease view places much emphasis on empirical evidence of brain changes in addiction. These changes are claimed to have an effect on the voluntary behaviour of the agent the brain of whom the changes take place. The addicted individuals' action is explained by these changes. The criteria of DSM-5 for substance use disorders, for instance, implicitly and explicitly rely on the addicted individual's desire in explaining different kind of action that is indicative of addiction. The view uses vocabulary such as craving, urge, and intense desire. (e.g. Hyman 2007, Henden et al. 2013, 1. DSM-5, 483.) As an exemplar, Charland (2002, 40) maintains that these can be also called compulsions.

So, it has been stated that the proponents of the disease view refer to empirical evidence that relates to the changes in the levels of neurotransmitter dopamine in relation to drug use. This is also understood to relate to desires that are connected to pleasure. (Henden et al. 2013, 1.) Charland (2002, 41), for instance, reports that "[t]he compulsive drug taking that defines addiction is a direct physiological consequence of dramatic neuroadaptations produced in the reward pathways of the brain." It seems clear that desires play a prominent role in addiction defined by the disease view, even if Charland (2012) is careful not to exclusively emphasise the importance of irresistible desires occurring in cravings and withdrawal, for instance. The problem that the disease view seems to face is to accommodate phenomenal desire as a reason in

addiction in order to maintain addictive action as intentional action in a very basic sense.

In order to focus on addictive action that is connected to strong desires, it is useful to consider the desires in the action theoretical framework in more detail. The picture of action theory that seems to lie under the disease view of addiction reduces the action to the desires, the intensive and irresistible desires, that move the agent no matter what the agent further thinks about the desires (and the addiction-caused changes in the brain probably make the addicted individual think that the addictive desires need to be satisfied in any case – this is the view of Charland [2002, 41], for instance). The simple view of the standard causalist action theory sheds light to an agent's action in terms of their desires and beliefs. The strongest desire is the one on the basis of which the agent acts (see for instance Davidson 1980c, 23) and the belief paired up with the desire is an instrumental belief about the ways in which the agent can satisfy the desire (see for instance Smith 2013, 153). In the disease view, addicted individuals are faced with strong addictive desires and they do not seem to have a choice not to follow these desires. Charland (2002) is strongly of this opinion, as he argues that addicted individuals are unable to make choices regarding the object of their addiction, in his case it is individuals addicted to heroin who cannot voluntarily make decisions about issues concerning heroin such as taking part in a trial in which heroin is prescribed to the participants.[39]

In general, again, when discussing addiction, the notion of desire and belief seems to be one of the explanatory features people commonly use. Addiction is described to involve either an appetite (Watson 1999) or an appetite-like desire (Wallace 1999, Sinnott-Armstrong & Pickard 2013). These kinds of desires are typically given a phenomenal description not only by the addicted

[39] I will discuss this case in more detail in the following chapter. However, it will not be in terms of strong desires but the kind of options the addicted individuals face. It needs to be mentioned, though, that Charland (2002) does not question addicted individuals' abilities to make decisions concerning other issues. Addiction does not impair their general abilities to make decisions.

individuals but also by researchers.[40] The addictive desire is described as "subjective craving" (Field & Cox 2008) or "intense desire or urge" (DSM-5, 2013, 483). It is given characteristics such as resilience and persistence that refer to the phenomenal aspect of the desire (see Wallace 2003). So, some of these phenomenal accounts of addiction belong to the disease view. The director of the United States of America's National Institute of Drug Abuse Nora Volkow is quoted to say in *Lancet* that "[a]ddiction is a disease not a choice" (Jones 2012, 20), which seems to suggest that there is no practical rationality involved in addicted individuals' behaviour.[41] The proponents of the disease view talk about "the intense desire for the drug" (Kalivas & Volkow 2005, 1410) and addicted individuals' reduced capacities to control the desire.[42] In this kind of rhetoric, the notion of desire is quite clearly phenomenal.

Furthermore, because of the repetitive nature of addictive desire, I consider below the phenomenal desire in addiction as an appetite. In order to consider an appetite or appetite-like desire as phenomenal desire in relation to action, we need to know more

[40] There are, however, exceptions. For instance, Galen Strawson (2011) questions the idea that human beings have the same kind of experience of, say, hunger. It seems that some people do not have direct access to their hunger, but have to induce from the symptoms that they need to eat. This as such is not a problem for my distinction between different notions of desire, as in those cases their appetitive desires lack the typical phenomenal characteristics, but are still desires which are noted by the agent.

[41] The interpretation of this quote is essentially important. The proponents of the disease view may only refer to the severe cases in which addicted individuals have lost their ability to lead everyday life or they refer to the fact that typically people do not actually choose to become addicted individuals, or literally that addicted individuals cannot choose not to refrain from their addictive behaviour. For the time being, I take it that the quote should be read as a counter-argument to the choice view in which the proponents argue that addicted individuals do choose to act the way they do, voluntarily. Thus, the quote should be understood to refer to the everyday situations in which the addicted individuals engage in their addictive behaviour: addiction is a disease that makes them act accordingly.

[42] Both of these characteristics are specifically named in the features of substance use disorder in DSM-5, too (APA 2013, 483).

about the role of the desire in question. It seems that these kinds of desires are the kind of desires that the agent finds himself with (see Wallace 2003, 425–6).[43] Now, the simple view on action in terms desires and beliefs as described above has been criticised for instance because of people in general can be understood to do things they do not have strong desires about such as procrastination or things that they do not want to do. Unwilling addicted individuals are a case in point of the latter one. Of course, we can always question whether they actually want to use drugs, drink alcohol, smoke cigarettes and so on despite their statements to the contrary, but if we take their statements of their desire to abstain at face value, the only way we can understand their behaviour is to see it as a some kind of a non-expression of their agency.[44] They are puppets in the grip of their addictions; their agency is empty in the sense that addiction dictates the action, not them themselves.

To give credit to the disease view when credit is due, this does seem to fit the picture of extreme cases of addiction.[45] Charland (2002, 40) talks about compulsions when he refers to cravings. The addicted individual struggles against the subjective craving, but as his resources as a human being are limited to resist the desire and in the light of the persistent desire, the addiction wins out. However, as it has hopefully become clear, the phenomenal experience of the craving should not be understood as a causal force that merely pushes the person towards its satisfaction. Simply, that does not appear to be an explanation of addicted individuals'

[43] These desires are the kind Thomas Nagel (1969, 29) calls unmotivated (see also Schueler 1995, 16–17).

[44] Of course this can be a critique for the standard view more generally: if the agent is merely a platform for the desires the strongest on which he acts, there is hardly room for agency in the action, especially when the desires are the kind we find ourselves with. For a critique of the standard view on this see Velleman 1992a.

[45] By extremity I refer to the intensity of the desire as well as addiction seeming to be the centre of the agent's world. For instance, his time is consumed by addiction-related activities and his money is spent to maintain the addiction. On the basis of his autobiography, Mötley Crüe's Nikki Sixx (2007), for instance, might qualify as an example of this kind of a case.

behaviour in the sense addiction is usually understood: Addicted individuals' behaviour is intentional action. They make plans and may show exemplary executions of instrumental rationality weaving their lives around their addictions.

Furthermore, this kind of view fails to explain those addicted individuals who are reported to willingly undergo withdrawal to lower their tolerance (see Ainslie 2000, 80). The immediate satisfaction of the addictive desire is hardly the goal in this kind of behaviour. In fact, it seems that the addicted individuals are well aware of the effects of the desire whether it leads to intoxication (when satisfied) or withdrawal symptoms (when left unsatisfied) and weigh these two options before their actions. The desire is certainly something that is involved in the motivation of the action, but it hardly reduces to a simple causal force that leads an addicted individual to consume drugs, for instance. The motivation that the desire provides does not automatically lead the agent to simply satisfy it immediately. Therefore it seems wrong to argue that addicted individuals lose their agency *to* the addictive desires; the desires do not take over the control even if they may guide the actions. This, however, shows that having the desire and acting in a way that involves the desire does not mean that it is satisfied. There may be greater goals than simply an instant desire satisfaction in play.

Even if I consider Charland (2007) a proponent of the disease view, he has expressed criticism toward the proponents of the disease view that do not seem to differentiate between different kinds of motivation in addiction (e.g. Hyman 2007). Charland himself calls for more nuanced view on agency in terms of acknowledging that addicted individuals (and everyone else for that matter) execute their agency in the context of "emotional brain" that suggest that the agents have an affective aspect to their actions, too. For this part, it is enough that we acknowledge that Charland (2007, 20) emphasises that addictive desires are like hunger with "urges and gut feelings associated with craving and withdrawal".

This brings us to one aspect of these kinds of desires, namely the way in which they are experienced in terms of pleasure or pain.

The phenomenal desire is also characterised by its connection to pleasure and pain (Wallace 2003, 427). The problem I presented above about the simple view of desires leading to action brought this problem in sight, too, as the disease view, if taken as a representative of the simple view of action, does not take into account different rewards at different times and the circumstances of the agent in the sense that it would account for cases of unwilling addicted individuals' actions, for instance. The disease view presents addiction in straightforward terms of craving, intoxication and withdrawal; there seems little regard for longer periods of time.

In order to illustrate the dangers of lack of context in understanding addictive action, I will now analyse this kind of view of addiction that centres in pleasure and pain in terms of synchronic agency: the agent acting on the immediate sensations or temporally near rewards. Addicted individuals are typically seen to seek for the pleasure of, say, using drugs, drinking alcohol, smoking cigarettes and gambling, while the unsatisfied desire with withdrawal symptoms may be very unpleasant if not painful (cf. Kennett, Mathews & Snoek 2013). This is one of the predominant characteristics which are studied in the neuroscience of addiction, namely the reward system in the brain. Charland (2007, 20) describes the addicted individuals as having urges and gut feelings concerning craving that they cannot resist. It is, of course, important to pay attention to the general schema the notion of pleasure has: whether pleasure, rewards, are something that motivate an agent to act, what kind of worth this pleasure has and what kind of pleasure it even is; on what does it base, for instance?

The pleasure addiction is sometimes alleged to involve usually refers to synchronic moments. It is the immediate craving, intoxication or withdrawal that is at issue. In some cases, it seems that not only the proponents of the disease view but other theorists too assume addicted individuals to have this kind of myopic take on life (e.g., Ainslie 2000; Heyman 2009); There seems to lie an

implication that were the addicted individuals to consider their lives diachronically in relation to pleasure, they would not continue that kind of behaviour.[46] This is of course problematic if we consider again the case about individuals addicted to heroin who go through withdrawal in order to lower their tolerance for the drug. This is hardly a simple act of synchronic agency, but it seems to involve the addicted individuals' plans to use the drug in a more economical way in the future as well. These kinds of addicted individuals do not seem to match Charland's (2002, 41) understanding of addicted individuals whose personal values have changed and who remain actively addicted, unless actively addicted also refers to states in which the withdrawal has been successfully conquered.

Furthermore, it has been pointed out that pleasure-seeking that substance-addicted research subjects reported in a study is not narrowly defined as focusing on instant pleasure, but the value the subjects attributed to pleasure was diachronic in nature. The research subjects identified their lifestyle as hedonistic, and it did not reduce to mere pleasure-seeking in the synchronic framework. (Kennett, Matthews & Snoek 2013, 6.) In contrast, Charland 2002, 43) suggests that addicted individuals' "choices do not adequately reflect their real enduring values, because the brain mechanisms and systems that govern evaluation have been disrupted and reoriented." I would still conclude that characterising addiction only by means of instant pleasure-seeking may well be accurate description of some actions, but it is far too narrow in scope to catch the different kinds of roles pleasure may play in human action, also in addiction. In what follows, I will, however, maintain my task of showing that the addictive desire is neither necessary nor sufficient condition in addiction and focus on the notion of pleasure as something that synchronically motivates an agent to act, but consider whether the idea of pleasure can be seen as a

[46] I will discuss myopia in the following chapter in relation to the choice view.

contributor in making the addicted individual act against his "real" values, as Charland suggests in the above quote.[47]

It has been suggested that addictive desires play the kind of role in one's agency that explains what makes addicted individuals judge that fulfilling the desire is more rewarding than it might turn out to be. Because the phenomenal characteristics of the desire, the addicted individual chooses differently than he would had the desire not assailed him. The desire involves the agent to focus on the anticipated pleasures and it may be intensified by other painful sensations and emotions. (Wallace 2003.)[48] This is in line with Charland's (2002, 43) view: heroin-addicted individuals' "sense of value is warped and biased by addiction, so *benefits are overweighed*" (emphasis in the original). This kind of view on the desire explains the lure of addiction and formulates addiction more, I would suggest, in terms of temptation than compulsion, thus leaving room for agency and underlining challenges in terms of irrationalities. However, Charland and other opponents of the disease view still suggest that the competence of addicted individuals is thus compromised and it still seems to come down to the phenomenal characteristics of addictive desire.

2.2.4. The problem of attention and agency

Even if Charland (2007, 20) demands a finer notion of desire, other proponents of the disease view may still engage in a simple view of a mental state that involves "loss of cognitive control of behaviour". As discussed above about the role of addictive desire, the desire can be understood as a passive motivational state, an unmotivated desire. This "unmotivation" should be understood in a way in which desires may be results of something such as hunger

[47] This is a common argument in the disease view. The brain has been hijacked. See e.g. Hyman 2007. To problematise this kind of idea see Henden 2013.

[48] I will discuss Wallace's view as a representative of the defect of will view in Chapter 5.

may be a result of lack of food, but even if the desire can be explained, it is not motivated in the same way as my desire to have lunch is (Nagel 1969, 29). Recent neuroscientific research on attentional bias in addiction resonates with this view, as it seems that addictive desire, the subjective craving, is triggered through cues in the agent's environment (Field & Cox 2008) in the same manner as lack of food results in hunger. The desire is not result of any kind of deliberation process, but "springs to life" outside the agent's values, views and attitudes. Charland (2002, 40) would probably argue that instead of emerging outside the agent's cognition, the motivation sneaks into the agent's mind and hijacks it, but even he refers to "[t]he powerful reinforcing effects of social and personal factors" that are related to drug use and which intensify it.

The empirical studies on attentional bias in addiction (see for instance Attwood 2008) suggest that this is an idea of anticipated pleasure can be found in neuroscience too in the way in which addicted individuals perceive situations in which they engage in practical reasoning. The portrayal of the situation may be affected by this attentional bias and in this way the perceptual experience is distorted. Attentional bias is a form of selective attention and there has been studies for instance how alcohol, heroin, smoking and gambling stimuli draw attention.[49] In neuroscience, this has been suggested to be connected to the agent's behaviour. "Attentional bias that increases the likelihood of drug-related stimuli being attended to, will, in turn, increase the likelihood of subsequent conditioned response" (Attwood et al. 2008, 1875). The addiction-related cues "grab" the addicted individual's attention (ibid.). This theoretical description accords with personal experience. A former heroin-addicted individual describes a time when she relapsed in the following way:

[49] As far as I understand, the concept of attention is a complex and hot topic in the philosophy of mind. I do not have the resources here to go into the topic in more depth, so I try to stipulate my understanding of attention as simple terms as possible.

> "[I] walked down the cycle track where there's a phone box… and there were two people there that I know… One was in the phone box smoking crack and smoking gear… I was fine until that happened. Then I thought, 'Fuck it. I'll go and get a bag of gear.'" (Neale et al. 2012, 58.)

The attentional bias of the cues in that situation, place and people triggered her craving and she relapsed. However, it is important to notice that to have this kind of phenomenal desire does not in itself alone suggest anything about the nature of the relation it has on a person's action. Indeed, as Charland suggests, it can play a role in the agent's deliberation making the deliberation more difficult to carry out in an unbiased way. The craving may realise in uncomfortable sensations and the promise of the pleasurable satisfaction of the desire together result in a state that may be more positive in nature than the reality, as Charland suggests when he discusses that addicted individuals tend to overemphasise the benefits of drug use. This as such does not create any law-like conditions to the agent's behaviour. The proponents of the disease view seem to assume that this in fact typically leads to action.[50] In any case, it is important that temporal as well as other contextual settings is taken into account in understanding addicted individuals' actions.

All in all, as a proponent of the disease view Charland (2002, 37) seems to agree with the (causal) power of the phenomenal addictive desire, but at the same time he underlines that this kind of compulsion results in "an impaired decisional capacity to make decisions" concerning their addictions. This, he argues, concerns the benefits the addicted individuals believe to gain. In what follows, I will return to the second point of Davidson's account of intentional action that concerns what the agent believes to be free to do and discuss the addicted individuals' beliefs in action in the context of Charland's view and the disease view, in general in order

[50] The proponents of the disease view agree with R. Jay Wallace (2003) about the phenomenal characteristics of the desire, but disagree with him in what comes to the agent's ability to exercise his agency, as I will show in Chapter 5.

to show that the addictive desire, understood more generally as a pro-attitude that consists in desire and belief, still fails to provide sufficient understanding of addictive action.

2.3. Belief as a prerequisite for pro-attitude

Charland (2002) argues that addicted individuals not only have disordered desires but also disordered beliefs due to intoxication and withdrawal that occur in addiction. What kind of challenges does this impose on agency? According to the other point in Davidson's formulation of action, in order to actually intentionally perform the action, the agent believes to be free to do it. Leaving aside the intriguing issues of free will,[51] this point is an essential one in analyses of addiction. Addicted individuals as well as researchers may engage in thinking that addicted individuals cannot but act according to their addiction. This presents a problem in light of Davidson's account. For instance, Charland (2012, 51) stresses that "[i]n these highly individualized and specific circumstances, it may in fact be *practically* impossible for a person to resist the compulsion to use drugs." He refers to evidence that shows "for some addicts, at some times, in some context, there appear to be compulsions" and these compulsions prevent the addicted individuals from refraining from drug use (ibid.).[52] In these kinds of cases, the addicted individuals seem to fail to satisfy the second point of believing to be free to act against addiction and at least in this respect fall short of intentionally doing so if they are aware of the compulsive nature of their action. It does not matter whether they are metaphysically free to act against their addiction – which they according to the disease view in any case are not. It is their

[51] Whether an agent is free or not and to what this freedom amounts to is a vibrant field in philosophy but, in its theoretical form, it falls outside the scope of my thesis. In Chapter 5, I will, however, discuss more a topic that draws on these discussions, namely whether addicted individuals are free in acting against their will in comparison to non-addicted agents that do so.

[52] Of course there is a difference between what one is free to do and what one believes to be free for him to do.

belief that they cannot what counts. Charland's discussion of individuals addicted to heroin taps into this. His informant, Cynthia, only confirms it: she believes individuals addicted to heroin, including herself, cannot refuse an opportunity to use drugs. This kind of view of addiction raises all kinds of criticism into which I will look next in order to illustrate the implausibility of this kind of conception of addictive action.

2.3.1. The problem of power of belief in addiction

One of the problems concerning these beliefs of one's freedom to engage in action has been presented by Hanna Pickard (2012). She criticises the disease view from a pragmatist point of view and employs the idea of the importance of the belief. Pickard argues that the disease view prevents addicted individuals even from rationally forming intentions to get rid of addiction if the addicted individuals believe that they suffer from a brain disease over which they do not have any control. Even if Charland (2002, 40) is critical of the simple total loss of control, he maintains that "[t]here are [--] two different kinds of decisional impairments involved in addiction." In combination, these two impairments make it the case that "decisions that relate directly to heroin use are susceptible to powerful physiological and psychological compulsions that usually nullify any semblance of voluntary choice" (ibid. 41). It seems safe to conclude that Charland assumes that these addicted individuals are not free to make choices contrary to their addictions and that their beliefs probably are in accordance with this, as "heroin addiction results in radical changes in personal values that make seeking and using heroin the overriding goal of the addict's life" (ibid.). It may thus be that they do not even consider other options, but that the goal of using drugs wins out without a fight. Pickard's assumption, in contrast, is that addiction is not compulsive in the sense that the agent does not have a choice to refrain from his addictive action. In fact, her criticism about psychopathology of

irresistible desires extends from addicted individuals to a more general level (see Pickard 2013).

Pickard points out that if addicted individuals' own action are essential in recovery, which it has been regarded as important in different treatment assessments, and they do not believe to be free to get rid of addiction, addicted individuals fail to opt for that alternative and this may hinder their recovery if not altogether prevent their success in it. Charland (2012) responds to this kind of criticism first by distinguishing between compulsion and irresistibility and then debunking the notion of compulsion as an all-or nothing issue he claims Pickard to be employing. However, he does not seem to problematise the power of belief in the sense Pickard suggests it. This may be due to an idea that it does not matter what the addicted individuals believe about their chances, as they actually are unable to refrain from their addictive actions in any case. It then seems that the disease view and the picture of addiction it promotes may come with a price that is too high for addicted individuals to manage if there comes a time when they make attempts at recovery.

2.3.2. The problem of understanding action on the basis of the moving pro-attitude

The problem of belief described above seems to suggest a rather simple picture in some sense: addicted individuals are compelled to act in accordance with their addiction. The disease view seems to place a great deal of emphasis on the brain mechanisms that (re)inforce the repetitive drug use.[53] In fact, they seem to concentrate on the mechanism and causal aetiology of the action of that kind that they do not seek for other kinds of reasons for action. It seems clear that if one uses drugs intentionally, one needs to have some kind of motivation behind it, but as such, it does not contribute much in understanding addictive action. Charland

[53] As I already mentioned in the introduction, repetition does not seem to suffice for a framework of action in addiction, but there should be continuity.

(2012), too, wants to see more nuanced aetiology of addictive action even if he rejects the possibility that it may be voluntary. As mentioned above, motivational states can be distinguished on the basis of whether the agent simply finds himself with a motivational state and whether the motivational states comes about as a result of the agent's active deliberation (Wallace 2003).[54] In similar lines, we can, for instance, consider hunger as an example of an unmotivated desire and argue that hunger is produced by lack of nutrition, but it is not motivated by it (Nagel 1969).[55] We understand hunger, the desire to eat, but it as such is not motivated by any other desire the agent has. We just find ourselves with hunger. A motivated desire to eat, in contrast, does not have to involve the notion of hunger in the action explanation. (Ibid.) My act of eating porridge a couple of hours before my gym class is explainable by deliberation on the maximised potential energy for the class, not typically by hunger.

Naturally I may also be hungry. These two are not mutually exclusive. We may have an appetite such that it has the same propositional content than the motivated desire to eat (Schueler 1995, 15). In my gym preparation example, my motivated desire to nurture my physique is a desire to eat porridge, but were I also hungry, it would be that I had an appetite with same propositional content than my motivated desire, namely to eat porridge.[56] In any case, anything said about these different kinds of desires, i.e. motivated and unmotivated, so far does not suggest that either of the desires were stronger in terms of motivational force in action. In contrasts, the disease view seems to maintain that an appetite, say,

[54] Deliberation, choosing and intending will be analysed in more detail in the following chapters.

[55] Nagel's terminology may be confusing as 'motivation' seems to refer to the agent's active participation in producing the desire and does not here simply refer to an entity that motivates.

[56] This, in fact, touches upon another problem, namely that of overdetermination, that concerns the causal factors of an action. I will discuss it below and also in Chapter 3 when I discuss the notion of reward and its content.

for drugs is sufficient for the addicted individuals to keep on acting in accordance with their addiction despite any emerging circumstances that should be enough to make the addicted individuals change their behaviour.

As I have pointed out, there is plenty of empirical evidence to suggest that this kind of picture is too simplistic to capture the complexities of addictive actions. It is simply not enough to understand the action in terms of stemming from "a desire to use drugs". It describes the action, but does not provide enough information on the kind of motivation, and this, I feel, is essential to understand in order to provide means to change the behaviour, in cases where this behaviour is undesirable. I hope to have shown by now that the addictive desire may well be the moving pro-attitude in the addicted individual's action, but at the same time, it does not provide enough information to understand addictive action on the whole. As a proponent of the disease view, Charland (2007), however, seems agree that addiction is not merely about (phenomenal) desires, but it involves a cognitive component. He emphasises that "[a]ddiction is both a brain disease and a moral condition" and calls for an account of addiction in terms of affective neuroscience (ibid. 20). Charland's claim that addiction is, indeed a moral condition is something that is strictly denied by the proponents of the disease view (see e.g. Hyman 2007). I will not go into Charland's attempt to combine the two accounts, but focus on the issue he mentions, namely questions of values in action.[57] In light of understanding addicted individuals' action, the question of value is important and one that needs to be taken into account in any sufficient view of addiction. It could be a necessary aspect in understanding (addictive) action. I will next consider the kind of problems the disease view may face in relation to questions of value in action and how do values relate to desires.

[57] I will also provide my own view of the incompatibility of the so called choice view and the disease view in Chapter 4.

2.3.3. Challenges of evaluative nature of action and addiction

It seems that phenomenal desire does not directly concern any evaluative dimension, whereas desire as the notion of preference does. The motivational states that the agent finds himself with do not as such have any value, unlike the motivational states that are results of deliberation. Charland (2002) is not a typical proponent of the disease view in this respect in his discussion of individuals addicted to heroin and their personal values, as he recognises that addicted individuals may prefer to use drugs. My discussion of the phenomenal desire characterised by the proponents of the disease view has not so far been concerned with any evaluative dimensions. Leaving value aside from the considerations of agent's actions seems leaving something important from the understanding of that action. Unlike many other proponents of the disease view, Charland (2002, 40) actually pays a considerable amount of attention to this aspect of addiction when he stresses that addiction "results in fundamental changes in personal values". What can this mean in light of action? As I mentioned above, Davidson (1980c, 23) does not restrict his notion of pro-attitude to (phenomenal) desires. His notion includes a far richer variety of different kinds of motivations. He, in fact, elaborates on the notion of "wanting more" with an evaluative aspect in his discussion whether weakness of will is possible. He argues that

> "[i]f an agent judges that it would be better to do *x* than to do *y*, then he wants to do *x* more than he wants to do *y*." (Davidson 1980c, 23)

Values and desires are connected in this way.[58] This way of thinking about the actions is also particularly prominent in the

[58] This second principle sheds light to Davidson's internalist view on motivation that I will not go into in this chapter, but deal with it later in Chapter 5. Also, it is important to note that this desire or want in this second condition is a desire of certain kind, a preference that I will also discuss later, in the next chapter.

choice view that I will discuss in the next chapter, but it seems that at least some of the proponents of the disease view acknowledge that addicted individuals' commitment to their addiction may rely on this kind of logic. Charland's quote about addicted individuals' personal values above suggests that addiction influences the values of the agent and that allows the addicted individuals to act according to their values, but it seems that the values the addicted individuals acquire are wrong. He suggests that these values that are a result of addiction usually change when the addicted individual is no longer active regarding his addiction. This as such obviously does not suffice for wrongness in the sense that the change in values is problematic. Merely having some values regarding one's action at a time and other values in other time when one has stopped doing the previous actions does not raise alarm as such. Before I started attending physically tough classes at the gym, I never paid much attention what I ate before the class. Now, however, I do pay attention to the nutrients the food has and the times I eat before the classes. I value food in a completely different way than previously, and I suspect that this kind of valuing does not last when the time comes that I stop going to these classes, at least not to the same extent. It seems normal that my commitments and values change according to the current circumstances, but maybe this is not what Charland has in mind when he refers to the "fundamental changes in personal values". So what could he mean?

In order to understand what Charland may have in mind, I will bring us back to Harry Frankfurt's hierarchical model of action to have more nuanced view of desires and their evaluation than what Davidson's view offers. For Frankfurt having a first order desire or another is not the whole story for full-blown (human) agency. In fact, human beings who are only concerned with first order desires are wantons in Frankfurt's terminology; they are not persons. Persons, in contrast, have second order desires about the first order desires and, furthermore, persons want *some* of their

second order desires to be their will (ibid. 16).[59] Charland seems to suggest that the changes that he is concerned about are those that Frankfurt would call "second order volitions", those that are concerned with the person's free will.

It seems that the changes that addicted individuals' values undergo are suspect in Charland's view. In his view the fact that the values seem to change questions the status of the values as enduring ones. He (2002, 42) argues that "[a]t the very least, a person must have a limited set of enduring values that count as their own". This ownership becomes important when addicted individuals' decisions are evaluated. Charland argues that unless the decision at least minimally reflects the agent's real likes and dislikes, the decision cannot be said to be his. He seems to assume that no one can actually be what Frankfurt calls a willing addicted individual – a person whose second order desires are in accord with their first order desires to use drugs.

In general the condition for owning one's decisions sounds plausible, but it is one thing to agree with this and another to state what the real likes actually then are. Merely arguing that the values the addicted individuals had before their addictions are different from those that they hold in addiction does not really suffice for saying that the current values that they hold are not 'real' because of addiction. First of all, the values may not have changed after all and second, even if they were, it does not provide reasons why the values involved in addiction are necessarily problematic. This also raises another problem with motivation and values that extends over addiction and concerns action in general.

As mentioned, in Davidson's causalist model of action–that to some extent seems to underlie in the disease view as well as in the choice view of addiction–the second principle links the agent's values with his strongest desires:

[59] What is relevant for Frankfurt is that a person whose second order desire about the effective first order desire is not in conflict with the effective first order desire is acting freely and is thus responsible for that action.

> (P2) If an agent judges that it would be better to do x than to do y, then he wants to do x more than he wants to do y. (Davidson 1980c, 23)

Making an evaluative judgment about the action plan in the situation also motivates the agent to act accordingly. In its internalist formulation, Davidson's principle seems to conflate value with motivation. This is what Charland (2002, 43) seems to do, too. He suggests that addiction has hijacked addicted individuals' brains: "[t]he set of values that govern their daily decisions and behaviour is no longer theirs." Nevertheless, as it has been pointed out, valuing and wanting are distinct. Sometimes people have desires and they want to do things that they do not value (Watson 2004a, 19). It is important, however, to notice that Davidson's principle only states the connection from values to desires one way, so this kind of point is not a problem for his account, but it does highlight the assumption that if one judges something to be better than something else, the motivation follows accordingly.

However, if we assume that judging that it would better to do x implies that we see something good in x, we are making even a stronger statement. This kind of view has been contested, for instance, by calling into question the plausibility of seeing people's action purely on the basis of good reasons (see for instance Velleman 1992b).[60] In any case, this criticism, actually, falls in line with neuroscientific research about addiction in which two distinct mechanisms in the reward system in the brain involved in action, namely wanting and liking, are identified (Robinson & Berridge 1993, 2008). There has been a philosophical attempt to collect these two distinctions together and further argue for a tripartite distinction between wanting, liking and valuing in explaining addiction (Kennett et al.2013, 9). Insofar as these distinctions hold, liking and valuing seem to involve some kind of evaluative dimension while wanting simply refers to the motivational aspect of a "pro-attitude" if we want to use Davidson's term for the moving

[60] I will return to "the guise of the good thesis" in Chapter 5 (see Raz 2008).

feature in human action. It seems that in addictions that involve a physical dependence, the motivation for addictive actions may involve all three, but not necessarily. As it is clear that all actions need have motivation of some kind, the understanding of different kinds of actions should take into account the kind of motivation involved and my purpose is to show that it is not that clear that only one or another is involved in addictive actions whether it is wanting as a craving, pleasure-seeking liking or valuing the action for some reason. However, as Charland's example illustrates, addictive action may seem to be especially problematic due to the valuing.

To reflect, this brings us back to the question of plausibility of these kinds of general views on human action when that actions concerns addiction. In light of Frankfurt's hierarchical model of free action or Davidson's account of intentional action, we face questions concerning evaluation and weighing one's actions: In Frankfurt's account, the effective desire resulting in action is approved or has been identified with by the agent. In Davidson's view, having made a judgment about what would be better to do, the agent also wants to do it.[61] To some extent, Charland would probably be happy with these kinds of conceptual apparati on the level of action, as his claims about the compulsiveness of addiction go deeper than Frankfurt's requirement for coherence of both levels of desires and even for the identification with the second order desires, or alternatively Davidson's simple model of the desire and instrumental belief pair that gives rise to intention. Nevertheless, these kinds of accounts seem to fall short when we try to understand addictive action in a way that does not reduce it to single acts that Charland and other proponents of the disease view claim to be compulsive. Yet, Charland (2012, 51) calls for more nuanced view on addiction, as he acknowledges the complexity of human life in general. This brings us to yet another problem that we

[61] In Davidson's view this does not mean, however, that the agent would value everything she wants, but only points out that having a better judgment of what one ought to do, he also wants to do so.

face if we consider addictive action to be solely caused by the addictive desire.

Coming back to the motivational factors in action, we may have an appetitive desire such as thirst that involves the same propositional content than the desire to drink well before a run (Schueler 1995, 15). Both involve the desire (and goal) of drinking water, but the reasons are different and, also, it would seem plausible to think that the phenomenal experience of the reasons differ from each other. In the same way as in the case of drinking water, drinking alcohol, smoking cigarettes or gambling may have different reasons for the activity that falls under this kind of description. It seems that in the disease view, the hijacking of the brain either prevents other reasons than addictive desire with the same propositional content to drink alcohol from motivating the agent or, in a stronger sense, prevents any reasons with the propositional content to drink alcohol from surfacing and reduces the agent to an entity that is responsive to stimuli without a higher cognitive aspect in the behaviour. This kind of view would suggest that the phenomenal desire is more of a sensation, a felt desire that does not involve complex planning but merely its satisfaction.[62] In this view then, addictive action is always the same kind of action revolving around the phenomenal desire. However, not all the proponents of the disease view would agree on this kind of a view. Charland (2002, 43), for one, considers addicted individuals' action as intentional action even if he still maintains that "the brain of a heroin addict has almost literally been hijacked by the drug".

As Charland (2012, 50-51) is willing to grant, engaging in addictive action may, nevertheless, involve various reasons or motivations (see Pickard 2012; Kennett et al. 2013). For this to be a relevant point about action, it requires that reasons actually have a role in bringing the action about. Constantine Sandis makes fine-tuned distinctions between different kinds of reasons involved in action explanations (see Sandis 2012). He distinguishes agential

[62] Wallace (2003) presents another possibility to interpret the desire than sensation. I will discuss it in Chapter 5.

reasons that are, in his non-causalist reading, considerations upon which one actually acts from the reasons why. The reasons why are reasons which explain why someone acted as he did and they concern motivation. (Ibid., 67.) He identifies several motivational factors such as mood, the agent's epistemic or agential reasons. The moods further explain why the agent has certain beliefs and pro-attitudes, why he takes what he believes to be good reasons for acting and why he weighs his reasons as he does. Sandis also specifies a special kind of reasons as nest reasons. These reasons are "metareasons" which explain why the agent took his agential reason to be a reason for his action.[63]

Indeed, it would be too simplistic to claim that the reason addicted individuals engage in their addictive action is their addictive desire even if it may well be the case that the persistence of desire may cause some serious problems to addicted individuals were they to attempt to quit. In Sandis' terminology, the agential reasons upon which the addicted individuals acts may vary even if

[63] The division between reasons why and nest reasons seems to resemble Fred Dretske's (2004) distinction between triggering and structuring causes. Even if Sandis' reasons do not cause action in his account, Dretske's (2004, 169) causes provide us with a causal explanation of the event, a piece of behaviour, but their relations to the effect differ from each other. Structuring causes bring about the conditions in which the triggering causes then cause tokens of the event type (ibid. 171). This means that structuring causes do have an effect on the event, but the causal relationship is one to many instead of causal relation of one to one. In a naturalistic picture, addiction may well be a structuring cause conditioning the brain to the object of addiction, but I simply find it too simplistic to argue that addictive desire is a causal force that results in its satisfaction in a law-like manner. In some trivial sense it is true every time when an addicted individual satisfies his desire, but this does not characterise the phenomenon of addiction sufficiently. Whether or not we take reasons to be causal, addiction involves such a variety of different kinds of actions that a simple one to one causal relation between addictive desire and a certain kind of action would not do justice to actual phenomenon. In the standard view, even Davidson (1980d, 208) hesitates to suggest that there are "strict deterministic laws on the basis of which mental events can be predicted and explained". When he argues that mental states like pro-attitudes cause the action, there is no strict law that covers the causal relation in question. See also Stoecker 2013, 603.

they all share the nest reason for addictive action, that is, addiction being the reason that explains *why* an agent took his agential reason to be his reason for so acting.[64] Or, if we consider that addiction is the reason *why* the addicted individual acts, it is not at all clear that it is the same reason as the addicted individual's agential reason or his nest reason for that matter, nor does it necessarily lead to addictive action. An individual addicted to drugs may consider that he wants to get away from his work stress and this is the agential reason he has for getting a fix. The nest reason may be that he believes that drugs are a good and effective form of self-medication in case of stress. Also, the phenomenal aspect of desire may occupy a slot in Sandis' motivational factors in the form of mood that explains why the agent weighs his reasons as he does. However, leaving the complexities of affective states from my analysis, the point I want to emphasise here is that the phenomenal dimension of desire is not necessarily and automatically linked with the action in which the agent engages and, if it is linked, it is not at all clear which role it plays in the action. The agent does not act in virtue of the phenomenal characteristics of the desire.

What one could say more plausibly, instead, is that addictive desires impose challenges to one's ability to make decisions contra to the satisfaction of addictive desire, not because of the desire's overpowering, pressing force, but because of its phenomenal effect on the agent's deliberation process. Addicted individuals do not then lose their control over their action *to* the desire, but they may face difficulties and have less control over their action *because of* the phenomenal nature of these desires. This "because" is not then a causal relation, but it offers explanatory force to descriptions of addicted individuals behaviour on a case by case basis. It depends on the case whether the difficulty addicted individuals may experience due to the desire actually has a decisive effect on the

[64] Addiction may then play a role in an agent's action as a nest reason which explains why a former drug user refrains from using drugs: he might not want to activate his addictive behaviour. This is probably one reason why it is sometimes argued that one cannot get rid of addiction even if one stops using the substance or the behaviour that is in the core of the agent's addiction.

actual action and what kind of an effect it is. This effect can, for instance, be conceptualised as distracting noise and as a biased starting point for the deliberation (see Uusitalo 2013b).[65]

2.4. Concluding remarks

In this chapter, I have explored more or less plausible ways in which strong desire can be understood in relation addictive action. Moreover, I have argued that Charland and other proponents of the disease view can only provide a limited view on addictive action in their accounts with their focus on the addictive desire. I have shown this by discussing the criteria of intentional action and reflected it to Charland's account of addiction. The problems that the disease view faces makes it clear that the disease view as such falls short of providing sufficient means for understanding the variety of addictive actions.

Whilst it is clear that actions stem from motivation, describing addictive actions only by means of addictive desire does not suffice for capturing the phenomenon. In this chapter I have paid attention particularly to the notion of desire and the problems that arise from that concerning the accounts of the proponents of the disease view. Particularly, the phenomenal desire (or preference for that matter) is not the kind that by default deprives the agent from his alternatives with its strength. The persistence of the desire may be such that it interferes in the deliberation in a way or another, but it is hardly a causal force that brings about the addictive action no matter what. For instance, the kind of reasons addicted individuals have behind their addictive action may not necessarily change when they are treated by manipulating the reward pathways or other areas of the brain. Treating addicted individuals with DBS that is targeted at the nucleus accumbens, for instance, assumes that the purpose of addiction merely centres in the phenomenal aspect of the desire, namely perceived reward and

[65] I will discuss these effects in detail later in relation to decision-making (Chapter 3) and in relation to self-control (Chapter 5).

subjective craving, and there is a danger of ignoring the importance of other aspects of addiction ranging from environmental cues to social relationships (see e.g. Field and Cox 2008 and Pickard 2012). The recognition that addicted individuals have different reasons for their behaviour (Pickard 2012), some of which can be regarded as rational in the sense that they are intelligible and justified, draws attention to the point that addicted individuals may still find reasons for continuing the kind of action that triggered their addiction in the first place regardless of potentially permanent and total remission of craving. In light of these considerations I conclude that the phenomenal notion of desire may provide a reason or a further motivation for the addicted individual to act accordingly, but it is not a necessary or sufficient characteristic in addiction.

3. Reason and rationality in addiction: critical remarks on the choice view

The strong desire may well be very important and relevant in understanding addictive action, but as we saw in the previous chapter, it does not suffice. Before continuing to the other characteristics of addiction, I want to highlight an aspect of theorising that is of utmost importance in our analysis of addictive action in order to further motivate my list of different kinds of characteristics that jointly suffice for something to be addiction.[66] In what follows next, I will demonstrate that it is not enough to identify merely one relevant feature in addicted individual's agency and action, namely the desire for drugs, especially when the one relevant feature is not necessary or sufficient in order to understand addiction in the first place.

The desire for drugs is usually considered to be related to pleasure. Addicted individuals are typically seen to seek for the pleasure of, say, using drugs, drinking alcohol, smoking cigarettes and gambling, while the unsatisfied desire with withdrawal symptoms may be very unpleasant if not painful (cf. Kennett, Mathews & Snoek 2013). This is one of the predominant characteristics which are also studied for instance in neuroscience, namely the reward pathways in the brain, and also the characteristic which in some sense also gives, not only the disease view, but also the choice view of addiction content to its theoretical structure of human behaviour: In the choice view, (all) agents have preferences in light of different kind of rewards and utilities.

[66] This is especially relevant regarding the focus of the chapter, i.e. myopic action and biased choosing. Biased decision-making refers to a decision-maker's tendency to downplay some relevant aspects whilst overvaluing others; the preferences may thus be coloured. In the choice view, as we shall see, everything depends on the preferences that focus on the feasible set of choices, but how are these choices individualised?

As the choice view relies on preferences, the framing of the different alternatives becomes necessarily important. Feasibility of these options is of course one important thing to consider, but a problem that occurs prior to that involves the ways in which we actually conceptualise the options.[67] I want to suggest that the problem of conceptualising the options goes deeper than merely observing the circumstances and it involves the core understanding of addiction.[68]

In this motivating part, I will focus on one of the common problems of choice theory, namely the problem of framing and what kind of effects it has on the chooser's actions in order to clarify what kind of issues are in play in addicted individuals' action and thus the need for a more complex view on addictive action than mere desire. The assumption in making choices is that the options framed differ from each other in a meaningful sense and that they are available (i.e. feasible) options. I highlight the question of framing of the options in the sense that the options are set up in relation to relevant aspects. They capture the features which distinguish different options from each other and make the choosing meaningful in this sense. The options are not indifferent in relation to each other. It seems self-evident that when addicted individuals act in an addictive way, their reasons for acting in that way are concerned with the object of the addiction in some way. If a heroin-addicted individual is contemplating his options for action, the options will be determined on the basis of heroin-related issues; whether or not he wants heroin at that particular time, for instance. The framing of options is important because the assumptions we may have about reasons for actions definitely affect the assumptions of the possible options the agents have in the circumstances.

[67] I will focus on feasibility in 3.2.1.

[68] There are other aspects to be taken into account in framing. For instance Heyman (2009) discusses the local – global distinction as a matter of framing. I will discuss this framing in 3.2.2.

I will not deal with the framing effects of addicted individuals' options in a manner that is usually among the standard criticism against the rational choice theory, namely how the framing of the options affect the ways in which the agents choose (see for instance Rubinstein 1998, 14) though it could be highly interesting in relation to for instance acquiring informed consent from addicted individuals for research or treatment.[69]

In understanding addictive action, the way in which we frame the options addicted individuals have does play into the way in which we understand addiction. If addicted individuals' action does not make sense, it may be that we have framed the options in a way that does not describe the options the addicted individuals consider themselves to have. This applies to the agents themselves as well. In fact, it has been pointed out that if we accept that preferences are the agent's subjective evaluations of the options, then we need to realise that it is not the goods in themselves that have worth, but rather it is about what can be obtained with these goods (Hansson & Grüne-Yanoff 2011). This makes sense. Consider, for instance, a heroin-addicted individual and his preference to obtain heroin. It is not necessarily the drug as such that is valuable and desirable, but more what results he can obtain with it, whether the goal is to escape from the reality, to escape withdrawal symptoms, to gain

[69] An example of this kind of framing effect is a study in which participants were asked which one of the two mutually exclusive programmes (1, 2) should be chosen when there is an outbreak of a disease. The participants were divided into two groups and the first group considered options that dealt with how many people will be saved or have a chance of being saved. The second group considered options that dealt with how many people will die or are in the risk of dying. The options were the same in terms of the amount of people dying or the probabilities of the amount of people saved or dying, but 72 percent of the participants in the first group chose progamme 1, whereas 78 percent of the participants of the second group chose programme 2. One possible explanation that the study provided is that the framing of the options affected the way in which people chose. Framing the alternatives wither with deaths or saved lives affected people's decision-making. Rubinstein 1998, 17. See also Tversky & Kahneman 1986.

feelings of being normal, or just to feel good.[70] Nevertheless, if the choice view regarded preferences as subjective evaluations, this would present a challenge to trying to understand addictive action, as only the agent has access to his own evaluations and even that may be unreliable. Framing the options by considering the options as concerning states of the world may be less informative about the agents' agential reasons for actions, but even they can capture "more meaning" when they include not merely the action option described on the basis of one characteristic, but also its consequences and the context in which these options take place.

In fact, one of the aspects that help to explain the behaviour of addicted individuals in terms of choices is to understand that preferences are dynamic. This means that the value different preferences have does not merely depend on the preference itself but also on the context in which it is situated. This means that the past choices and the passage of time affects the value different preferences have.[71] (Heyman 2009, 118; Heyman 2013, 432.) Let me give an example in the context of bioethical discussion about addicted individuals' options in a particular setting; the discussion focuses on heroin-addicted individuals and their options in the situation in which they are asked to participate in heroin trials.

The preference for heroin being dynamic means that the option of having heroin does not obtain its value merely on the basis of the intrinsic value of heroin, but also the context in which the heroin is obtained. Insofar as the desire for heroin *per se* is not considered to be compulsive dictating the heroin-addicted individuals' choices (cf. Charland 2002), the bioethical discussion about heroin-addicted individuals' options in giving consent to heroin trials has been sensitive to this (e.g. Foddy & Savulescu

[70] It is sometimes argued that substance use is merely pleasure-oriented behaviour, but for instance interviews with addicted individuals have shown that this kind of generalization is a simplification. It does not accord with the data from addicted individuals' self-reports. See e.g. Kennett, Matthews & Snoek 2013.

[71] I will discuss the issue of time consistency in section 3.2.2.

2006a, Levy 2006a, Henden 2013). It is not enough to frame the options adequately here if heroin as a substance is the only feature on the basis of which the addicted individual makes his decision. If the addicted individual participates in the trial, he has a chance of obtaining heroin and this is the case also if the addicted individual refuses to take part. If access to heroin is the only feature that has value in the addicted individual's point of view, these two options are indifferent to the addicted individual in this respect. However, even the discussion that concerns the strength of the desire for heroin does not view these options indifferent, but it takes other aspects into account such as costs and benefits of those different options. The options are then also evaluated in terms of the context – to some extent. Obtaining heroin from the study does not cause the same kind of financial costs, for instance, as heroin in the streets does, and having access to heroin in the streets may be even dangerous to acquire, adding other kind of costs to the access to heroin in the streets. Given this kind of perspective, it has usually been regarded as an unexpected result that it has been the case that the trials that have taken place have actually faced difficulties in recruiting heroin-addicted individuals (e.g. Henden 2013, 401). This implies that there may be something missing from the option set that should be the base for explaining that these addicted individuals (unexpectedly) refuse to participate and have less costly access to heroin by doing so.

One suggestion for an explanation of this has been that the addicted individuals do not want to commit to the trials as they require regular appointments with health care professionals (Henden 2013, 401). The costs of participating in the trial amount to be too high in this explanation; maybe it is the time consumed or the idea of one's own action being monitored on a daily basis – several times a day – that is too much. All this, however, requires an assumption that the addicted individuals act on the basis of the desire for heroin. When we try to understand how addicted individuals act, we should take into account that, like non-addicted individuals, they too function in a complex world. It is true that

there is a great deal of empirical evidence that addicted individuals tend to focus on addiction-related activities.[72] Nevertheless, even if addicted individuals' lives seem to revolve around obtaining and consuming heroin, it is not the only desire or reason that drives their behaviour.[73] There is empirical evidence that addicted individuals respond to reasons.[74] (See for instance Heyman 2009, Heyman 2013.) In fact, in line with this evidence, it has been speculated that it might be the case that the addicted individuals view the option of participating in the trials doing no good for them; they already have access to heroin if they want it. Also, if they, on the other hand, want to be treated for their addictive condition, they do not believe that consuming heroin will help them, as it will maintain dependence. (Henden 2013, 401.)

This may provide a sufficient picture of the situation for some, but I argue that once the complex context of human agency is taken into account, the situation changes.[75] If we call into question (like we have reason to) that heroin-addicted individuals merely make their decisions on the basis of satisfaction of their desire for heroin and that this decision is in accordance with the desire, we can see that the options look different in the trial case. The individuals addicted to heroin that are recruited for the trials are typically substance users who have tried different kind of treatments several times, but have repeatedly failed in them (Uusitalo & Broers 2015). This gives reason to believe that not only are they likely to act in accordance with their desire for heroin, but also that they have had at least some kind of a reason that is also motivated not to do so and to seek treatment. These two are typically considered as opposites. However, the trials in which

[72] This is reflected for instance in Heyman's (2009) idea of the toxic nature of addictive rewards that I discuss more later in the chapter.
[73] This is a point that proponents of choice model emphasise too.
[74] I will return to this in more detail in Chapter 5.
[75] For a more detailed analysis of the kind of options heroin-addicted individuals face in giving consent to trials in which heroin is prescribed to them, see Uusitalo & Broers (2015).

these heroin-addicted individuals are recruited are designed as treatment.[76] In the heroin-assisted treatment, addicted individuals are prescribed heroin instead of substituting heroin with, for instance, methadone. By taking into account that the options framed should also reflect addicted individuals' attempts to get rid of their addictions, i.e. their motivation to change their condition, the overall picture looks different. The states of the world are not defined merely on the basis of access to heroin, but also in terms of treatment and this involves heroin in a different way. So what really counts as well is whether the addicted individuals access the heroin as a drug or as treatment. The assumption that preferring access to heroin simply equates with maintaining "the habit" is untenable in this context. The consequences of a preference for access to heroin in the study are very different from those of a preference for access to heroin in the street.[77] Even if individuals addicted to heroin maintain their dependence to the drug physiologically, the purpose of taking drugs changes.

It has been pointed out that physical dependence is clearly not sufficient (nor necessary) for addiction (Watson 1999, 12). Consider, for instance, an example of a patient who is physically dependent on morphine, but who does not suffer from addiction (ibid.). In the same vein, in the heroin-assisted treatment the drug is given as medication in a controlled setting. In this light, it does seem to make a difference what kind of reasons the addicted individual has for his action. In order to make a difference between different kinds of consequences the seemingly same kind of action has, we need to be able to consider the consequences of action in

[76] There have also been social and legal reasons for harnessing the new treatment into research. For instance, before the referendum of 2008 in Switzerland, it was illegal to prescribe heroin for patients under the Swiss Narcotics Law, whereas in the research domain the use of heroin for research purposes was allowed (Savary et al. 2009).

[77] There is empirical evidence that heroin-addicted individuals benefit from trials on heroin-assisted treatment. See e.g. Oviedo-Joekes et al. 2009. The evidence covers also long term benefits. E.g. Blanken et al. 2009, HeGeBe 2012.

the context of the purposes of that action was meant to have as well as acknowledge that there is very likely to be other motivations involved than solely access to heroin. Access to legal heroin and its consequence of physical dependency for it, for instance, does not shed light to whether the addicted individual prefers to continue his addictive action or whether access to legal heroin is a means to an increased level of well-being and a form of treatment. The purpose of consuming heroin makes a difference. It implies that there may be different kind of motivations and actions involved. This example has hopefully illustrated the need to see the actions of addicted individuals in a more nuanced way than merely stating that they act on the basis of desire for drugs (which may well be true, but certainly it is not enough).

In the rest of the chapter I will flesh out another common view on addiction, namely the choice view and discuss it in terms of Gene M. Heyman's (2009) account, particularly. The purpose of the chapter is to illustrate two typical characteristics of addiction – those of biased decision-making and myopia – that the choice view acknowledges and focuses on. [78] These features are two of the four

[78] Out of the four identified characteristics of addiction that I mentioned in the introduction, three concern (ir)rationality. The focus here is on myopic behaviour and biased decision-making. By decision-making I refer to an agent's choosing mainly in terms of preferences and rewards, and reference to bias means that those preferences and rewards are results of the kind of decision-making in which the some aspects are overvalued at costs of other aspects. Myopia is a case of short-sightedness in decision-making. The agent does not engage in diachronic agency taking into account the past and the future as a continuum, but prefers the instant reward even when the long-term benefits of some distant reward would have amounted to being greater. This can be seen as a form of irrationality and addicted individuals allegedly focus on the instant pleasure of another hit, drink, spin of the wheel or so on. They do not seem to appreciate the long-term value of abstinence or even moderation when the instant reward is present. This kind of behaviour is considered typical to different addictions and for instance neurosciences study the mechanisms of attentional bias in which addiction-related cues in the agent's environment seem to receive more attention from the agent and these cues in turn fuel the feeling of craving (see for instance Field & Cox 2008; Field, Munafó & Franken 2009). This suggests that awareness of the instant rewards is intensified further by the neural mechanisms of craving. As

features I identified in the introduction to be involved in addictive action as long as they are understood in the framework of an active agency that involves not only repetition but continuity. Here my attempt is to show that these features are not, as such, sufficient in describing addictive action nor are they necessary. However, I hope that the choice view still serves as a case for illustrating the importance of the two characteristics and analysing their role in characterising addiction. With the help of the view I aim to show that these features are prominent in addiction: both the myopic way of choosing rewards and biased balancing of costs and benefits typically seem to characterise addicted individuals' action. So again, like in the previous chapter, my goal is two-fold: first, to show that these characteristics seem to be central in addictive action and, second, that they still fail as such to provide a sufficient account of addiction. In light of this, the choice view, like the disease view, falls short of capturing the phenomenon of addiction. I begin, or rather continue, by discussing the role of desire, as it plays an essential role not only in the disease view but also in the choice view, but in a different manner.[79] Then I will proceed to analyse the two characteristics with the help of the choice view, particularly Heyman's account. By analysing the characteristics in relation to the choice view, I hope to clarify the characteristics and also point out the challenges the account faces when analysed in terms of addictive action, especially concerning biased decision-making and myopia. Let us start with desire and (rational) human action to see how the choice view that rests on choices accommodates desire.

---

addictive desires are typically cue-dependent, social environments, times of day, modes of behaviour, and people trigger the desire and this has an effect on the addicted individual's decision-making.

[79] It seems that the views hold quite different views from each other. I will discuss the difference between the notion of desire in both of the views in the following chapter, in chapter 4.

3.1. Choice view and desire

My critique of the disease view aimed to show that a simple view on addiction that rests on the notion of addictive desire that is phenomenal is not enough to capture the actual phenomenon. If strong phenomenal desire is not sufficient in explaining addictive action, then reason and rationality may shed some light on the issue, in an indirect way, though. Contrasting desire with reason in philosophy dates back to antiquity (e.g. Plato 1997 R, 1072, [440e-441c]). David Hume remarks in the beginning of Book II, Part III, Section III of *A Treatise of Human Nature* that "[n]othing is more usual in philosophy, and even in common life, than to talk of the combat of passion and reason". As Hume argues, it is far from evident that these two should be juxtaposed in considerations of action.[80] Instead, Hume suggests that reason should be harnessed to serve as means in action. For Hume, reason is not involved in determining the ends of our action, nor does it select or rank them with authority (Korsgaard 1986, 6-7). This kind of rationality is instrumental. It provides the means to satisfy a certain end that is determined by desire. It is not difficult to imagine an addicted individual who satisfies his addictive desire in an efficient way. A growing desire for heroin, for instance, motivates the addicted individual to come up with the most convenient way of accessing the drug. It seems to involve more than a mere reaction to a stimulus. In fact, obtaining and consuming illegal drugs, for instance, may require quite detailed and complex plans. It would be difficult to argue that addictive action is not instrumentally rational in this way.[81] In fact, this is one of the observations that the proponents of the choice view such as Heyman (2009) take to be essential in understanding addicted individuals and addiction. The

[80] Christine Korsgaard (1999, 2) has questioned that Hume in fact successfully overcomes the juxtaposition, but for my purposes it does not matter whether Hume actually succeeded in this venture.

[81] It could, however, be argued that addicts may be more likely to take greater risks than what a non-addict would take in similar circumstances.

choice view of addiction explains addicted individuals' actions in terms of choices, as can be expected. The proponents of the choice view tap into this observation about instrumental rationality and argue that, in fact, addictive behaviour is rational in this sense.

In light of this and with respect to desire, the proponents of the choice view seem to capture a different aspect of the desire from the disease view, namely its role as preference.[82] For instance, on the first page of the preface in his book on addiction, Heyman (2009, vii) argues that addicted individuals make choices too and these choices include ones that go against addiction (as long as the costs of continuing become too great). The choice view on addiction is concerned with agents' preferences and these serve as the basic constituent in their action. According to rational choice theory, preferences are motivational propositional attitudes that mirror the agent's values and dispositions and their content is unrestricted. This means that they can be selfish, altruist, self-defeating or masochistic, for instance. (Bicchieri 2004, 183.) In this light, addicted individuals may have a preference to maintain their addiction even if it were harmful to themselves as well to others. Accordingly, Heyman and other proponents of the choice view argue that addicted individuals are rational agents in the sense that they act according to their preferences. Addicted individuals prefer engaging in addictive action, such as drinking alcohol, using drugs, smoking cigarettes and gambling, to abstaining from these activities to the extent that seems strange. If the choice view portrays addicted individuals as typical agents with coherent sets of preferences, some part of the actual reality, however, seems to be ignored. Furthermore, the characteristic of biased decision-making that I identified for addiction in the introduction seems to be questioned by this. What does the reference to rational agents and their actions concretely mean? In order to answer my question, we

[82] Due to the richness of discussions on preferences and desires on the whole, there are accounts that distinguish these two from each other (e.g. Schroeder 2014). I will use 'desire' as a broader term here that covers the term 'preference', which is a certain kind of desire in my terminology.

need to look at the prerequisites for the preference in more detail in order to see whether addicted individuals' action characteristically complies with these conditions. Next I will discuss this and what kind of problems the view faces when we assume that addicted individuals act in accordance with the presumptions that the proponents of the choice view make about addicted individuals (and agents in general) and at the same time illustrate that addicted individuals' actions may fall under these presumptions, but not always.

3.2. Struggling addicted individuals and the prerequisites of the choice view

It is not the case that the proponents of the choice view would regard addicted individuals' living as a walk in the park. The view about addicted individuals that for instance Heyman (2009) provides seems more complex than that. In his book *Addiction: A Disorder of Choice*, he (2009, 44) provides vignettes of first person reports from different stages in addiction: the initial stage when everything is new and sometimes though not always exciting; the stage when there are both negative and positive experiences and; lastly, the stage when the addicted individuals report their desire to quit. Still, the struggle is simple in some sense: given the circumstances, the addicted individual chooses on the basis of what he prefers the most. In the choice view,"[r]ationality is identified with (expected) utility maximization, and this presupposes that individuals have (or behave *as if* they have) utility functions, that is, that they have well-behaved preference ordering over alternatives" (Bicchieri 2004, 184).[83] Heyman (2009, 117) discusses choices in

[83] Well-behaved preferences fulfil formal conditions such as, first, in a choice situation there has to be a set of feasible actions that the agent knows to be available to him. Second, there is a set of consequences of actions which follows certain requirements. The set needs to be complete, antisymmetric, reflexive and transitive. Finally rational choice proper is defined in a way that a rational agent chooses an action that is feasible and optimal and follows the

general and argues that the "governing principle is to choose what is best". A problem is that this kind of view rules out addicted individuals who struggle with their addiction in the sense that they seem to act on the basis of a lesser reward, for instance.[84]

Now, as I mentioned above, some of the proponents of the choice view acknowledge that there may be some kind of struggle and they make attempts to accommodate this to their views. For instance, Heyman (2009) calls his view of addiction a *disorder* of choice implying that there is something problematic in addicted individuals' choices in terms of standard choice making and he states that sometimes quitting is very difficult if not impossible. What is this disorder? First, Heyman (2009, 113) makes a case that in addiction people choose: "[v]oluntary acts are guided by costs and benefits, such as concern about family, cultural values, self-esteem, fear of punishment, and so on; the same holds for drug use in addiction." He accepts that addictive actions fit into the general view on choosing and argues for it. However, the choice view rests on assumptions about the preferences – that they are well-behaving preferences. Heyman does not seem to spend any time on explicitly analysing these in detail in his book. What does it mean that preferences are behaving well? Does, for instance, the unwilling addicted individuals who decide to quit in the morning and are already engaging in their addictive action by the evening fit the picture even if in the next morning they are again of the opinion that they want to quit? Frequent preference reversals are hardly well-behaving in the sense that they are stable and do not change all the time.[85] The preference ordering follows and is modified by the

functions and rules set in order the preferences to be represented by utility functions and rationality consists in maximising one's utility. For a more detailed and technical description see Bicchieri 2004, 183.

[84] I will discuss this more in more depth below.

[85] Furthermore, the addicted individuals need to know that alternative actions are available (and feasible) to them. All these alternatives need to follow some rational requirements such as that the alternative ways of action of, say, not drinking and drinking are asymmetrical in their in the preference set. Also this well-behavedness can mean that the preferences are informed in the sense that the agent is truly responsive to reasons. If there are good enough reasons which

agent's deliberation and this is assumed to aim at an optimal action in the circumstances. How do the technical requirements for preferences to be well-behaving, i.e. the right kind for the choice view, relate to, for instance, Heyman's account and his view on addicted individuals' preferences that he assumes to be qualified preferences? Could this potential discrepancy in the well-behavedness of an addicted individual's preferences offer an explanation for biased decision-making and myopia?

3.2.1. The condition of well-behavedness of preferences in the choice view and addictive action

In order to understand the kind of choices addicted individuals typically engage in, we need to look at "the ingredients" of choice in more detail. In this section, I will discuss the technical requirements of preferences in the choice view and thus, in some sense, continuing the previous chapter's main theme, namely the kind of desires the addicted individuals are considered to act on, as these seem to offer points of potential conflict. As long as addicted individuals' preferences are well-behaved, their action can, other things being equal, be seen to fit the choice view. For instance, Heyman (2009) spends time in his book to show that the preferences of the addicted individuals in the vignettes seem to be ordinary preferences. He does claim that addictions are out of ordinary, "yet, they reflect general rather than special principles [of choice]" (Heyman 2009, 116). My point is to show that addicted individuals' preferences can be either well-behaving or not. They need not necessarily always be one or the other. However, at first blush it seems that preferences to engage in addictive action may well face difficulties in satisfying the criteria of behaving well. Let us see if that is the case. The well-behavedness of preferences needs a closer look.

---

speak in favour of abstaining from addictive action, the agent will change his preferences and act accordingly. I will discuss these aspects later in this chapter, too.

As a starting point, there has to be a set of feasible actions in the choice situation. From an agent's point of view, this means among other things that the agent has to know about the options being available to him in the choice situation. (Bicchieri 2004, 183.)[86] On a very general level, this epistemic condition seems plausible. In order for me to apply for a post-doc post, I need to know that this option is available (for me), i.e., the post is actually open and I am able and qualified in applying for it. Typically, it is assumed that addicted individuals do know that abstinence is an option for them in their everyday lives in the sense that no one or nothing coerces them to drug use. However, there has been different kind of views. For instance Edmund Henden (2013) questions this piece of knowledge in his article on heroin-addicted individuals and their ability to consent voluntarily to trials in which they are given heroin. The problem, in his view, is that the nature of beliefs about addicted individuals' options has been affected by the psychological and wider social circumstances in a way that may undermine the addicted individuals' voluntariness.[87] In Henden's view, the addicted individuals involved in these kinds of studies[88] in which heroin is prescribed to them tend to live bad lives and due to these bad psychological and social circumstances they live in, Henden argues, they may fail to see what kind of options they have available. They may for instance lack belief in self-efficacy and because of that fail to consider abstinence as a feasible option.

[86] The case would be different if we would consider feasibility on an objective level. It is easy to come up with options that may be feasible in the sense that the agent is able to do them, had he known about them. However, in this context, I am interested in the options that are feasible to the agent also in the sense that he knows about the alternative.

[87] Henden (2013) makes a distinction between freedom and voluntariness. He does not question whether addiction deprives addicted individuals of their freedom to choose. There is no external controlling influence that would undermine addicted individuals' abilities to choose freely in the context of research on heroin-assisted treatment.

[88] The treatment for which the research is and has been conducted is meant for the severely dependent drug users who have previously failed repetitively in ordinary abstinence-based treatments. See for instance Ferri, Davoli & Perucci 2006.

(Ibid. 400.) In this sense, these addicted individuals do not know that abstinence is an option of this kind.[89] If this, in fact, is the case, then the options an individual addicted to heroin faces are restricted and he fails to "know" about the objectively feasible options as well in this required sense.[90]

Heyman (2009, 114), too, acknowledges that "[m]any addicts have limitations … that make it difficult to take advantage of alternatives to drugs" and he even goes as far as to claim that "in some situations … it may be impossible" (ibid.). This seems to imply that even in the choice view there can be cases in which the addicted individual cannot quit. Heyman does not elaborate on the impossibility of quitting further than mentioning that there may be "road blocks" for getting help or some (other) medical problems. However, as mentioned above Heyman (2009, 113) maintains that addictive action is voluntary in the sense that addicted individuals acts are "guided by costs and benefits". They are still choosing on the basis of their preference. The quoted statement of costs and benefits refers to the idea that addicted individuals' preferences are susceptible to the consequences of the alternative ways of action. This, in fact, is the second criterion for the well-behavedness of preferences that has been seen to be a criterion which (some) addicted individuals fail to satisfy.

In fact, "the hard cases" of addiction have been repeatedly taken up as a counter-argument for the choice view on this aspect (e.g. Kennett 2013, Kennett & McConnell 2013). Heyman (2009) argues that addicted individuals' drug use follows the same principles as other voluntary action. He states that "the degree to which an activity is voluntary is the degree to which it systematically varies as a function of its consequences, and the degree to which it is feasible to apply such consequences" (Heyman

[89] This is an important point that I already touched in the previous chapter and it highlights the importance of beliefs in action. It seems clear that in order to act in a certain way, an agent not only needs abilities and motivation but also beliefs.

[90] Obviously this does not need to be a permanent state. People may achieve many things that they do not actually believe to be able to do simply by trying.

2009, 104). This can be understood in two ways. The weak reading only relies on the technical requirements that I will discuss here. The strong reading involves some kind of interpretation of the reasons the agent reacts to be worthy of the reaction under some description of worthiness.[91]

So regarding the technical requirements of preferences, another criterion for the well-behavedness is that each option for action has consequences that behave in a certain way in relation to the set of consequences of which the consequences are a part. It is assumed that in a rational choice situation, the consequences viewed are part of a set that is complete (Bicchieri 2004, 183).[92] For instance, to illustrate this with a concrete example: the discussion about heroin-addicted individuals' options when they are asked to participate in trials in which they are prescribed heroin involves two options that are mutually exclusive and they cover all the possible options, that is, the addicted individuals can give consent to participate in the research or they can refuse to do so.[93] Completeness of the set in this case means that these two options are both feasible, and that the individual should prefer one option or rather its consequences to the other in the sense that it is considered at least as good as the other option (ibid.). So basically if heroin-addicted individuals opt for enrolling in the study, they should consider that option at least as good as not participating in the study in order it to be a rational choice. They are then choosing according to their preferences, that is, rationally in that sense. This requirement as well as the completeness requirements is set to define the set of consequences and this means that it is also

[91] I will discuss this later in 3.2.2 and in Chapter 5.

[92] Technically, for the set list C of the consequences of actions, completeness means that "for any x,y ϵ C either xRy or yRr" (ibid.).

[93] Nevertheless, if we consider the consequences of those options, they are not mutually exclusive in all respects: a heroin-addicted individual who participates in the trial will have access to heroin, but if he refuses to participate, he will still have other ways to get access to heroin, namely in the streets. They are mutually exclusive only in relation to participation in the research.

important the options that are included in the set have a relation to every other option in the set.

However, in the context of the example, considering heroin-addicted individuals' options merely on the basis of these two options– consenting or refusing–does not seem to provide enough context for the evaluation of that choice in reality, as it is supposed to be made on the basis of preferences and the preferences concern the consequences of those feasible action options. For instance, the ethical discussion revolving around heroin-addicted individuals' ability to consent to research on heroin-assisted treatment voluntarily illustrates this point well. In this discussion, more nuanced options than merely whether or not the addicted individual participates in the trial are usually stated. This has probably been done because it is acknowledged that people's willingness to participate in a research may not stem only from the interest in promoting scientific research as such but from other reasons, too. In the discussion, there have been attempts to capture salient features of that choice and with heroin-addicted individuals it seems safe to assume that a salient feature in the choice involves heroin. As heroin or its lack affects their abilities to function, it seems clear that heroin is an issue that is considered when they are mapping out their options for action. However, it is typically recognised that an analysis of action in terms of whether it contains heroin or not is not enough to make the choice meaningful, as participation in the trial and refusing to participate in it may both involve the same kind of consequences in terms of heroin; both may include for instance prevention or cessation of withdrawal symptoms. The options have, thus, been tried to set out in a way that is sensitive to the context of heroin, namely heroin-addicted individuals' access to heroin in the trial, access to heroin in the streets, access to heroin in the trial and the streets and abstinence (e.g. Foddy & Savulescu 2006a, Levy 2006a, Henden 2013).[94]

[94] The issue of laying out the options can also be about the framing of the decision and not just about the content, as I illustrated in the beginning of this chapter.

The set of these consequences should also be antisymmetric and reflexive according to the choice theory (Bicchieri 2004, 183).[95] If the addicted individual considers the consequences of using drugs to not using drugs to be at least as good as well as the consequences of not using drugs to using drugs to be at least as good, then the options are indifferent to him. It does not matter which one he prefers, as these options do not differ from each other in a meaningful sense in the choice situation. If the addicted individual chooses either, he is acting rationally. Heyman's vignettes portray addicted individuals who have different kinds of preferences toward drug use. However, the important point is that the preferences addicted individuals have are antisymmetric in the described sense. As for the requirement of reflexivity, it refers to an option's relation to itself. It may seem obvious that the option of participating in a heroin trial is at least as good as the same option of participating in a heroin trial. This criterion, however, serves a technical function that seems to guarantee that the set of consequences to which the choice model is applied covers every single relation there is in the set and these exhaustive relations also include an entity's relation to itself.

The final requirement for the well-behavedness of preferences is that they are transitive (Bicchieri 2004, 183).[96] Heyman (2009, 115) states that addicted individuals function on the basis of motivational principles that "produce adaptive if not optimal choices".[97] He seems to imply that this criterion is satisfied in the discussion of addicted individuals' choices. In light of our example of heroin-addicted individuals, let us assume that the addicted individual is again faced with the choice of participating in a heroin trial. If the options are set out in terms of access to heroin,

[95] The technical way of putting these is the following: for asymmetry "if xRy and yRx, then x ~ y, and for reflexivity "for all x ϵ C, xRx". The symbol ~ denotes indifference. (Bicchieri 2004, 183.)

[96] The technical way of putting the requirement for transitivity is "if x, y, z ϵ C, xRy and yRz, then xRz" (Bicchieri 2004, 183).

[97] As such this does not of course refer to transitivity, but in my view the quote assumes it.

the addicted individual has four options: not to have access to heroin, i.e. abstinence, to have access to it in the research, to have access in the street or finally a synthesis of the two latter options: to have access in the research and in the street.[98] In order the options to be well-behaved the addicted individual needs to have transitivity in his preferences. This means that, for instance, if the addicted individual prefers access to heroin in the research to heroin in the street, and heroin in the street to abstinence, then he should prefer access to heroin in the research to abstinence too. Heyman (2009, 115) talks about adaptive choices that the addicted individual chooses from the laid out alternatives; if the optimal option is not available, the addicted individual chooses the next in line in terms of its value of reward. This sounds plausible, but it seems that in this case, for instance, the addicted individuals' preferences have not necessarily followed this kind of transitive criterion. Addicted individuals do not systematically choose according to this kind of order. It may be that it has to do with different kind of values they have compared to non-addicted individuals or maybe the assumptions about addiction and addicted individuals' agency are skewed or maybe it is simply human that sometimes we as human agents do not always follow this kind of logic regardless of whether we are addicted or not. Still, leaving aside the problem of the accuracy of the choice view to reflect human agency in general, insofar as all these requirements are concerned, addicted individuals seem to be able to fulfil them, but it can be also accepted that in some cases, their preferences fall short of a requirement or another, especially in the hard cases.

I will next discuss other challenges addiction can pose to this kind of rational behaviour to find out whether addictive action

[98] Typically in the research setting it is assumed that the addicted individual who participates in the trial does not use the drug in the street while they take part in the research so basically they have three options available to them.There are ways in which the researchers can test whether the addicted individual consumes drugs in the streets as well (see e.g. Blanken et al. 2009, 301; Haasen et al. 2010, 125).

involves something unique and distinct features from other kind of human action, for instance biased decision-making.[99]

3.2.2. Biased decision-making and myopia on the basis of preferences

It is interesting to notice that addicted individuals' action is typically called into question in terms of rationality, but when their choices are analysed in terms of instrumental rationality, that is, in terms of coherence and effectiveness of means and their ends, there might not be anything wrong. This is a point that the choice view acknowledges. Indeed, addicted individuals may be highly efficient in acquiring drugs, for instance. They have a goal of scoring drugs and they use whichever means are the most effective in reaching that goal. In this sense, their decision-making is not biased, but it is still generally agreed that there is something wrong in their decision-making; they may weigh the pros and cons of their options in surprising ways. Next I will illustrate how the choice view tries to accommodate this characteristic and still maintain that addicted individuals act rationally.[100] I do this in order to show that biased decision-making is often an apt way of describing addicted individuals' choices and action, but it need not to be present in addicted individuals' action.

[99] It seems that the choice view can always argue that in seemingly contradictory cases (i.e. the alternatives do not seem to follow antisymmentry, transivity etc.), the relevant features have not been identified properly. However, this suggests that it faces the same kind of challenge that Davidson's theory action does in our attempts to understand *addictive* action. It does not give us means to distinguish between different kinds of actions in this respect.

[100] Heyman (2013) and other proponents of the view offer different accounts of how to explain the seemingly irrational action of addicted individuals who seem to engage in suboptimal ways of action in this picture (e.g. Ainslie 2001). I will focus on Heyman's attempts and also reflect on Ainslie's influential account, particularly in relation to myopia.

The theory of *rational* choice requires that the agent acts on the basis of utility functions or as if he had them.[101] This means that addicted individuals choose the best available action on the basis of their preferences. These preferences are supposed to base on the consequences of the kind of action alternatives available for the agent, and they are said to reflect values and dispositions that are not necessarily "rational" in the sense of being, for instance, self-preserving. A top model's value to be so thin that she is considerably underweight may not be rational in terms of her health, but it is her value to look like a (that kind of) model, and her preferences mirror this in her choices concerning, for instance, food and exercise. In the same vein, even if using drugs were considered somehow to be inherently irrational activity, this would not prevent drug-addicted individuals from acting according to the rational choice theory, i.e. acting according to their preferences if they happen to genuinely value drugs.[102] It seems, for instance, that despite probable considerable negative consequences, addicted individuals may still regard addictive action as worth performing. This is important to notice, as it seems essential in describing the biased decision-making.[103] This observation also presents a challenge to the choice view that maintains that addicted

[101] The theory has received a great amount of criticism concerning the assumption of this kind of "perfect rational man" which, in the real world, does not seem to exist. See for instance Rubinstein 1998, 2.

[102] This picture, of course, fits the disease view too, especially the "hijacking" model; drug-addicted individuals values and dispositions may be due to addiction, but they are acting according to their preferences and, in this sense, rationally. However, as mentioned in the previous chapter, there are certain conditions to be met in this picture: preferences need to be well-behaved. The disease view may cover a range of different kinds of models depending of course also on the kind of notion of disease that is being used. There has been discussion on different diseases in comparison to addiction ranging from diabetes and cancer to obsessive-compulsive disorder and depression (see for instance Foddy & Savulescu 2006a, Henden et al. 2013, 4–5). However, the discussion about whether or not addiction is a disease and what kind of disease falls from the scope of my thesis.

[103] It is, in fact, a feature that both the disease view and the choice view pick up on and try to explain.

individuals make decisions in the same ways that non-addicted individuals do.

The proponents of the choice view see the addicted individuals choosing actions in a way that maximises their utility; addicted individuals view the situation, consider the expected utility and choose the alternative that maximises their utility. As it has been pointed out, this is definitely a stronger assertion than what for instance Donald Davidson argues for in his causal account of action (Kennett and McConnell 2013, 472). For Davidson (1980c, 23) judging that it is better to do action *x* than to do action *y* means that the agent also wants that to do *x* more than *y.* This judgment is not, however restricted in the sense that it has to involve evaluations of maximisation of one's utility. Being better does not directly translate into maximisation of one's utility. In fact, Davidson (1980c, 23–24) acknowledges that the phrase judging better may be ambiguous or have a plurality of uses. He explicates his stand by considering different kinds of evaluative judgments and states that his second principle[104] that connects making judgments with wants and, following the first principle,[105] to action, is specifically about the making of judgments and not about the content or meaning of those judgments (ibid. 26–27).[106] Furthermore, the content of those judgments insofar as they are reasons for action consists in pro-attitudes and beliefs, but Davidson specifically argues that "[i]n general, pro attitudes must not be taken for convictions - - that every action of a certain kind ought to be performed, or is, all

[104] The second principle of Davidson's (1980c, 23) view: "If an agent judges that it would be better to do *x* than to do *y*, then he wants to do *x* more than he wants to do *y*."

[105] "The first principle of Davidson's view (1980c, 23) "If an agent wants to do *x* more than he wants to do *y* and he believes himself to be free to do either *x* or *y*, then he will intentionally do *x* if he does either *x* or *y* intentionally."

[106] Indeed, in terms of content, some addicted individuals, for instance, alleviate their stress with their addictive action; others seek meaning to their lives with it. Addicted individuals can perceive the rewards in different ways. Of course this can be interpreted to mean that they try to maximise their utilities in different ways, that they still are forms of reward. As it will become clear in this section, I disagree with this kind of interpretation.

things considered, desirable" (Davidson 1980b, 4) and pro-attitude needs to be joined by a belief that the agent sees it worth doing (ibid). In light of Davidson's account, this worthiness does seem less demanding than rewards that depend on the somehow measurable utility they are expected to provide to the agent.

Furthermore, the choice view is sometimes discussed as the reward view, as it pins the idea that reward values motivate the choices the addicted individuals make (Kennett & McConnell 2013). This seems to be a problem for an account of addiction, as it is typical that addicted individuals are seen to act in suboptimal ways.[107] Heyman (2009, 64) is aware of this challenge and argues that some addicted individuals "openly acknowledge that drug use was the source of their difficulties, yet they kept using the drugs". How does, then, this fit into the picture in the choice view? This, if anything, seems to suggest some biased decision-making in the part of the addicted individual.

To begin with, to explain the odd choices, the choice view cannot rely on the references to values that are not truly the values of the agent, as it does not matter in the choice view whether or not the values of the agent that he acts upon are truly his. Yet, the proponents of the choice view may have similar aspect with which they can explain these kinds of situations: addicted individuals' choices can be, and frequently are, questioned in terms of value. For instance, Heyman (2009, 145) argues that the toxic nature of addiction makes addictive rewards always preferable to other kinds of rewards. He elaborates that "[a] substance is behaviorally toxic when it poisons the field, *making everything else relatively worse"* (ibid., emphasis added).[108] This may be considered to be analogical to the agent's values that guide the agent's actions. Unlike in the hijacking model of the disease view discussed in the

[107] I will criticise this reliance on a single principle of action below.

[108] It should be noted too that Heyman cannot maintain this assumption consistently as he argues (and provides empirical evidence) that sometimes addicted individuals stop using.

previous chapter,[109] the agent's agential resources are not "taken over", but it is the very nature of addiction to make other rewards appear lesser when compared to the rewards concerning addiction.

The choice view implies that people's choices are made on the basis of value of the available rewards (and that they choose the rewards that maximise their utility) and the nature of addiction plays into this.[110] In accordance with Davidson's principle of action that connects values and motivation, in the choice view preferences are considered to be motivational on the basis of which the agent chooses (Bicchieri 2004, 183).[111] Maybe it is the value in those preferences that sheds light to the issue in the way that it clashes with the requirement concerning utility and in this way exemplifies biased decision-making in addiction.

In order to flesh out the logic of utility maximisation and further tease out its problems, I again take an example that concerns treatment for addicted individuals. The treatment form of addiction in question works with the notion of rewards and their value, and is called contingency management. This kind of treatment is based on an assumption that it shares with the choice view (see Kennett, Matthews & Snoek 2013, 2), namely that positive incentives change addicted individuals' behaviour when the reward of refraining from addictive substances or behaviour becomes greater than the actual addictive substances and behaviour. In contingency management the reward of sobriety is initially considered to be seen by an addicted individual as a distal, less valuable, reward in

[109] The proponents of the disease view can employ a different kind of tactic: if addiction has hijacked the agent's brain, as it has been suggested by proponents of the disease view (see e.g. Leshner 2005), it offers an explanation why addicted individuals seem to have different kinds of values and other motivations compared to non-addicted agents.

[110] It should be noted that the value a reward has does not simply reduce to the inherent value of the object. For instance, the value of heroin is not strictly speaking the value of some concrete substance matter with a chemical formula as such, but what it and the consequences that follow it offer to the agent.

[111] The second principle of Davidson's (1980c, 23) view: "If an agent judges that it would be better to do *x* than to do *y*, then he wants to do *x* more than he wants to do *y*."

comparison to the pleasure of, say, drugs or alcohol (e.g. Pickard 2012, 43).[112] It seems that the reward of sobriety may include, for instance, the appreciation of one's children for one's sobriety and this kind of reward seems to be of a different kind than the immediate reward of a high from a heroin dose, for instance. The problem has been that, for some reason or other, the addicted individuals have not chosen the reward of abstinence. By adding an incentive to the reward of sobriety, the assumption is that addicted individuals began to choose differently (see for instance Petry, Alessi & Rash 2011). The incentive adds to the value of sobriety option in a decisive way. On a first blush it seems that it is quantity that counts: The addicted individuals' options of using or abstaining are quite even in value and they vacillate between those two options. The incentive in the form of for instance a voucher may tip the scale in favour of sobriety. In this picture, the bias seems to involve the nature of those rewards: why would a voucher be a decisive incentive to the addicted individual when there are larger issues such as family well-being at stake?[113]

The choice theory assumes that agents' action is based on a single principle of maximising one's utility and, as argued, this is here, in the case of addiction, interpreted to mean that they act on the basis of rewards. Also, these rewards tend to be understood in terms of pleasure (Kennett et al. 2013). The biased decision-making could be seen as an instance of pleasure seeking, i.e. favouring pleasure in an unbalanced way in relation to other benefits and costs. This would help us understand addicted individuals' choices to use drugs over abstinence, as drug use probably provides them with pleasurable sensations, for instance. This does not always seem to apply, though. There have, in fact, been reports that

[112] I will discuss this aspect more later in this section when I discuss myopia.

[113] This does sound too simple to be an accurate description of addicted individuals' action in their attempts of cessation, for instance. Aggregating rewards to tip the scale in favour of abstinence merely on the basis of the value of those rewards does sound appealing. Sadly, I do not believe that addicted individuals will choose abstinence merely on the basis of the additional small rewards such as vouchers. Something else must be in play here.

addicted individuals do not merely act for their desire for pleasure. For instance in a study on pleasure and addicted individuals, a group of drug and alcohol addicted individuals was identified who denied that they had *ever* experienced pleasure in using the substance they were addicted to (Kennett et al. 2013). Moreover, it was found out that the notion of pleasure that some addicted individuals reported was not restricted to immediate hedonistic pleasure that seems to be assumed in the choice view and which also typically explains addicted individuals' myopic actions, but pleasure is involved in more complex ways.[114] It should be noted that this study is not the only time that the role of pleasure in addicted individuals' action has been questioned, either (Pickard 2012). Even if the general principle of acting on the basis of (greater) rewards is not rejected, it could still be argued that that addicted individuals who have problems in managing their addictions have a reason to maintain their addictions and this reason is not based on a desire for drugs that give them pleasure. For some addicted individuals, the purpose for addictive behaviour may well be in alleviating other psychological problems, for instance. (Pickard 2012.)

Still, contingency management may work for some addicted individuals. But if it does, nevertheless, there seems to be a strong normative implication that the quality of reward should count more. Does for instance a voucher really make a difference in these kinds of issues that concern the well-being of the addicted individual and people who are connected with him? The reward of sobriety is in some sense of higher value because of its quality compared to the immediate reward of, say, using drugs. Could it be that the bias in addicted individual's decision-making concerns conflation of quality and quantity of value? John Stuart Mill (1987, 280), for instance, seems to have a strong view on the hierarchy of those different kinds of rewards:

[114] I will return to the issue of myopia later in this section.

> "Now it is an unquestionable fact that those who are equally acquainted with, and equally capable of appreciating and enjoying, both, do give a most marked preference to the manner of existence which employs their higher faculties. Few human creatures would consent to be changed into any of the lower animals, for a promise of the fullest allowance of beast's pleasures –." (Ibid.)

In this view, the superiority of these higher rewards always outweighs the lower ones regardless of the quantity of each (Mason 2011). If sobriety is considered a higher intellectual reward, then no matter how low quantity there is of it, it should be superior to the pleasures of addictive substances or behaviours. However, this kind of view may well be a rather intellectual picture of human agency that might not meet the reality and struggles to find sufficient motivation with it. In general, people's action in their everyday lives seem to concern the lower pleasures of, say, eating and it is far from obvious that this kind of action were less valuable.

What the critics of the view that addicted individuals seek pleasure also bring up is that the loss of pleasure in addicted individuals does not necessarily result in a cessation of addictive action (e.g. Kennett et al. 2013). Pleasure then seems not to be the only value on the basis of which the addicted individuals act.[115] Heyman (2009, 113), for instance, does not explicitly deny this, as he acknowledges that there are many motivating aspects that play into the cost and benefit analysis of rewards, as long as they are viewed in terms of rewards. The choice view insists on (addictive) agents' actions be based on their views on the available rewards,

[115] As such, this kind of assertion, if it is understood to refer to the agent's values, does not commit to particular metaethical position concerning value. However, the choice view is based on monism in value as well as concerning its principles in action. This means that if pleasure is the overarching single value in human action in their view, they need to identify another value that reduces to pleasure in the action of those agents who deny pleasure in the sense it has been previously discussed in this context as the basis of their action.

but many addicted individuals may find this kind of notion of reward quite unintelligible.[116]

So what can we do to grasp a better understanding of addictive action? Does a meaningful notion of reward help us to understand addictive action better?[117] In the context of addiction, reasons and motivational factors may be so complex that to reduce all of them to addictive desires as preferences that base on rewards seems to deprive preferences from their explanatory power. This, in fact, touches upon criticism that has been voiced out in relation to the reward view (Kennett & McConnell 2013, 477). More specifically, the assumption in the reward view that all rewards are commensurable has also been criticised. The main question in this discussion is whether we can put the rewards in a linear order or "well-behaved preference ordering" in the language of the choice view. With this criticism, the bias in decision-making would gain another dimension: unless we accept a monist value theory, in which everything can be reduced to a single value, we may find ourselves in situations in which there are options that involve different kinds of rewards based on different values. To compare these with each other does not seem to be an easy task.

I have already ruled out the view which solely rests on the idea that addicted individuals' action is based on merely a strong

[116] If reward is then merely a label for the factor on the basis of which every human being in fact functions in the world, we seem to gain little understanding of human action let alone predicting it with the help of that notion. In order to succeed in making distinctions between different kinds of action, we need more nuanced conceptual tools to explain human action. Labelling whichever factor for human action simply as preferences brings little to the explanation besides the somewhat trivial notion that the agent acted.

[117] It has been argued that all accounts of action with only a single way of explaining actions fail to provide a full account of explaining human action (Sandis 2012, 56). This kind of criticism is more extensive than to what I aim here. However, it is an important point to keep in mind when discussing different views on addiction. If Sandis is right about action pluralism in the context of action explanation, the views about addiction that stem from an account of action that relies on a single way of explaining actions are bound to fail if their presumptions rest on this kind of view that Sandis considers untenable.

desire (for a drug or action that brings about pleasure) above. The idea that people act on the basis of motivation that cannot be reduced to this kind of desire seems plausible. On a more general level, if I reflect on my own actions, I find it extremely difficult to make sense of my own actions merely on the basis of pleasure, or rewards. Take a visit to a dentist as an example. I do not particularly hate dentists, but I find no pleasure in going there either. (True enough, I do get some kind of reward of the visit, but it is not related to pleasure.) Still, I more or less regularly make an appointment and go there even if there were no pressing reasons such as tooth ache to contact the dentist. This way of acting makes sense in Davidson's view on action: A primary reason that causes the action consists of a pro-attitude and a related belief. The various attitudes in the light of which an end seems worthwhile can range from a desire, an urge, a yen, an evaluative judgment, aesthetic principle, policy, and so on. (Davidson 1980a, 4.)

Insofar as the choice view as a reward view rests on a notion of pleasure, however, cannot explain it unless they argue something in the lines that acting according to some principles gives me reward and this expected reward is the reward on the basis of which I act, but it is not related to the notion of pleasure.[118]

Of course the proponents of monism in value can argue that this is a case of akrasia: acting against one's better judgement, but even this sounds strange.[119] The appeal for value pluralism in understanding human action may be explained by an observation that it is common that we are confronted with complex situations which seem have alternative ways of action that pull in opposite

[118] The proponents of the reward view, however, are likely to reject this kind of narrow reading on reward and perhaps suggest that reward is a prudential value and not necessarily connected to pleasure but having a reason for which one acts and the reason is in the eyes of the agent increasing or maximising his utility, his quality of life in this sense.

[119]Obviously, the proponents of the choice view cannot argue this, as they are committed to the view that the agent always acts on the basis of what he considers better or best. I will discuss akrasia in more detail in Chapter 5.

directions.[120] There are cases in which a simple calculation of benefits and costs does not solve the problem in the sense that it would tell us which one concerns the greatest reward. (Mason 2011.)[121] There are good examples of this kind of conflict in the discussion about the treatment of addiction. For instance, the discussion of coercive measures in providing treatment, for instance, in relation to deep brain stimulation (DBS) treatment for addicted individuals illustrates this (see Uusitalo 2013a).[122]

---

[120] Nonetheless, value pluralism may contain some challenges of its own, as the case of coercive DBS treatment illustrates: how are the two options of respecting addicted individual's autonomy and refraining from treatment, and of carrying out the intervention for promotion of addicted individual's well-being despite his own view on the topic to be compared if they are based on different values? This is hardly a unique question to discussion of addiction as such, but it applies to ethics in general. Moreover, it seems that there is no simple answer on offer. Proponents of pluralism differ with respect to whether pluralism entails incommensurability and what the relation of the possible answer to the possibility of choice is (Mason 2011). (In)commensurability here refers to whether the different values at stake can be measured and ordered on a single scale or measure (see Blackburn 1996, 69: *s.v. commensurability*). There are different kinds of measures and scales which affect the degree of commensurability (see e.g. Martinez-Alier, Munda & O'Neill 1998, 278). However, in the scope of my thesis, it is sufficient only to touch upon the issue of measures to this, rather brief, degree. The choice view avoids the problems of incommensurability because of its monist standpoint on the principle of action. However, even if we accept that action in addiction should be understood in terms of incommensurable value pluralism, the question of making rational choices is not automatically ruled out. See Mason 2011 for a brief discussion on the topic. The price of having this kind of reward-based view on action may, however, be too high for the proponents of the choice view, as I pointed out earlier, since it seems to leave the notion of reward empty in the sense that it is trivial in providing only a little information and its explanatory power being questionable.

[121] At least in practical ethics a great extent of the cases concern complexity and conflict between different principles that seem to be based on different values such as autonomy or beneficence.

[122] Given the multifactorial nature of addiction, if coercive measures were applied to treating addiction, they would need to be justified in ways in which do not argue for enabling or enhancing addicted individuals' true selves to surface or for improving their autonomy. There is a potential conflict of respecting addicted individuals' autonomy and helping them to get rid of addiction.

The choice view does not really seem to give room for the possibility of value pluralism unless the values are reducible to utility and in which case it is not strictly speaking value pluralism any more. The choice view, then, by arguing that addicted individuals act on the basis of rewards, may fail to capture the nuances in addicted individuals' action that seem very typical to addiction (see for instance Radoilska 2013).[123] It seems intuitively true that human action may have its origin in diverse sources, some of which may not be commensurable in this evaluative system of rewards.[124] It may be that in their view, addictive action is not just about maximising utility, but it could be a form of self-punishment, or even a case of procrastination that is characterised not in terms of pleasure or utility, but rather some kind of escape of one's realities. Nevertheless, even if we want to refrain from making any substantive claims about the value and status of different kinds of rewards, we are still left with a problem for understanding the case of unwilling addicted individuals, i.e. struggling addicted individuals, who either seem to experience a conflict between different kinds of pleasures or the conflict may be more foundational.

Addicted individuals who struggle with their addiction in terms of occasionally caving into it do seem to present an obvious objection to the choice view of addiction and against the logic of the utility maximisation. The objection stems from the fact that there seems to be addicted individuals who act in accordance with their action whilst they arguably prefer to abstain. It does not seem to make sense to observers or even to the agents themselves. This objection against the view is only apparent insofar as the agents act on the basis of their preferences, as the actual content of preferences is not restricted in terms of rationality. If the addicted individual's motivating reasons actually concern weighing the pros

[123] A clear case of this would be that of akrasia that I will discuss in Chapter 5

[124] This cannot be explained by referring to, for instance, the distinction between synchronic and diachronic agency nor by human tendency to discount value over time. The distinction between synchronic and diachronic agency is discusses in 3.3. and hyperbolic discounting later in this section.

and cons of the consequences of addictive action, their criteria must either differ from those of non-addicted individuals, as they seem to come to different conclusions than non-addicted individuals in their deliberation of what to do, or there is something wrong in the process of decision-making if we want to maintain that addicted individuals choose the best available action on the basis of their preferences. Either way, their decision-making seems biased.

As mentioned above, the issue of the criteria being different is not a problem for the rational choice theory, as the content of preferences is not restricted in the theory.[125] They just change their minds. Nevertheless, biased decision-making may involve the content of the *kind* of criteria on the basis of which the agent makes his decisions, and the choice view assumes that a rational agent chooses an action that he believes to be feasible and also optimal (or, in Heyman's view, adaptive) in relation to other options. This means that the preferences according to which the agent then acts comply with the requirements for the preferences to be applicable to be represented by utility functions. The rationality of the choosing consists in maximising one's utility. (Bicchieri 2004, 183.) So even if the content of preferences is unrestricted, it needs to be so in the way in which it does not conflict with the requirement of utility maximisation.[126]

In this light, the proponents of the choice view allow the preferences to include different kinds of contents, acknowledging that addicted individuals' agential reasons might vary in a way that their reasons for engaging in addictive action may differ from each other a great deal in terms of their differing views on utility, but what they, nevertheless, seem to fail to recognise is that their

[125] What would be a problem is that they choose to act in a way that would not maximise utility. I will discuss this more in the following section.

[126] If (expected) utility maximisation is understood to be purely instrumental, there seems to be a leap from individuals having a view on their action that maximises (expected) utility to individuals having preferences which mirror their values and dispositions. Something to be of use need not mirror the agent's values and dispositions. There seems to be a same kind of conflation here that there is in the distinction of wanting and liking. See section 2.2.3.

actions may differ also in terms of differing principles of action. Considerations on different kind of motivating principle other than utility maximisation should be taken into consideration. Similarly to preferences in utility maximisation, expected or perceived rewards seem to refer to something that explains the ways in which the agent acts. It has been called into question whether the addicted individuals actually act on the basis of (expected) rewards, especially with the hard cases (Kennett & McConnell 2013, 472). In fact, as mentioned above, it has been shown that the reward view does not fit the hard cases in which it seems clear that addicted individuals are motivated by a lesser perceived reward.[127] The heavy users' self-reports make clear that they do not consider the consequences of using drugs at least as good as refraining from using drugs, and yet, they choose to use drugs. If their statements are taken at face value and considered to cover both synchronic and longer term frameworks, this kind of view of addiction necessarily conflicts with the choice view and displays problematic decision-making in another way than simply weighing pros and cons of the options in a biased way.[128] This is of course a problem for the choice view, as it is impossible in the view to act on a lesser reward.[129]

Heyman (2009), nevertheless, calls into question the issue of choosing a lesser reward by arguing that the addicted individual may prefer staying off the drugs at a global level, but prefer them

[127] This evidence also consists of quotes from the reports of these hard-case addicted individuals describing their actions in ways that leave little room for interpretations that these actions are acted out on the basis of rewards.

[128] This is probably one of the features that puzzle in addiction. The addicted agent seems to actively engage in addictive action even in these extreme cases in which they state that they do not consider their actions to be based on rewards. Yet they seek out chances of realising addictive actions.

[129] Proponents of the disease view probably find this as a criterion for claiming that because (at least some) addicted individuals do seem to act on the basis of lesser perceived rewards, they are not really making choices but only reacting to the demands of addiction. What both of these views seem to fail to recognise is that, first, addicted individuals' agential reasons might vary; their reasons for engaging in addictive action may differ from each other a great deal.

on a local level.[130] Still, he argues that "[i]ndividuals always choose the better option" and this seems to be clearly not the case in the hard cases (Heyman 2013, 432). He does, however, point out that the notion of better option is ambiguous and as it depends on the framing of the options. Nonetheless, even granting this, Heyman's view does not seem to accommodate the hard cases. It seems that either the choice view is not meant to cover all degrees of addiction, excluding the extreme cases from its scope, or the view simply states that these hard cases are instances of something else than addictive action. Heyman (2009) does not explicitly address this problem of these hard cases, but he keeps presenting empirical evidence in favour of addicted individuals' choosing the better option and in this sense behaving in the way in which the choice view requires.[131] Insofar as these two aspects are accurate, the hard cases as well as Heyman's evidence for other kind of addictive action jointly give support that biased decision-making (in terms of preferring addictive action even in the face of grave negative consequences) is neither sufficient nor necessary for addiction.

So far I have mostly been discussing single acts, but addiction is a phenomenon that consists in more than mere consecutive single acts; it develops and the circumstances take place in a complex world, usually involving other agents too. As we have seen, to explain this only by referring to rewards seem to lead to a limited account of human action, an account that leaves some addicted individuals' action out whilst including others'. Heyman (2009) does acknowledge this challenge and he tries to provide an account of addiction that explains addicted individuals' choices in

[130] This may be due to, what he calls, the toxic nature of addictive action, i.e. using drugs deprives abstinence its value. I will discuss global and local choices below.

[131] Heyman (2009) does, however, argue that addiction is a disorder of choice. This is because, in his view, the addicted individuals tend to act more synchronically, concentrating on the single action and discounting rewards rather steeply. This is the local level in his terminology. He also identifies a feature in addictive rewards, i.e. they are toxic in nature; they make other potential rewards seem less in the eyes of the chooser. See also Kennett & McConnell 2013, 474.

"bundles" of acts rather than single acts. This does not, however, solve the problems of addicted individuals' agency even if it carries the view a little further. In fact, it allows for Heyman and his choice view to accommodate a salient feature of addiction, i.e. myopia, even if it may bring other challenges with it. In fact, myopia can be regarded as a particular type of biased decision-making that emphasises the importance of temporal aspect in action, preference to the temporally closer reward even if it were smaller. This is the second characteristic of addiction that I intended to discuss in this chapter. Let us see whether myopia is indeed a needed requirement for understanding addictive action.

To start the discussion, there is an adequate amount of literature to support the view that addicted individuals are often seen to be myopic (e.g. Ainslie 2001, Levy 2006a). Myopia occurs when, for instance, a less valuable reward (compared to another reward that is temporally further away) is chosen over the other reward that would, in the long run, provide more utility to the agent. As it has, however, been pointed out, a time preference in rational choice theory – or in reality for that matter – is just another preference (Elster & Skog 1999, 17).[132] Some prefer the present to the future more than others just like some prefer Chinese to Italian food, or drugs to abstinence.[133] In this sense, myopic action may be rational if the agent just does not value the future (rewards) that much. In fact, most people probably find this reasonable if we consider that given the complexity of the world it is safe to assume that the closer the available reward, the more likely it is that it will be there at the moment of choosing. If I am promised a five-euro note tomorrow or a hundred-euro note in twenty years' time, I will probably take the smaller note as it feels to be more certain. Time counts in this kind of contemplation. My planning rarely extends so

[132] In Heyman's account, for instance, this preference or maybe a principle as contrast to the personal preferences of the agent that guide the action it should be subjected to the motivating principle of rewards.

[133] Of course time preference focuses on different aspect of the reward. It does not concern the content but rather when the reward is wanted to actualise.

far as twenty years ahead in the future so there are plenty of unexpected things that may happen in the latter option. This kind of rationality of myopic action does not, however, erase the problem that according to the choice view (see e.g. Bicchieri 2004), the agent acts according to his preferences that are harnessed to maximise his utility. Heyman (2009, 119) sees this as a question of framing and expresses the problems that he sees in viewing the addicted individuals' action in terms of single acts: "Local choice is simple, but it ignores the dynamics that link choice and changes in value."

Would this temporal aspect be the reason why addicted individuals are seen to make biased decisions, i.e. weighing reasons in favour of addictive use despite negative aspects involved? Now, finding the relevant features with which we understand the action is a challenge of framing the options correctly, but as we have already seen it is not the only challenge. Another one is to do with framing the choice either as a single choice or bundling choices in some sequences. These may be called local and global choices. (Heyman 2009, 119; Heyman 2013, 432.) For instance Heyman (2009, 171) argues that as there are the demands of these two equilibriums, addicted individuals' conflicting choices may be explained with acting on the basis of the equilibrium that does not result in the best outcome. This is one of the factors on the basis of which Heyman calls addiction as a disorder of choice, and also provides room for myopic actions in his account. In what follows I will analyse what exactly does it mean to choose within these two equilibriums and how well does this capture the kind of issues addicted individuals face in their addictive action such as weighing the pros and cons of different options in search of utility maximisation and ending up with what seems to be a "wrong" option.[134] I do this in order to

[134] A keen gambler may gamble all of his salary even if he knows that he needs to have money for living. It seems that the gambler either engages in wishful thinking about the chances of winning or thinks that having money, paying bills and buying food, for instance, are simply overrated. He may also decide to spend all his time gambling instead of working, socialising or even sleeping.

show that addictive action may well display myopia, but again it is not necessary.

A local choice takes place when, for instance, a drug-addicted individual chooses to use drugs at a time or an alcohol-addicted individual takes a drink. A global choice takes place when the choice is considered in competing bundles. That is, the choices are treated in a basket, i.e. an ideal combination of instances using drugs and abstaining, or drinks and nondrinks. This global choice then covers a longer period of time, for instance, the following day, the whole week or maybe the rest of addicted individual's life in the sense that the instances are gathered together and thus there can be a variation of action and nonaction in a bundle or basket (Heyman 2013, 432). Addicted individuals are typically considered to choose the instant reward even if choosing it may in the long run be worse than refraining from the instant reward. They focus on the local level of making decision, choosing drugs, alcohol, cigarettes and so on at a time, or so it has been claimed. It has also been claimed that they work merely at the present moment and are not concerned with anything else (e.g. Elster & Skog 1999, 19).[135]

In terms of action, these kinds of addicted individuals resemble the agents whom Frankfurt (1988, 17) calls wantons: the agent is not concerned with the desirability of his (current)

The decisions concerning how one spends (and values) time also concern this issue.

[135] Research on addiction in neurosciences that concentrates on the attentional bias addicted individuals seem to have towards the addiction-related cues support this (e.g. Field & Cox 2008, Marhe, Luijten & Franken 2014). This way of acting is myopic, as the agent does not seem to be affected by considerations of the potentially conflicting global picture. The addiction-related cue triggers the craving that increases the probability that the agent acts according to the craving. The agent seems to leave longer-range considerations aside and concentrate on the immediate rewards. It is that particular moment that counts. The choice is isolated from any previous considerations of maybe cutting down or abstaining altogether.

desires.[136] He does not question or reflect on whether it is good to satisfy the desire for drugs in the long run for instance, but acts on the basis of his strongest, i.e. most effective, first-order desire, at that moment. There is no evaluation of the action by the agent, but the motivation is followed uncritically. If we accept Heyman's proposal that addiction is toxic in nature in the sense that it devalues other rewards, it is easy to imagine that in the case of being presented an addiction-related reward, the desire triggered from the acknowledgement of the potential reward is likely to be the strongest at that moment. The decision for acting is then hardly an all things considered judgment, as the long term consequences of those rewards are either not taken into account at all or not reflected in relation to other options, nor are the previous choices seen to affect the decision.

The distinction between local and global decision-making is easy to see in first blush: heroin-addicted individuals choose, for instance, the drug or abstinence at a moment. The instance of decision-making is clear cut in the sense that taking the drug will have immediate consequences and abstaining from the drug will have relatively quick consequences too. It is easy to see it as a local choice. Not all addictive substances are the same in this sense, though.[137] Substances that cause a sense of intoxication differ in the amount of the substance is needed in order to result in intoxication (and of course there is also individual variation in intoxication). However, when typically talking about substance addictions of this kind, there is one substance among the common list of addictive substances that differs from the other substances in

[136] Of course it could be asked how many people actually reflect on their desires in their everyday lives. It may well be that being a wanton might not turn out to be so rare a phenomenon after all.

[137] Basically any substance can be addictive. Foddy and Savulescu (2006, 9–10) discuss a desire for strawberries as an analogy to desire for heroin. Furthermore, they refer to studies that have discussed for instance carrot addiction and water dependence.

respect to its effects.[138] This substance is alcohol. Let me spend a little time with this example. As the effect of alcohol is different, i.e. proportionally less intense, from the other drugs, it is easy to illustrate global choice with an example of drinking. A choice to have a beer, for instance, does not typically have the effect of intoxicating the agent as effectively as, say, a single dose of heroin does. The effects of a local choice concerning alcohol are in some way less drastic than with other typical addictive substances, but at the same time these local choices concerning alcohol, as they are more frequent than, say, with heroin can easily be seen in a global scale considering the appeal of the addictive substance or behaviour in question. The choices an alcohol drinker makes can happen within a few minutes from each other and thus these decisions are more difficult to be considered as isolated choices unattached from previous decisions.

Furthermore, there is another point to be made about treating addictive action as a series of single actions. If we consider these kinds of acts in isolation, weighing their benefits and costs, it is easy to understand why addicted individuals prefer using substances or maintain their addictive behaviour even when we disregard the allure addictive substances or behaviour seem to offer. This has to do with the issue that the negative consequences of those single actions may not be, first, immediate, and, second, a single action is not necessarily sufficient in bringing about the negative consequences. In this light, it is reasonable to choose, for instance, using drugs as the benefits outweigh the costs. Meeting the costs of a heroin dose for one time might not throw the individual's personal budget off balance, but when this happens frequently, the person probably faces serious financial difficulties sometime in the future. The same applies for negative consequences for one's health. Of course there may be a danger of overdosing or other kind of risks that are immediate or relatively quick such as

[138] DSM-5 (2013, 482), for instance, lists alcohol, caffeine, cannabis, hallucinogens, inhalants, opioids, sedatives, stimulants and tobacco of which only tobacco is excluded from the diagnoses of substance intoxication.

infections, but the health problems related to for instance alcohol take a relatively long period of time to develop. For instance, cirrhosis typically requires a little more than once or even a couple times of drinking alcohol. Both aspects, the potentially temporal delay of costs and the probability of consequences, help to understand why addicted individuals' action seems rational in this framework. They also raise questions of valuing the reward.

Treating addictive action as a series of local choices could explain addicted individuals' action as rational when the object of addiction is regarded as greatly valuable and when the addicted individuals act in a way that maximises utility. Nevertheless, analysing addicted individuals' action on a local level fails to capture the struggle of the unwilling addicted individuals with their changing preferences concerning the substance. The local choice may, of course, vary in its results in action: there comes a moment for instance in drinking when the same kind of object, namely the drink, loses its appeal because of satiation or maybe even boredom. If preferences are taken to express the general attitude toward the good, i.e. the global level, the variation that people may have concerning the object of their addiction in their action can be explained by these two levels of framing. It is not always the reward of addictive substance, for instance, that maximises utility. Proponents of the choice view such as Heyman (2009) suggest that by taking into account the previous actions regarding the reward, the view can explain that at some point, for instance, an agent drinking alcohol stops for the time being. It is about a desirable (or even in Heyman's terms 'ideal') set of choices of drinks and nondrinks (Heyman 2013). The choice view explains this with a matching law (e.g. Ainslie 2001, 35; Elster & Skog 1999, 19; Heyman 2009, Heyman 2013): rewards are likely to be chosen in direct proportion to the amount of utility they offer and frequency of occurrence, and also their delay affects the choice but in an inverse manner.[139] This means that the higher amount of drinking

[139] I will come back to questions of value and discuss utility and delay more below.

is involved during, say, an evening, the lower the pleasure the agent obtains from drinking in the present because the frequency of those rewards satiates the preference. In some sense, the agent becomes tolerant to the pleasure. The utility of consuming alcohol decreases, because the previous choices of alcohol consumption affect the next ones.[140] The question, though, remains whether addicted individuals, or people in general for that matter, view their consumption on this kind of a global scale. Let me illustrate the global choice a little more with Heyman's example in order to bring out the challenges of this kind of view in terms of action and agency.

It should be kept in mind that as long as we accept that preferences are dynamic, the value of the reward cannot be separated from its context and this context involves previously made choices too. Heyman (2009) for instance takes example of eating Chinese or Italian food. If the agent always chooses Chinese food over Italian, the overall value probably decreases nonetheless, as the agent will probably be saturated with Chinese food in the long run if he eats only that. The value of choosing Chinese on a global level would reduce because it consists of instances of eating Chinese food with little value. So from a global perspective it makes more sense to eat Italian food once in a while even though in general the agent preferred Chinese food. According to the choice view, this insight gives us reason to consider action more in terms of bundles of single acts rather than mere single acts. As it does not make sense to talk about single acts in addiction, the same model can be applied to, for instance, drug use to the extent that on a local level the addicted individual always chooses drugs because the option out-competes abstaining from drugs at that moment. However, on a global level the situation may be different: the more there are instances of abstaining from drugs, the greater the utility,

[140] This seems also to suggest that the toxic nature of addiction is not, after all, a permanent characteristic of addiction if the addiction-related rewards undergo the same kind of value reduction as other kinds of rewards.

it is argued, as it is likely that abstaining from the drugs has a greater reward than what using drugs offers, in general.[141]

The ambivalence of addicted individuals' choices may be explained by arguing that they shift between these two frameworks, sometimes acting in the local framework and other times in the global one, or that the immediacy of one reward increases its value over the other values (and decreases the value of the other reward because of its delay). In the latter case, the better option changes in accordance of temporal proximity of the rewards. This latter suggestion concerns myopia, specifically; it involves a feature of human psychology that is common to addicted individuals and non-addicted individuals alike, namely our tendency to discount rewards. Proponents of the choice model argue that people tend to devalue future goods proportionately to their delay (e.g., Ainslie 2001, 30).

There are however different ways to discount the future. The picture becomes more complex, as it has been suggested that people discount future goods in a hyperbolic manner instead of an exponential way. In an exponential discounting the agents discount the future rewards in a time consistent way: the longer the delay for the reward, the less value it has. This applies to addicted individuals and non-addicted individuals alike, but it has been argued that addicted individuals engage in discounting more than non-addicted people. A drinker probably chooses a drink today even if he is offered two drinks tomorrow. The rewards are then evaluated not only in terms of size (for instance a drink versus two drinks), but also in terms of temporal proximity of those rewards (for instance

[141] This, however, is another assumption that may be questionable. If the potential negative consequences were in balance with the benefits of addictive behaviour, would it still make sense to automatically assume that abstinence or sobriety is a greater reward than say using drugs in a recreational way in the long run? Furthermore, what if using drugs is truly analogous to Heyman's example of choosing Chinese and Italian food? If we accepted that this analogy applies, then moderate consumption of drugs would probably be the best outcome, as the persistence of abstinence in the long run can decrease the value of abstinence because of for instance boredom. Heyman (2009) does not discuss this aspect in relation to addictive behaviour.

today versus tomorrow). Hyperbolic discounting, in turn, is time inconsistent in a way that the value of rewards is discounted more drastically when the delay is shorter than when the delay of the reward is considerably longer. (Ainslie 2001, 47.)

Discounting refers to, for instance, a case in which a poorer reward of a single drink compared to a longer term sobriety is chosen. The temporally closer reward of a single drink is valued more because of the differences in delays of those two rewards in question. However, this way of discounting does not as such commit to any specific type of discounting: it may also be exponential, but what is characteristic of hyperbolic discounting is that the curve is not linear but bowed (Ainslie 2001, 47). This means that at the time of valuing the drink today the most because of the shortness of the delay and the appeal of drinking, the agent may well evaluate that the reward of a drink in the following week be less than the reward of not having drunk at the end of month. This kind of valuing does not follow a time consistent pattern. What this kind of discounting also highlights is that preferences are affected by other features than merely the intrinsic qualities of the rewards or their consequences *per se.*

I illustrate this with the example of addiction treatment I already utilised above. Contingency management designed for substance addictions incorporates this insight (see for instance Schumacher et al. 2007). It has been argued that this treatment approach fleshes out "a puzzle" in addiction.[142] This puzzle is not in a strict sense a puzzle in the sense that it would amount to be a mystery, i.e. something that is difficult to understand or explain, but it highlights an aspect of addicted individuals' decision-making based on rewards that calls into question the traditional way of seeing the choice view in which rewards are objectively measured items which then have certain consequences and outcomes. In contingency management or systematic use of reinforcement treatment addicted individuals' attempts, for instance, to stay

[142] Hanna Pickard develops this idea with a neuroscientist Serge Ahmed. See Pickard & Ahmed 2014.

abstinent are reinforced with vouchers, prizes or privileges (e.g. Petry et al. 2007). In this framework, the reward of being abstinent is combined with this additional reward in the form of a voucher or other kind of modest incentive. This means that instead of being confronted with two options of either using drugs or being abstinent, they are confronted with two options of either using drugs or being abstinent *and* obtaining a small benefit. It seems that adding these seemingly worthless rewards to the option of being abstinent changes the addicted individuals' decisions. The "puzzle" highlights the restricted choice architecture of a common way of thinking about addiction and decisions, especially in the choice view. It is about acknowledging the human tendency to discount future goods. When the reward of abstaining is brought temporally closer than the abstract and in some sense timeless reward of abstinence, the agents start to choose differently. They will choose abstinence.[143]

Again, if we do not question Heyman's argument about the toxic nature of addiction which makes addictive rewards always preferable to other kinds of rewards, it leaves us only a certain amount of tools to explain what happens when an addicted individual wants to quit. If addicted individuals are in the grip of addiction, how is it possible that they manage to have a preference of abstaining and possibly succeed in acting according to that preference? The toxic nature of addiction should by its definition devalue other preferences thus making them ineffective, not available for being the basis of action. The value attributed to the different rewards (on the basis of which the preferences are partly formed) is of course also controversial. It is far from clear that the addictive rewards hold this kind of unquestionably superiority to other rewards simply in light of the fact that there are plenty of people who have managed to overcome addiction, with or without help.

[143] This also seems to lie behind the tradition of Alcoholics Anonymous in which giving tokens or chips marks achieved periods of sobriety (see Alcoholics Anonymous 2014).

It has also been suggested that the problem of addicted individuals has been the conflation of maximising goods with meliorating them. In this picture, the biased decision-making would amount to making a mistake. Melioration happens when the agent assumes to be choosing in a way that maximises the good, but makes a mistake. The option that the agent chooses only *seems* best at that time and the agent realises only later that it was a mistake. (Elster & Skog 1999, 19.) It could even be that "the toxic nature of addiction" could be described to be due to the conflict of mere appearance and actuality.[144] Furthermore, this kind of action resembles for instance Davidson's (1980c) view on weakness of will in which the agent fails to judge his options according to "the principle of continence."[145] It seems that both of the characteristics that I have discussed in this section, namely biased decision-making and myopic action are connected to the last characteristic that I discuss in the following chapter.

To wrap up this section, it does not seem to help if we understand the value of reward in terms of the guiding principle in the choice.[146] In addiction, utility is or has typically been understood in terms of pleasure: addicted individuals act according to their desire for pleasure (see e.g. Foddy & Savulescu 2006b, Foddy & Savulescu 2010), or so it has been claimed (cf. Kennett, Matthews & Snoek 2013). Drugs, alcohol, cigarettes, gambling and so on are seen as sources of pleasure and the agent acts in a way that maximises his pleasure in relation to these goods. According to, for instance, Heyman, these goods, when labelled addictive,

[144] Also R Jay Wallace (2003, 441) taps into this in his phenomenal account of addiction in which he explains that addicts are acting the way they are because they are confronted with "quasi-perceptual modes of presentation" of their desires. I will discuss Wallace's view more and this kind of possibility in Chapter 5.

[145] I will discuss akrasia, weakness of will, and issues relating to them in more detail in Chapter 5.

[146] Of course, these kinds of lax notions are probably good tools in some other kind of contexts but when we want to understand the differences between different kinds of actions, they do not seem to help much.

involve a characteristic that not only make these goods seem valuable but also reduce the value of alternative rewards in the eyes of the addicted individual. As we have seen, this may be, nevertheless, a rather simplistic picture, as it assumes that, first, value and motivation always go hand in hand in addicted individuals' action and, second, all reasons for action can be categorized in terms of rewards.[147] And, as Heyman's view illustrates, unfortunately it is not that simple that addiction-related rewards are always preferred. Heyman seems to try to have it both ways: explaining that the nature of addiction makes other rewards seem lesser, but yet explaining that addiction-related rewards are affected by issues such as satiation. In these terms, however, he can include myopic actions in addiction. I hope to have shown that myopia is relevant in understanding addictive action, but it is not a necessary feature. Furthermore, understanding (addictive) action on the basis of preferences either as single instances or in bundles, however, seems to leave something out when we are considering for instance myopic action or addictive action on a larger scale, specifically in terms of diachronic agency. Is addiction something that involves the addicted agent in this kind of agency? If it is the case, then the choice view faces yet again challenges in accommodating addictive action in its framework.

3.3. The challenges of diachronic agency in addiction

I have been discussing mainly synchronic agency in this chapter in relation to myopic action or making choices in general. In this light, agency consists in instances of action conducted by the agent. This is, of course, a rather narrow view on agency. It does, however, strongly involve the kind of rationality that has been prevalent

[147] I have also discussed the relationship of motivation and value in Chapter 2 and I will discuss it further still in chapter 5.

throughout the chapter, namely instrumental rationality.[148] This criterion of practical reason applies to both synchronic and diachronic perspectives on action. If one considers the means to be necessary for achieving a certain goal, one should intend to use those means to reach the goal. For instance, if an agent intends to get drunk and believes that acquiring alcohol will get him drunk, he will intend to acquire alcohol. What I have referred to as synchronic acts are actions the intentions and execution of which are relatively proximal. Acting on the basis of immediate reward is a case in point and this seems to be characteristic of addicted individuals facing a situation with potential immediate rewards. However, as we have seen, addicted individuals are not necessarily after the immediate rewards.

Also diachronic actions seem to involve the same kind of instrumental structure even if they are temporally extended. In my view, also diachronic action that concerns addiction does seem to have to some degree distinctive characteristics which I will discuss here in order to illustrate some of the typical characteristics of addictive action and in this way provide a view on addictive action that extends over the single consecutive acts (see Ferrero 2012, 144–45 for diachronic constraints for rationality). Heyman's discussion of local and global choices suggests that the choice view seems to be able to incorporate sequences of actions in its explanation of addictive action, but can it incorporate diachronic agency? The choice theory still seems to face some problems in providing certain continuity in addicted individuals' action even if the rewards of single, local, choices are affected by other choices in terms of frequency and temporal distance. Also, in light of my own interests, is my characterisation able to meet this challenge regarding the characteristics of biased decision-making and myopia? This is important question to consider as it seems that human agency involves diachronic agency and by failing to

[148] By its dictate, the agent in intending to φ and believing that ψ-ing is a necessary means to φ, ought to intend ψ, i.e. the means for reaching φ, the end (Bratman 2012, 73; Ferrero 2012, 144; Wallace 2009).

accommodate this into an account of a certain kind of action that covers, or so it seems, more than single consecutive actions. The following discussion aims to illustrate that there could still be a continuity in addicted individuals' action even if we accepted that there is no single type of addictive action but a variety of different kinds of actions.

The choice view in understanding addiction raises further questions about the addicted individuals' choosing. As we have seen in the previous sections, the view can accommodate the fact that sometimes addicted individuals do not act in a way that follows an optimal pattern of behaviour and this may be due to myopia regarding the rewards. This observation could be understood to involve diachronic agency in terms of global choice, the bundles of choices in the choice view. However, for instance in Heyman's account, the choices are still considered as separate instances even if they are bundled in a pattern, a sequence of choices. Addicted individuals shift to the local level of making choices when they should optimise their behaviour on a global level. On the global level, bundles consist of choices in which rewards value is affected by the previous and forthcoming rewards. Still, single choices that constitute the bundle seem isolated units without much continuity from the perspective of the agent as a person even if addiction seems to be more of a phenomenon that involves the person's agency and the kind that is not merely a collection of more or less problematic actions: the choices are always made in a single moment of time in which the best course of action is determined on the basis of the value of the alternative available and feasible rewards offer.

So the description above seems to leave something aside; something is missing from the picture. There seems (too) little continuity regarding agency. The agent seems to be making these sequential choices, but the only thing that persists through time is the relations of rewards on the basis of which the agent makes his choices. It has been pointed out that "mere temporal concatenation of momentary episodes of agential governance" is not enough for

constituting "continuous rational governance" that one might call a person, or will (Ferrero 2009, 406). This brings the question of agency and will to the fore. In fact to illustrate the importance of continuity and governance of human agency even more, philosophers have brought up examples that contrast human agency with other kind of striving forces; for instance, that of a bacterium in a glucose solution that moves closer and closer to the source of glucose, provided that the source does not move. The action of the bacterium follows instrumental rationality in the sense that as the bacterium is set to move toward the higher concentration of glucose, it does that.[149] Nevertheless, it seems to lack will even if there is intentionality involved in some sense. As I am arguing that addictive action should be understood to be plural in the sense that it does not reduce to a single type of action, but involves several kinds of action, it makes sense to find something that binds these structurally and temporally distinct actions together as addiction and this something could be the addicted individual's agency.

It could, however, be questioned whether addiction involves this kind of agency. In this kind of agency, the agent is required to act, "at each moment, out of *continuous* appreciation of the overall structure and cumulative effects of the sequence of her momentary action" (Ferrero 2009, 406, emphasis added). In the choice view that would amount to the agent making global choices that cover sequences of choices throughout his life. However, it seems that addiction fails to have an internally constituted unity and, moreover, the agents' continuous appreciation of the whole phenomenon may be missing. Addiction does not typically seem to be a goal in itself and the choice view certainly does not consider it such a way. The action of the agent builds upon his preferences concerning the expected rewards. Their preferences do not seem to

[149] Of course one might argue that the bacterium will probably fail to fulfil the criteria for having rational governance if rational governance requires some kind of reflection, for instance. The point is, however, that it seems that a mere sequence of moments of action does not constitute the kind of agency that human beings seem to have.

involve the idea of addiction that is in some sense on a different level than the preferences that move people. In Chapter 2 I introduced Constantine Sandis' typology of reasons in order to bring more nuances and in this way increase the understanding of actions. In Chapter 2 I also argued that *addiction* might not be an agential reason on the basis of which the agent acts, but it may, more plausible, be seen as a nest reason, i.e. the kind of reason that gives rise to reasons to act in a certain way on a larger picture. I suggest that how we normally see addicted individuals and their action does not fit this kind of picture of agential reasons: addiction is not an achievable goal for the agents in the sense that they aim for it with complex planning involving the overall structure of being addicted, nor does it seem to be obvious that addicted individuals appreciate this overall structure and its cumulative effects.[150] In fact, Heyman's bundles of rewards seem to capture addictive action better in this respect. The sequences of actions do not have a metalevel in the sense that they would constitute a web of actions that orient towards some goal, and in this case, towards addiction. But, alas, the focus is again on the action and the agency is reduced to being synchronic.

Is there any way out of this juxtaposition? Again, Sandis' (2012, 97) distinction between different kinds of reasons may offer a solution by providing more tools to understand *addictive* action.[151] Nest reasons are reasons behind the reasons for action which explain why the agent took his agential, i.e. his practical reason to be a reason for his action. Nest reasons provide an explanation about the reasons why the agent takes his agential reasons to be his reasons for action. So instead of seeing addiction as a goal for those agential reasons, it is more plausible to consider

[150] However, Heyman (2009, 64) seems to suggest that, on some level, addiction may be a goal when he provides the first-person stories and concludes that "[w]hen addicts speak for themselves, quitting drugs becomes part of the story of addiction". This is, nevertheless, in my view a reference to the narratives of people's lives and not a comment on their individual actions.
[151] See section 2.2.3.

it as a nest reason, a psychological background that offers reasons for action without being a direct contributing factor in the means-to-an-end kind of rationality. Maybe this kind of nest reason would provide the kind of continuity in intentions that reach over time in a way that amounts to diachronic agency? So instead of seeing addiction as a goal in the similar sense that for instance writing a doctoral dissertation is, consisting in multiple intentions and various different kinds of actions, addiction is similar to a hobby that does not have any ultimate goal like a race to win or a novel skill to acquire. A person whose hobby is dancing may take part in dance classes just because of it without any further goals (than in this case probably finding pleasure).[152] What is also important to notice here is that the addicted agent similarly to the dancer engages in addictive action on purpose and actively.

Also, if we discuss addiction in terms of preferences and not in terms of nest reasons, the choices addicted individuals make can be viewed in terms of actions and omissions. Understanding addiction as a nest reason for an agent's reasons for action sets the framework in a way that allows addicted individuals have a variety of different kinds of agential reasons for their action and still have the same nest reason, i.e. addiction. This can also accommodate the idea that people who do not engage in using addictive substances may well do so because of addiction. So addiction is the nest reason why they abstain. This also illustrates the point that if we understand addiction as a nest reason, it does not seem to have a causal power with which it coerces the agent under its dictate.

There is another potential objection to be made to diachronic agency in addiction. The idea of diachronic agency conflicts with some of the means that stem from the therapeutic setting in addiction treatment. Instead of highlighting the diachronic agency, the motto "one day at a time" is found to be effective among

[152] Needless to say, there may be a variety of reasons and goals for an agent who dances such as getting into shape and acquiring more skills in dancing. However, imagining a person who lacks these kinds of goals and still goes to the classes is still possible.

recovering addicted individuals (Neale et al. 2012; Uusitalo 2015). This works as an illustration that the general considerations of what kind of temporal structure a good kind of agency holds seems to depend also on the context. Nevertheless, this observation captures not only the temporal dimension of agency, but also its executive aspect, namely the resources of the agent's self-control.[153]

It should be noted that here is another danger, however, in arguing for diachronic agency in addiction that resembles the kind of critique the (rational) choice view in general and in relation to addiction has received, namely setting the human agency to too high a standard, intellectualising human action to too great an extent. The trouble in taking the rational choice model to describe reality in general is that it assumes a non-existent "perfect rational man" (e.g. Rubinstein 1998),[154] but so do the accounts of diachronic agency seem to assume a rather detailed plans that agents first deliberate and then execute. They are described performing "activities that are not merely continuous over time, but temporally integrated and unified" (Ferrero 2009, 403). This seems to be more than mere consistency and maintenance of some kind of action. In light of my own doctoral dissertation process, I do not doubt that people in general are able to engage in such activity, but I am, however, sceptical whether this kind of agency can shed light to addiction. However, it is important to grant the kind of diachronic agency to addicted individuals that involves agential activity regarding their addictive actions. At the same time, I try to avoid the too substantial accounts of the self to provide a suggestion that keeps the variety of different kinds of action under the phenomenon that we understand to be addiction, given the

[153] I will discuss self-control in more detail in Chapter 5 that concerns the will view that specifically focuses on the agent's guidance over his action.

[154] Ainslie (2001) and other proponents of the choice view of addiction however base their view on behaviour that is expressed in animals starting with pigeons. It seems clear that they do not assume this perfect rational man and also, the fact that the assumption does not base on reality, it still works as a model in explaining different phenomena.

individual variation of human beings and their actions.[155] Take for instance an example of the distinction between motivated and unmotivated desires (Schueler 1995, 16-17) or the similar distinction of desires that we find ourselves with and desires that come about by deliberation, choice or intending (Wallace 1999). I have argued that both kinds of desires in both distinctions seem to fit descriptions and explanations of addiction.[156] If the nature or origin of desire alone does not provide means to distinguish addictive action from non-addictive action, then surely we need more means to make that difference and a loose notion of diachronic agency is in this light called for.

3.4. Concluding remarks

In the beginning of this chapter, I motivated the need for more than one characteristic in addiction with a case of framing the options in the bioethical discussion about heroin-addicted individuals' options in a situation in which they are asked to participate in a trial in which heroin is prescribed to them. As it has become clear throughout this chapter, the framing of the options in the proponent of the choice view Gene Heyman's account is made on the basis of rewards. The notion of reward is indifferent to its content so the view seems to be able to capture the option set of the agent in this respect. However, relying on the idea of addiction's toxic nature and the principle of maximising utility, the view fails to acknowledge and in this sense include various different kinds of motivations that may come into play in addicted individuals'

[155] Leaving aside questions of personality and identity, I will narrow my discussion of the self to concern the discussion about the will and self-control in Chapter 5.

[156] As I have argued in the previous chapter, phenomenal characteristics do not move the agent as such, but they affect the ways in which the agent makes decisions. This again brings us back to the notion of will, self-control, and practical reasoning as such. I will come back to these in Chapter 5 in which I introduce the last feature of my characterisation of addiction in more detail, namely akrasia.

decision-making in the framing of the options. Relying on the sufficiency of addiction's lure, the view falls short of capturing addicted individuals' potential motivations to seek remedy for their condition and the framing of the options seems inadequate.

As the previous chapter showed, the reliance merely on the strong desire as a sufficient characteristic in addictive action falls short and more characteristics is called for. In general, the framing of the alternatives the agents have in addiction seems to carry importance that may have gone unnoticed for instance in that discussion. In this chapter I have mainly focused on two characteristics of addiction, namely myopia and biased decision-making, with the help of Heyman's account of addiction as an example of the choice view. These seem to be characteristics that are also highlighted in Heyman's view and lie in the core of the choice view.

Viewing addictive action as myopic actions illustrates the normativity of temporal structures in understanding human action in general. However, myopia is not necessarily problematic as such even if it seems to undermine what we typically consider to be rational action. On the whole, it is far from clear that all addicted individuals are myopic in their addictive action. If addicted individuals are considered to suffer from a disorder of choice, like Heyman suggests, on the basis of their failures in optimal patterns of behaviour, it might not only be addicted individuals who fall short in this respect. It is clearly not a sufficient condition of addiction. As the case of addicted individuals that lower their tolerance by undergoing withdrawal shows, myopic view on one's action is hardly a feature that is always present in addiction. This strongly suggests that it is not necessary. If the myopic behaviour is a matter of degree and if there are, as I suggest, addicted individuals who do not act in a myopic way, the choice view probably faces problems with its conception of addiction.

My discussion of myopic action also underlines the question of how the characteristics that I have identified in the introduction relate to each other and jointly form the description for addictive

action.[157] The two features in question in this chapter seem to support the idea that there is something about addiction as action that puzzles people; addictive action involves different kinds of (ir)rationality. This irrationality is not the kind that would make it difficult to identify the action as addictive, but in some respect, addictive action does not make sense even if we seemingly find no problems in identifying addictive agents. It is the kind of puzzlement that raises questions of why someone acts in such a way if he has a choice to act in another way. The description of addiction sometimes involves features that may be understood causally, such as the strong desire discussed in the previous chapter. In some sense providing such causal reason for addicted individuals' action steers us away from the other kind of considerations of why addicted individuals act the way they do. Even if causal reasons such as desires or preferences explain addicted individuals' action, they fail to shed light on the purpose and meaning of that action on another level. Heyman and other proponents of the choice view try to provide an answer to this by arguing that the purpose is to obtain the best reward in that choice situation. This is an important attempt because if the puzzlement people find in addiction concerns the questions of why they are related to meaning and purpose, the causal explanations may fail to dissolve the puzzlement when they are given merely in terms of addictive desires or preferences.

So, even if a common response to addiction may well be puzzlement over the observation why addicted individuals act the way they do, their action is, nevertheless, intelligible on some basic level. It is action in contrast to, say, something merely happening to the agent and we need to understand addiction in light of this kind of agency with a diachronic framework. On the whole, rationality and reason seem to have at least two roles in considerations of

[157] In order to finalise my argument, we need to look at the last remaining characteristic.

action.[158] First of all, rationality helps us understand and possibly differentiate action as non-addictive action and as addictive action. For instance, the disease view discussed in the previous chapter does not typically seem to question the instrumental rationality of addicted individuals. This also fits to addicted individuals' self-reports, as Heyman, too, points out; a recovering heroin-addicted individual highlights acting according to her priorities:

> "Getting some money from somewhere for the next day, that was always top of my list, always, always top… - - " (Neale at el. 2012, 88)

Nonetheless, the heroin addicted individual's quote could be read to illustrate her preferences on which she has reflected when she prioritises acquiring money. She tries to maximise her utility. As the proponents of the choice view argue that addicted individuals choose what they consider worth having (e.g. Heyman 2009). Charland's Cynthia, for instance, prefers heroin over abstinence and acting in a way which is in line with this supports the claim that the addicted individual is choosing and behaving in this sense rationally. In the choice view, addicted individuals' action is rational in a sense that they follow their preferences. Addictive action is thus in this view the same kind of action as any other action (e.g. Becker & Murphy 1988). If addictive behaviour bases on the evaluations of the potential consequences of the alternatives of action, just like any other kind of behaviour, we can also ask why we even make the distinction between addictive actions and actions that are not addictive. Even if the choice view seems to treat addicted individuals on a par with non-addicted individuals in their action, they still seem to make the distinction as can be understood from the title of Heyman's book, for instance: *Addiction – a disorder of choice.* Heyman does not seem to be alone in this. A proponent of the choice view may, for instance, explain the difference in different ways of discounting (e.g. Ainslie 2001). In

[158] The second role I will consider in more detail in Chapter 5 when I discuss the substantive criteria we may have for rational action.

this view it is not claimed that addicted individuals' action is necessarily different in kind but in degrees of discounting involved in the choice. So the reason for differentiating addictive action from other kind of action must then rest on some other aspect, if that kind of distinctions is made. The proponents of the choice view seem to do it with help of myopia and biased decision-making.

So finally to wrap up the chapter, here I hope to have shown that the kind of actions I have looked at here are characteristic and a part of addiction, but are not the whole story in addiction. These features are present in the choice view of addiction, in particular, but as far as I am successful in arguing that the two features are not sufficient in capturing the phenomenon, the choice view on its own also falls short. I have here argued that even if these two features characterise addictive actions, they are not sufficient in capturing the phenomenon excluding for instance the struggling addicted individuals that seem to fit the common understanding of addictive action and describe it.

Furthermore, as it was with the help of the choice view that I illustrated my points, it is also a view that receives my criticism on these matters. First, the choice view fails to capture other salient features that are understood to be part of addiction and, second, the features that the choice view identifies are not necessary ones in addiction. The proponents of the choice view for instance fail to explain action that is based on acknowledged lesser rewards. The biased decision-making is typically in the choice view considered to involve overvaluing addiction-related rewards and it is simply unintelligible that an addict could act on a lesser reward. Falling short and exclusion of other features is a problem for the view especially when it is accepted that the features present in the choice view are not necessary in addiction. Despite the choice view's appeal in "normalising" addictive actions, it seems to suffer to some extent from bounded rationality and in explaining addiction it falls into problems when we consider the hard cases of addiction. Further, the way in which preferences are understood in the view implies that there are formal constraints that may pose challenges to

the view in the sense that they do not necessarily meet with the reality of addicted individuals and their action, or the reality of any other agent for that matter. More nuanced view on action is thus called for and it needs to involve diachronic agency.

4. A note on the conflict between the choice view and the disease view

The two previous chapters illustrated the main points of both the disease view and the choice view, respectively. As shown in Chapter 2, addiction is usually explained by referring to the role of desires in the agent's action: Some argue that the desire is compulsive in the sense that it deprives the agent of their agency: The proponents of the disease view regard the addicted individuals as helpless in the face of addiction. According to this view, addiction shapes the addicted individual's brain in a way in which quitting becomes, if not impossible, then too difficult. In Chapter 3, it was seen that it is a different kind of desire that guides the action; it is argued that it is a rational choice, the agent's preference in the circumstances. According to the choice view, addicted individuals do act according to their preferences. The problem, in their view, seems to be that addicted individuals discount rewards in problematic ways. They maintain that discounting instant rewards is greater because of their temporal proximity and is typical of people in general, but addicted individuals seem to engage in it more. These two views are usually regarded as incompatible with each other. They seem to suggest that either addicted individuals are not rational agents, but desire-manipulated bystanders in respect of their own action, or addicted individuals are rational agents acting according to their preferences even in respect of their addiction. The two opposing views see addictive action as either stemming from compulsion or based on choice and, because of this contrast, incompatible views on addictive action.

However, in this note I will argue that, in contrast to how it may seem, these two views do not describe different groups of addicted individuals, but seem to rely on more or less the same group of people. Moreover, these views are not conceptually incompatible as they operate on different notions of desire. The disease view employs a phenomenal account of desire, describing it

as resilient, powerful and urgent, whilst the choice view regards desires as preferences, i.e. rational desires that concern rewards that the agent desires in relation to other rewards. These two ways–the disease view and the choice view–of explaining addiction highlight two notions of desire that capture different descriptions of addicted individual's action. In this note, I will first look at whether they really are different descriptions or whether they actually explain different phenomena. On a greater scale, this note further motivates the idea that addicted individuals may act in a variety of ways, all of which fall under what we understand to be addictive action.

4.1. Different populations, different cases, and the level of description

One of the issues in analysing addiction is the question of whether we are actually analysing the same phenomenon. An addicted individual who compulsively seeks drugs despite the obvious negative consequences his actions seems to be a completely different to someone who weighs the costs and benefits of his drug use and acts in a way that maximises utility. These are just two kinds of depictions of addicted individuals that can be encountered in research. The question then is whether researchers actually have the same people and the same kind of behaviour as the object of their study. Is it really the same phenomenon these two views are considering? Heyman (2009, 78) also voices this worry. He suggests that "[t]he simplest explanation of the discrepancy between research findings and received knowledge regarding the nature of addiction is that experts are basing their understanding of addiction on addicts who show up in the treatment clinics", whilst his view "is based on studies that selected subjects independent of treatment history, with the goal of obtaining a representative sample" (ibid.). I agree with Heyman that if we want to analyse addiction as a phenomenon, we should not merely concentrate on the addicted individuals that seek help or are objects of interventions of some kind. However, as I also pointed out in the

previous chapter, his view seems to exclude the extremely hard cases with the insistence on the idea that addicted individuals act according to optimal rewards. This suggests that despite Heyman's claim that he covers a broader range of addicted individuals, he seems to omit the extreme, hard, cases from his categorisation while including others. This seems to be the case even if he claims that his view covers addicted individuals with treatment history and those without. In contrast, the disease view seems to leave the other, less severe, end of the spectrum of addicted individuals aside, but they too argue that they cover at least the addicted individuals with treatment history.[159] Even if the margins of the group of addicted individuals may differ in both views, they seem to cover the same kind of individuals, in general. The following takes a closer look at the addicted individuals in question.

Sometimes the choice view and the disease view seem to have opposing outlooks on addiction and this can be highlighted in the way in which the individuals behave, as illustrated in the previous chapters. Charland's (e.g. 2002) view is that the values addicted individuals act on are not their own but have undergone a change. In his view the changes in the brain reinforce the desire for the drug. Basically this seems similar to Heyman's (2009, 22) account according to which "[v]alues, experience and receptor bindings all influence how neurons behave --." However, a shift occurs when Charland reads these changes as being causally determining for the agent and in some sense external to the agent's control. Heyman, in turn, argues that "personal values and economic options can affect the consequences of drug use at the level of receptor binding and neuronal interactions" (ibid.). Thus, they seem to agree on the ingredients of the action, but the difference lies in the ways in which these relations to the action and each other are understood. For instance, the power of the

[159] The proponents of the disease view, however, cannot maintain that not being able to refrain from addictive action as a criterion for addiction, as this would seem to nullify the diagnoses of recovering addicted individuals and question therapeutic attempts from the very start.

phenomenal desire seems very different in these views. The proponents of the choice view maintain that addicted individuals act on the basis of the same principle of action that non-addicted individuals do. This does not mean, however, that all the proponents of the choice view would want to reject the distinction between addictive action and non-addictive action in terms of rationality. As has been demonstrated, Heyman (2009, 124) argues that addiction is a disorder of choice. He maintains that it is a choice, but it is deficient in the sense that it is behaviour that does not have an optimal pattern. So it may well be instrumentally rational, but the choices of addicted individuals fail to fulfil the rational choice criteria in terms of maximising utility on a larger scale. The disease view emphasises that the desire for the drug simply takes over the agent's control over his actions and insofar as the drug use happens to have beneficial consequences for the addicted individual, it may be considered rational. Nevertheless, the actions are not up to the addicted individual to be modified to a great degree or refrained from altogether. It then looks as if the two views discussed here agree on this point concerning the fact that the actions of addicted individuals do not often have an optimal pattern, even if they disagree on some other aspects of that action.

On a metalevel, this kind of potential difference between the explained or described action, i.e. the explanandum in the disease view and in the choice view also highlights the importance of nuanced analysis of action.[160] If addiction is viewed in terms of the standard causal theory of action, the differences of these two views become trivial. The relevance of the different features of different kinds of actions becomes blurred in to the general framework, and an understanding of the different kinds of actions cannot be achieved. This has already been shown in the previous chapters with both of the views. If we actually want to understand different

[160] It is important to notice that in order to even begin to explain causally a phenomenon, it is necessary to describe the explanandum, and this latter project is the main theme of my thesis.

kinds of actions in addiction, it is necessary to have a more nuanced theory to accommodate all the different aspects of the phenomenon.

Hence, it seems that both views at least attempt to target some of the same population in their descriptions; however, in order to analyse the actions of addicted individuals in a meaningful way, it is necessary to employ more nuanced analysis of these actions than merely arguing that their actions stem from desire. What follows in the rest of this chapter is a brief return to the two notions of addictive desire that these views involve in order to nuance the description, and also show that the two notions are not incompatible as such.[161]

4.2. The notion of desire in the views

Initially, I will return to my analyses of the notion of desire in the disease view and the choice view of addiction in order to show that despite the first impression of a conflict between the two, they can be seen as compatible even without a reference to different explanandum, i.e. different populations. Addiction is often explained by referring to the role of desires in the agent's action and both of the views rely on this in their notions. However, both characterise the desire in different terms. The important questions are what the relation of these two notions of desire is and whether this affects the action descriptions and explanations, especially concerning addiction.[162]

First, I consider what kind of issues are involved in the notion of desire in the light of the two views concerned, and then see how these fit their descriptions of addictive action. The proponents of the disease view argue that the desire is compulsive. This means

[161] In fact, these has been visible in my discussion of the disease view, particularly as Charland's view on addicted individuals' action seems to be very nuanced and sensitive to various kinds of motivations an agent is confronted with.

[162] As we have seen in the previous chapters, neither of them suffices in explaining the phenomenon of addiction.

either that it deprives the agent of his agency or that the desire is stronger than the will of the agent. Whatever the case may be, it is assumed that the desire has causal power: It moves the agent. The proponents of the choice view, in turn and partly in contrast, argue that addiction is a rational choice, the agent's preference to use a substance or engage in addictive behaviour such as gambling in the circumstances, even if it may be irrational in the sense of being short-sighted or biased in some other way. Due to these kinds of descriptions, the disease view and the choice view can be regarded as more or less incompatible with each other depending on the point of comparison, particularly in terms of freedom.[163] I suggest that by distinguishing between the two notions of desires, it can be seen that the notions both describe addictive actions, but also that the notions are not necessarily mutually exclusive.

In Chapter 2, I illustrated that the disease view seems to function with a notion of desire that is phenomenal; the desire being strongly associated with cravings and compulsion. Charland and other proponents regard this as the basis on which addicted individuals function. These individuals act on the basis of their strong, if not compulsive, desire for drugs. However, the choice view does not differ very much from this picture in the sense that the proponents argue that addicted individuals always act on the basis of their preferences, i.e. on the basis of their desire to obtain the best rewards. As was seen in the previous chapter, being motivated by a lesser-perceived reward is impossible in the choice view. Proponents of the disease view probably employ this as a criterion for claiming that because (at least some) addicted individuals do seem to act on the basis of lesser-perceived rewards, they are not really making choices but only reacting to the demands of addiction. They are acting in a compulsive way in this respect. On the level of action explanations, though, the proponents of both

[163] I will return to the issue of freedom in the following chapter. For now it suffices to note that the driving force in the choice view need not be any freer than the compulsive desire in the disease view if freedom is understood as the ability to do otherwise and the agent being determined to act on the basis of either the most preferred reward or the strongest compulsive desire.

views then seem to argue that the addicted individuals act on the basis of their strongest desire when the desire is understood as motivation. However, the kind of desire in question in the views seems to differ. As strong phenomenal desire for drugs and a preference targeted to an optimal result in terms of rewards, seem to give a different kind of description of the phenomenon.

What the proponents of the disease view, however, question are the content of the preferences on the basis of which the addicted individuals act. Addicted individuals' actions seem to lead to undesirable results even in their own eyes. It seems that in their view, addiction is dictating the content of those preferences and they are not a result of the agent's own decision-making. As mentioned above, this is the kind of critique that the choice view does not touch upon, at least, on this level, as the content of the preferences is not restricted. Charland's (2002, 37) informant, Cynthia, is a good example of this kind of questioning. Her recovery from heroin dependence was treated in a clinic to which Charland had access. When confronted with questions concerning whether she could imagine people like her confronted with a decision about participating in a heroin trial with the assumption that they could genuinely choose, she responded in disbelief and amazement. It seems that the anticipated sensuous experience of the satisfaction of the phenomenal desire for heroin is too compelling to be refused. Along these lines, the assumption behind the disease view is that addicted individuals always prefer drugs over abstinence when it is assumed that objectively speaking the consequences of, for instance, using heroin cannot be preferable to abstinence.[164]

Not only does Cynthia have a problem in the sense that what she prefers is not up to her, not in her control in some sense, but she also faces problems as she may be a typical heroin-addicted individual in that her evaluation of the consequences of her heroin use is biased (Charland 2002, 37). She cannot choose not to prefer

[164] Heyman's point about the toxic nature of addiction seems to resemble this idea. See for instance 3.2.2.

heroin to anything else.[165] The disease view seems to differentiate non-addicted action from addicted action in terms of this kind of freedom-related activity; whether agents are in control in choosing according to their preferences, and, with addicted individuals, according to the disease view, this is not the case. As has been pointed out, this view on addiction consists of the kind of action that is intentional even though it may not be reflexive (Henden 2013, 397).[166] The addicted individual does not question the plausibility of his preference.[167] This does not, however, seem very different from the choice view as the rewards determine the addicted individuals' preferences. Moreover, as the toxic nature of addiction makes rewards connected to addiction superior in the eyes of the agent, he acts accordingly and does not question his preferences. In instrumental rationality, nevertheless, this is not an issue. If rationality only concerns acting on the basis of preferences and obtaining the rewards that determine the preferences, the action of addicted individuals seems to satisfy rationality. Neither of the views on addiction discussed here tries to deny this and the notions of desire that they use do not necessarily conflict with each other, as both capture different aspects of the same kind of action. Felt

[165] It could also be argued that no one can fully control their preferences: I just cannot choose whether I like cherries. This is, of course, true, but here, the question of preferring one option over another is not as simple as what the agent wants or likes in a narrow sense. It may well be that a person who has a taste for cherries may prefer not to buy them on an occasion. Liking or wanting may be a reason for choosing something, but it does not have to be the whole story, the decisive factor on the basis of which a certain action is chosen. The disease view, though, seems to imply that in addiction preference of this sort will necessarily lead to action.

[166] In Henden's view, however, there seems to be a strong assumption that addicted individuals' preference to act according to their addictions is an exemplar of impairment of their rational will and a functional rational will would result in the cessation of addictive behaviour. This corresponds with the assumption in the disease view about the abstinence-based ideal in the action of an addicted individual.

[167] In Harry Frankfurt's (1988, 16) terminology, the addicted individual would be a wanton; an agent who lacks second order volitions. This kind of agent does not have the kind of second order desires about the first order desires that they want to be their will.

craving most likely makes the satisfaction of that desire the most rewarding in the addicted individual's eyes. By referring to preferences, the choice view highlights the fact that addicted individuals are not robot-like agents merely reacting to stimuli, but the view still maintains that the agent is still bound to act on the best reward there seems to be available. In turn, the disease view focuses on the idea that the desire for the drug is the strongest and it does not leave room for the agent to act otherwise. It seems that in both views, there could be enough space to accommodate other aspects of desire.

Both of the views, however, seem to present their notion of desire as rather one dimensional; phenomenal desire for the disease view, and another kind of desire for the choice view. The views seem to fail to accommodate that the driving forces behind the addicted individuals' actions might vary, to a great extent, when engaging in addictive action. The proponents of the disease view should acknowledge that the phenomenal desire to use drugs is not the sole basis of addiction, but that the agency of addicted individuals involves more complex issues. In addition, even if the proponents of the choice view allow the preferences to include different kinds of content to the preferences, but they still fail to recognise any other moving principles than that of maximising one's utility in terms of rewards.

Despite the conceptual compatibility of the two views in terms of desire and their rather narrow view on agency and action, I still maintain that addicted individuals are agents in the sense that they are at least weakly reason-responsive and in this way in control of their addictive action.[168] This, of course, is in conflict with the standard understanding in the disease view and presents a challenge for the choice view in terms of allowing a wider understanding of the moving principles by which these agents react. In any case, by presenting the two ways in which desire can be understood in addictive action explanations in the previous chapters, I have so far argued that explaining addictive action

[168] This will be discussed in the following chapter.

should not be reduced merely to addictive desire–however it should be understood–and that addictive action is more complex than a simplistic model of a strong desire or preferences pushing the agent in the direction it dictates. My arguments rest on the assumption that addicted individuals are agents and this I hope to have already established in the previous chapters.[169]

4.3. Concluding remarks

To conclude the considerations of this brief interlude, the two views of addiction, the disease view and the choice view, seem to maintain contrasting views about the explanandum, i.e. the addicted individual in his addictive action, even if they claim that their focus is at least partly overlapping. The disease view highlights the notion that addictive action and non-addictive action are different kinds of actions, whereas the choice view does not see any contrast between them. This difference does not seem, however, to hold on closer scrutiny. Further, in agreeing with the choice view that there does not seem to be any major difference between addictive action and non-addictive action on the level of a single action and in terms of instrumentally rationality, it would seem to mean a failure to provide tools for making distinctions between different kinds of rational action. If, for instance, we want to maintain that there is a difference in the action of a heroin-addicted individual when he injects the drug *qua* drug in drug use and when he injects the same substance as a form of a treatment, then the choice view needs more tools to differentiate these kinds of actions. Both of the actions have reasons and can be considered rational in this sense. The choice view or the disease view, however, cannot accommodate their difference in meaning on this level. Accepting that both of the addicted individuals act on the basis of potential rewards, the notion

[169] This is especially relevant in my discussion of the different motivations that individuals addicted to heroin may have when they consider whether or not they participate in research on heroin-assisted treatment.

of reward seems to provide little information about addictive action, or action in general, and its further explanatory power seems weak. It could then be asked whether a generic theory of action is actually is worth having to explain phenomena such as addiction, when they seem to involve different kinds of actions, including rational action.

Furthermore, even if the proponents of the disease view and the proponents of the choice view seem to disagree with each other, I have argued here that their views rest on different notions of desire. In my view, these different notions, namely, the phenomenal desire and preference, are not as such incompatible with each other. This is important to notice as the juxtaposition of the views is usually assumed to rest on the kind of desires the agent has. The proponents of the disease view regard addicted individuals as being under the control of addiction and the proponents of the choice view the contrary. However, with regards to the action theoretical assumption both of the views hold true, it seems that the causal force they both attribute to these desires is problematic.

First, the phenomenal desire or preference is not the kind that by default deprives the agent of his alternatives with its strength. The persistence of the desire may be such that it interferes in the deliberation in one way or another, but it is hardly a causal force that brings about the addictive action regardless. For instance, the kind of reasons addicted individuals have behind their addictive action may not necessarily change when they are treated by manipulating the reward centre or other areas of the brain.[170] The recognition that addicted individuals have different reasons for their behaviour (Pickard 2012), some of which can be regarded as rational in the sense that they are intelligible and justified, draws attention to the point that addicted individuals may still find reasons

[170] For instance, in the case of treating addicted individuals with deep brain stimulation that is targeted at the nucleus accumbens, it is assumed that the problem of addiction merely centres in the phenomenal aspect of the desire, namely the perceived reward and subjective craving, and there is a danger of ignoring the importance of other aspects of addiction, ranging from environmental cues to social relationships (see e.g. Field and Cox 2008 and Pickard 2012).

for continuing the kind of action that triggered their addiction in the first place regardless of a potentially permanent and total remission of the craving. It is still important to notice that the phenomenal notion of desire may yet provide a reason or a further motivation for the addicted individual to act accordingly.

Second, desire as a preference highlights the cognitive assessment of the addicted individual's own action. The assessment may suffer from instances of irrationality such as myopia or other kind of biases that result in chronic frequent preference reversals, but they involve an evaluative judgment in terms of rewards or utility that motivates the addicted individual to action. The choice view, nevertheless, also fails to explain addictive action only in terms of the desire, even though the problems it faces are different from those raised by the notion of phenomenal desire.

To maintain that the strongest desire is the one on which people act is also challenged by the variety of different kinds of addictive action.[171] Addictive action may not be the paradigmatic case of human action, but it still captures features of human agency in a way that should allow it to be understandable and explainable. It does not fall outside the scope of actions that are in this rather minimal sense intelligible. It then seems that the problem of understanding (and explaining) addiction in these two views does not itself rest on the two different notions of desire, but more on the background assumptions about the simple causal theory of action. As both of the views seem to struggle in presenting an adequate picture of the addicted individuals' action–whether they have a problem with the premise of acting on the strongest desire or with the premise of the agent's judgment about what would be better to do being his strongest desire to act. The setbacks these faulty

[171] I am not questioning the truism that people act in the way they have the most motivation for at the time of acting. This seems to be a trivial observation. Here the notion of strength may refer to phenomenal aspects like in the disease view or to the expected reward like in the choice view. What I want to question here is the claim that there is only one "principle of action" to which people act according – be that the strength of phenomenal stimuli received as a biological organism or maximisation of utility.

assumptions may generate should be dissipated by correcting the assumptions.[172] In order to develop a view on addiction that actually captures the phenomenon, it is necessary to have a richer conceptual understanding of human agency (and action) than that provided by the simple causal theory. Maybe another view will be able to cast more light on the present attempt to understand addictive action.

To sum up the views of addiction thus far discussed, one of these views seems to suggest, roughly, that addicted individuals are not rational agents, but desire-manipulated bystanders in respect of their own action. The other view suggests that addicted individuals are rational agents acting according to their preferences even in respect of their addiction. What follows in the next chapter, is the third view, which suggests that addicted individuals are weak-willed and either act against their better judgment or change their preferences in a myopic way.[173]

[172] The consequences of maintaining these biased and even incorrect views may be devastating. Consider if, for instance, an addicted individual is told that he is suffering from a relapsing brain disease which causes his addictive action, how can the individual then he be expected to efficiently form an intention to abstain from his addictive behaviour and act on it?

[173] These three views are common portrayals of addicted individuals from fiction to reports by addicted individuals and theories of addiction (see for instance Neale et al. 2012, 54-57 on recovering heroin-addicted individuals' self-portrayals) and, in my view, they select different but equally prominent features of the phenomenon.

5. Agency and self-control: critique of the will view

As mentioned, there are more than the two views of addiction–the disease view and the choice view–in the contemporary academic literature. In the introduction, I identified a will view that can be considered to be a form of the choice view in the sense that addicted individuals are seen to make choices, but the choices they make are not the ones they think they ought to make or they ought to make. Foddy and Savulescu (2010, 2), for instance, discuss the choice view as "the willpower view" and they argue that it concerns the battle of control in the addicted individuals' action. As such, they maintain, the view is not incompatible with the disease view, but the motivation for forming the view is different. Disappointingly for our purposes, they provide an answer that does not really shed light on the difference on the level of action, but rather on the different levels of description: Foddy and Savulescu (2010) explain that the willpower view involves phenomenology and self-reports, while the disease view rely on neurobiological evidence.[174] In any case, Foddy and Savulescu's description of the view fits well to the account of addiction by R. Jay Wallace (2003) who depicts his view as phenomenological. In this chapter, Wallace's account will follow my considerations of weakness of will and self-control to illuminate the salient characteristic in this kind of views that culminate in the problems of addiction to the agent's will.

My starting point in this chapter is that, in addition to the disease view and the choice view, a third view is useful to identity even if it may be seen as a modification of the choice view in some respects.[175] According to the will view, addicted individuals suffer

[174] Of course this is not a clear distinction if one considers for instance Charland's account that I discuss in Chapter 2.

[175] This, however, depends on how weakness of will is defined. It may be regarded as mere irrationality or it can be understood in terms of morality or a

from weakness of will: they either go against better judgment or change their minds when the instant good appears to them (see Levy 2006b, Wallace 2003). In other words, they either act akratically or undergo unjustified preference reversals. How is the will view then a modification of the choice view? Similarly to the latter form of the will view, the proponents of the choice view consider addicted individuals to act according to their preferences and try to maximise their utility and in this way they are considered to act rationally (see Becker and Murphy 1988, Heyman 2013).[176]

It needs to be noted though that, in general, it is typical for by and large all people to discount the instant rewards greater because of their temporal proximity. However, addicted individuals seem to engage in it more and this can be regarded as problematic. (See e.g. Levy 2006a.) As a proponent of the will view, Wallace (2003, 445) agrees with this, but says that discounting the future goods as a result from the effects of "A-impulses on the process of deliberation" does not amount to a defect of will as such even if it "deserves to be thought of as at least a partial impairment of our capacities for reflective agency." In contrast to the choice view, however, Wallace (2003, 448) suggests that "[m]uch in the way of Aristotle's *akrates,* they [i.e. addicted individuals] will find themselves unable to focus with full concentration on the normative conclusions that they accept." Wallace's observation seems to confirm that addiction may involve or at least resemble weakness of will that cannot be explained simply with reference to discounting or framing issues.[177]

---

form of incapacity in which case it would be compatible with the disease view. I will return to this distinction in 5.3.

[176] The problem if there even is one (cf. Becker & Murphy 1988), from the perspective of the choice view, seems to be that addicted individuals discount the goods in problematic ways, suffering from myopia or other bias in their deliberation (Henden et al. 2013, Uusitalo et al. 2013), or framing their choices unwisely (Heyman 2009, 2013).

[177] Before I set off with my analysis, I briefly want to emphasise that in this chapter, I will concentrate on akratic action, specifically, as akrasia can also be viewed in terms of character traits which do not necessitate that an akratic agent always acts in an akratic way (see Mele 2012, 3). Aristotle (1996, NE,

My discussion of the will view then gives me reason to focus on the fourth characteristic of addiction that I identified in the introduction, that is, weakness of the will or more specifically akrasia. This chapter, roughly, attempts to show that addictive action can be, and typically is considered to be, weak-willed action, as Wallace (2003) points out in his account above. However, at the same time and importantly it should be acknowledged that there are many cases in which weakness of will does not realise in the actions of an addicted agent and, partly because of this, simply relying on an account of addiction that stems from consecutive acts of weakness of will fails to make justice to the phenomenon.

In the following pages, with the help of Wallace's (2003) account of addiction, I explore different kinds of challenges the will view may face in terms of questions related to weakness of will and analyse their compatibility and relevance to addiction. First I review standard accounts of weakness of will in order to show (dis)similarities with addictive action and then discuss whether freedom seems to play a role in akrasia and in the distinction between akrasia and addiction. Finally, I move from this discussion to consider what kind of flaw or defect of will addiction can be considered to involve. My main point here is that while weakness of will seem to play a salient role in addiction, it is, nonetheless, neither a necessary nor sufficient condition for addiction. I will start by considering what 'weakness' means in weakness of will.

1813 [1147^{b}20-24]), for instance, distinguishes enkratic or continent persons from akratic or incontinent ones in *Nicomachean Ethics.* Even if I want to make sense of addicted individuals and their agency, I do not think that attributing certain character traits to addicted individuals is a fruitful way to proceed, especially when my hypothesis is that akratic action is typically although not always present in addiction. By focusing on akratic *actions*, I will highlight the characteristics of addiction as a form of behaviour and not as a feature of someone's person. See also Mele 2012, 2. However, it should be mentioned that Gary Watson (1999, 13–14, 17) categorizes levels of dependence and in this categorization names one of the levels of dependence as "existential dependence" in which the agent's identity is constitutive of the dependence. Unfortunately the questions of identity fall outside my scope of addictive action for now.

5.1. The will and weakness

Is weakness of will best understood as action contrary to one's better judgement, or maybe as action contrary to some prior resolution and the result of an inappropriate shift in judgement? Is it a matter of evaluation, volition, or maybe execution? Weakness of will has puzzled philosophers of action over the years dating back to the philosophers such as Socrates and Aristotle in the antiquity. Wallace (2003, 448), for instance, names Aristotle's view of akrasia as one that resembles his view, but this is not the full story of akrasia in philosophy. I want to explore the issue little further here in order to see whether different accounts of weakness of will provide differences between addictive and weak willed will action and in this sense contribute to our understanding of addiction.

It appears understandable if someone fails to find their way to a friend's house due to lack of information or fails to make a soufflé due to lack of skill. It is more puzzling when people intentionally act against their better judgement. If I judge best to finish this paragraph before lunch, it is simply irrational that I decide to play minesweeper for a good part of the morning, instead of working. It could be the case that I had changed my mind and judged that procrastination is more desirable than being productive at work and finishing this paragraph. We can imagine a case in similar lines: a person who decides to cut down his drinking judges best not to go to the pub after work on Friday, but when a colleague asks him to come along, he joins the others for a beer and another. The world is full of reports of observers or personal statements of addicted individuals acting against their own will or judgement about what would be the best thing to do in that situation. However, it is not clear how and why agents would act in this way if they have judged that they ought to refrain from the very thing they seem to freely and intentionally engage in. If we accept–as we should–that this kind of description is compatible with our account of addictive action, this kind of action brings questions of self-control to the table not only to akratics but also to addicted

individuals.[178] Wallace (2003), for instance, seems to be of the opinion that the difference for addicted individuals and akratics does not lie in the nature of the recalcitrant motivating desire. Still, I assume he wants to distinguish these two from each other at least in relation to question of responsibility, as he lists addiction as a reason for exempting a person from full responsibility (Wallace 1996, 118). This gives us an opportunity to have a quick glance at the moral aspects that are involved in weakness of will.

Before for instance Donald Davidson's (1980c) influential article "How is Weakness of Will Possible" acting weakly was considered to involve strong desires, passions and the like, and it was also a question of morality, an indication of moral weakness.[179] Aristotle (1996, NE, 1812 [1147[a]14–15, 17]), for one, maintains that "the condition of men under the influence of passions; for outburst of anger and sexual appetites and some other such passions" is similar to the condition of incontinent men. Davidson questions this and assumes that it is not only passions that cause the conflict between the judgement of what one ought to do and the recalcitrant feature that motivates the weak willed action. In my view, the key to the moral resonance that follows the normative idea that one should act in a way in which in akratic action one does not, is the principle of "ought implies can". If a person is expected to behave in a certain way, it also makes sense to assume that he is able to do it. In this kind of framework, it is assumed that the

[178] An objection can be raised that addictive action and weakness of will are incompatible because weakness of will is free and addiction is unfree. Wallace (2003) suggests that the proponents of such views typically explain it in counterfactual terms. As I have argued in the previous chapters that it is not plausible to consider addiction to be based on literally irresistible desires, it is not unfree at least in this sense. Compatibilists such as Wallace (2003) who are skeptical that there are such things as literally irresistible desires make the distinction as a case of degree. I will return to this issue later on in this chapter.

[179] This connection to morality is based on the idea that people want to do what they consider best and that they strive for good. Recalcitrant desires which stir this picture of human action prevent agents from acting towards the good. Davidson (1980c) is critical of the confusion of moral weakness with weakness of will.

person committing a weak willed action is free in a sense that he could (and should) have resisted the temptation or in any case could (and should) have followed his better judgement.

Weakness of will results in action that has a different history than willed action. But what does it mean that an action is conducted in a weak willed manner? Acting weakly in this way implies some kind of flaw or lack in one's actions. The philosophical discussion between actions that express the agent's loss of control over his action has focused on the control the weak willed agent ought to have used in his action and the kind of loss of control the addicted individual suffers from. These two ends have created a continuum in which on the one hand the will is too weak to resist a temptation and, on the other, the temptation is too great to be resisted (e.g. Watson 2004b, 34). Will is in some sense the control the agent has or exercises over his agency and action. The will being weak suggests that it is imaginable that it were stronger. This kind of evaluative idea easily gives rise to moral judgements, too.[180] This is probably the reason why Wallace (2003) spends time in highlighting that the potential irrationality he sees to be involved in action rising from A-impulses, which I understand to cover akratic action too, is not the same as the condition that addicted individuals suffer from and that is a defect of will. This kind of irrationality may be involved in the defect, but the irrationality alone does not suffice for the defect.

Wallace's discussion of his view seems to fluctuate between akratic and addictive action. In fact, as his discussion concerns reflective agency and its relation to A-desires or A-impulses, he argues that these A-desires can be other than mere addictive desires. Appetitive desires seem to fit in to the characterisation he provides and it can be easily imagined that some "akratic" desires fit into this A-category too. However, Wallace's view seems to be that akratic action may overlap with addictive action, but they are

[180] Since weakness of will is often conflated with moral weakness, I will briefly touch upon some of the central issues involved in this moral dimension. This is to give context to issues of agency concerning weakness of will.

not, as such, synonymous. Wallace only deals with weakness of will in the sense of akrasia along the lines of Aristotle's account. As it is only one conception of weakness of will, I will next introduce other conceptions and view them in order to find out whether addictive action is compatible with other accounts of weakness of will. In what follows I will introduce three forms of weakness of will that commonly surface in the philosophical literature. These three cases of weakness of will are, first, ungrounded giving up of a resolution, second, the conception Wallace discusses, akrasia, and third, inverse akrasia.[181] Needless to say, they may all be understood in various ways depending for instance on the views' commitments in action theory and takes for instance on motivational internalism, i.e. the view that moral judgements and motivation have a necessary connection (see for instance Miller 2008). Nevertheless, I will try to provide rough characterisations of each of the three cases, ignoring for most parts the variation within the cases and reflect how they match with accounts of addiction and forms of addictive action.

In general, weakness of will can roughly be seen as an instance that violates the procedure of forming a practical judgement for good reasons and holding it in a stable manner (Tenebaum 2013, 280). Next, I will focus on both of these aspects. In fact, it has been claimed that weakness of will is not about acting against better judgement, but about changing one's mind.[182] This view does not necessarily rely on the relation of two concurrent but different kinds of judgements, but more on changing one's better judgement in a way that does not have a solid standing or grounds for the change.[183] In what follows I will analyse whether this kind

[181] Inverse akrasia is a case in which the agent acts against his better judgement, but his better judgement is mistaken in what is the good thing to do and by acting weakly, the agent does the right thing.

[182] George Ainslie's hyperbolic discounting is an example of this kind of view, and it also illustrates that Ainslie's choice view is closely connected to the will view when the will view concerns the change of mind.

[183] Wallace (2003) does not phrase his view in these lines, as his focus lies on the akratic cases where one makes decisions and forms volitions. However, it

of weakness of will is typical for addiction and whether this kind of change of mind and acting against one's better judgement actually are distinct from each other.

5.1.1. Changing one's mind and acting against better judgement

Wallace's (2003, 443) view does not focus on weakness as a tendency to change one's mind, rather he discusses "obstacles posed by A-desires to reflective agency" in which the decision is constitutive of that agency, there is no waiving of previous better judgement. Wallace mainly concentrates on instances that resemble the traditional cases of akrasia, but this is not satisfactory stand to all philosophers concerned with weakness of will and addiction. Richard Holton (2009, 70), for instance, criticises this kind of take on weakness of will. He argues that in lay terms weakness of will does not concern acting against one's better judgement.[184] Instead, he argues, weakness of will is commonly understood as irresoluteness. Weak willed people fail to stick with their intentions. Of course sometimes it is only natural and rational to revise one's intentions. I will briefly introduce some of these occasions following Holton's (2009, 75) list of, what he calls, rules of thumb to provide an idea what Holton has in mind, more specifically and to see whether violations of these rules of thumb fit the typical views on addictive action, and also whether these actually differ from akrasia. This is to further flesh out the different kinds of instances that can be considered as addictive action.

---

seems that these two kinds of weakness of will begin to be quite similar to each other on a closer inspection.

[184] Holton is not the only philosopher to claim this. Alfred R. Mele (2012) has not only argued this in his work but he has also conducted surveys with first-year philosophy undergraduates at Florida State University which lend some support for Holton's claim. However, Mele's studies do not lend support for Holton's claim that his account of weakness of will reflects better the understanding of weakness of will of non-philosophers than an account of weakness of will as akrasia. See Holton 2009, 70; Mele 2012, 18.

The first rule of thumb concerns the cases when it is reasonable to revise one's intentions because the circumstances change and with the change defeat the purpose of having the intention (Holton 2009, 75). Again, I take a case from the field of addiction treatment to illustrate that the rule seems to be assumed as guiding the addicted individual, too: There has been a suggestion that addicted individuals should be forced into treatment with a medication that blocks sensations of pleasure from alcohol and certain illegal drugs (Caplan 2008). The kind of treatment idea seems to accord with this principle of revising one's intention: In the treatment case, there seems to be an assumption that addicted individuals' purpose to use drugs or alcohol relies on the expected pleasure of the drugs or alcohol they use. If the circumstances change with the help of medication in a way that the addicted individuals no longer obtain pleasure from the use, their purpose to use drugs is defeated and thus there is space for reconsideration whether they maintain their intentions to use drugs.[185] This may indeed work for some addicted individuals even if there is good reason, as we have seen, to question the assumption that addicted individuals act according to their addictions due to the pleasure they expect to gain. It seems that both following rule and not following the rule fit descriptions of addicted individuals' action, as it is easy to imagine addicted individuals ignoring the change in the circumstances and simply continuing in a way that they first intended, despite the defeated purpose.[186]

In contrast to weakly changing one's mind, another acceptable reason for revising one's intentions is suggested to be when the agent starts to believe that the intentions cannot be carried out any longer (Holton 2009, 75). This is an interesting point, as it

[185] The proponents of this kind of treatment model admit though that it does not work with every addicted individual. This acknowledgement, however, supports my main argument in Chapter 2 that the addictive desire is not necessary condition of addiction.

[186] For instance, Neale and her colleagues (2012, 37) describe the self-expressed confusion of a recovering heroin user who was prescribed subutex and was still using heroin even if she did not get any effect from it.

tries to distinguish between unwillingness and (belief in one's) inability. In light of this principle, it is reasonable that addicted individuals experiencing withdrawal may indeed change their intentions and continue using drugs or alcohol if they believe that they cannot stick with their intention of cessation. These kinds of cases would not amount to cases of weakness of will in light of this principle, but would amount to the agent's belief about the compulsive nature of addiction. This kind of question of willingness and capacities has been raised in the discussion of addicted individuals' beliefs about their chances of quitting their addictions in the context of treatment.[187] The addicted individuals may fail to believe that they have a sufficient amount of self-efficacy to continue in a treatment programme, for instance. This example helps to see the problems of this rule. Holton (2009, 75) stresses that in order to actually have this principle and consider cases of intention revisions in its light, the reason that allows for revision need be understood as an issue of one's willingness or its lack and not about whether the agent (believes that he) can do it, but in my view it is unclear how to evaluate addicted individuals' intention revisions in these kinds of cases where they for instance go through withdrawal. Lack of belief in one's self-efficacy may well be true, but at the same time giving up the resolution to abstain from addictive behaviour because of that belief seems self-defeating. Nonetheless, it is easy to imagine cases of addicted individuals who revise their resolutions to give up addictive behaviour merely on the basis of their willingness, too, and in this way addicted individuals would act in a weak willed manner in light of this rule.

Furthermore, as we have seen, the relation between intentions and believing is important in light of the agent's actions. In general, it is considered that people cannot form intentions to do something

[187] I discussed the issue in Chapter 2 in my criticism against the disease view. I also touched upon the same issue in my discussion of Edmund Henden's analysis of heroin addicted individuals and what options they believe they have in Chapter 3.

if they believe that they cannot do them in the first place.[188] Let us imagine that I have made a resolution of going to ice swimming to support a local sauna and I do know myself to be able to do so. So in the light of this principle, basically it is reasonable for me to change my intention of going to ice swimming if the reason for the revision concerns something that I believe to fall outside the scope of my capacities that was not there when I formed the intention in the first place. Maybe I caught a cold, for instance. In the light of addiction, it may be that when confronted with the severe negative consequences of abstaining from drugs, the addicted individual who made a resolution to quit may become to genuinely believe that, in the midst of painful withdrawal, his resolution can no longer be carried out.[189] As pointed out in the paragraph above, this would be a reasonable case of revising one's intentions and not a case of weakness of will.[190] The addicted agent in question who becomes to believe that he cannot carry out his intention of quitting drugs because of the severity of his withdrawal is not in this case a weak

[188] Davidson (1980e, 100–101) argues that there can be no intention if the agent believes that no such action (that the intention concerns of performing) is possible. Also, in the context of addiction, the critics of the disease view have this in mind when they argue that the talk about a brain disease may result in addicted individuals believing that they cannot stop their addictive actions. Still, motivation to stop using is in many cases a requirement to access to treatment.

[189] It feels tempting to bring up a question of what is actually the state of affairs and how veridical should we require agents' beliefs to be in these kinds of situations.

[190] This also seems counterintuitive to me because the agent is acting against his (previous) better judgement and he would not have made the better judgement if he did not consider it possible to carry out. The addicted individual had formed a resolution to refrain from using drugs and let us assume that he had anticipated some kind of withdrawal, too. However, the situation has changed and if the addicted individual makes a new better judgement, i.e. to take drugs to alleviate the withdrawal, there is no case of weakness of will as akrasia either. Moreover, the described situation does not satisfy the conditions Davidson (1980c) gives for acting in a weak willed manner, because the agent does not believe that he is free to act in a way that he had previously considered to be better. These observations cast doubt whether akrasia and Holton's giving up resolutions differs from each other that much.

willed agent. It is then not a question of lack of self-control for instance.

In addiction, the level of control in action can be also evaluated on the basis of whether the agent is under the influence of addictive substances such as alcohol or drugs. When intoxicated, agents may be more likely to revise their intentions that they have formed in a state that allowed clear thoughts. This is probably a case of weakness of will that is typical in addiction and does not differ from cases of akrasia. In cases like these the rule of thumb "it is reasonable to have a tendency not to reconsider intentions in circumstances that prevent clear thought" is violated (Holton 2009, 75) because the new intentions are formed in a state that does not allow clear thoughts due to intoxication. This violation seems to resemble the standard accounts of akrasia such as Aristotle's in which the better judgement is not clearly in the agent's mind[191] and points to a problem that is generally dealt with in explanations of akrasia.[192]

Nonetheless, the rule concerning clear thoughts as such seems plausible and it is, in fact, a common practice in research ethics, for instance. Acquiring an informed consent from an individual addicted to drugs, for instance, to a research of any kind typically requires that the addicted individual is not intoxicated at the time of consenting. Another point when it is reasonable to reconsider the situation is if the expected consequences of the intended action gain a new aspect such as suffering that was not there at the moment when the intention was formed (Holton 2009). Consider a case of an addicted individual who suffers from an infection in his arm caused by a dirty needle. It is easy to imagine that the addicted individual has an intention to inject drugs to his arm. Due to the contaminated needle, his arm has been infected and this should affect his intentions. It would be reasonable that this kind of contingent difference in the addicted individual's life made

[191] This also suggests that Holton's distinction between acting against better judgement and unfounded giving up resolutions may not work after all.
[192] I will come back to this in the following section.

him to decide that, if not abstaining from injections altogether, he would be better off if he injected the drug with a non-infectious needle to a non-infected vein. Of course it can be questioned whether this kind of an intention qualifies to resolutions that are specifically formed "to stand firm in the face of future contrary inclinations or beliefs" (Holton 2009, 10). It probably does not, and in any case the intention to use drugs remains.

Lastly, Holton (2009, 75) argues that violation of the rule of thumb that states that it is reasonable to make sure that the agent does not revise his intentions in a situation in which he has formed the intention specifically to overrule his later reluctance to act accounts for weakness of will as giving up resolutions. For instance, an agent is put in a test when his New Year's resolution to start exercising three times a week prevails, but the hours at work are long, the weather is awful, his energy levels are low and the gym is probably crowded and so on. Even a self-indulgent agent would know that it is not reasonable to start revising one's intention just because the excuses stemming from his reluctance are manifold and easily available. The challenges of keeping this last principle are the kind that addicted individuals are probably facing when they have formed an intention to get rid of their addiction and try to follow that intention. The question whether they are reasonable in breaking that resolution (or revising it to the opposite) when the physical and psychological withdrawal begin depends among other things on the reasons why they revise it, as I pointed out above. Moreover, this kind of violation fits well the cases which are commonly regarded as cases of akrasia, too.

In the discussion of these rules of thumb I came across a distinction between resolutions and other kind of intentions. Even if it could be questioned that the distinction between giving up resolutions and acting against better judgement holds true, the distinction between different kind of intentions is helpful because weakness of will as failure to stick with one's intentions needs to be distinguished from caprice which is another form of possibly giving up previously formed intentions at the moment of another

inclination. In Frankfurt's terminology, for instance, caprice would be something that wantons do, as they do not even form second order desires about their first order desires, but merely act upon the first order desires that happen to be the strongest at the time of action. Resolutions are something different, as they are formed in light of rising contrary inclinations.[193] It is easy to imagine an addicted individual who forms a resolution to abstain: he is probably well aware of his rising contrary inclinations. Holton incorporates a hierarchical model that resembles Frankfurt's desire model to his own view about intentions.[194] He distinguishes caprice from weakness of will with different kinds of intentions: simple intentions and resolutions (Holton 2009, 77). Intentions that Holton (2009, 11) describes as simple are intentions which do not have a second order intention about them, while resolutions have this layer of intentions about the intention resulting in action. Resolutions have the second order intention of not giving up that intention even when faced with contrary inclinations.[195] Now, the question concerning addicted individuals who wish to quit their addictions is whether their intentions are simple intentions or resolutions. Do

[193] However, Holton (2009, 77) points out that "defeating contrary inclinations might be only part of the reason for forming a particular intention" so resolutions need not be formed only to fight against contrary inclinations.

[194] This also seems to resemble the dual-processing model of cognition: The philosophy of action and agency that is empirically informed has introduced the dual-processing model of cognition in the discussion of self-control (see description of the models in for instance Kennett 2013). The failures that are identified in addicted individuals' action such as relapses are explained by the two-level processing system the first of which is descriptively referred to as automatic, implicit, reflexive, and impulsive, among others. The second level of processing is referred to be controlled and is described in being explicit, reflective and deliberative. (Ibid. 147.) In addiction, then, cues may trigger the first level processing even when the agent has formed the intention in accordance with his deliberation to quit, for instance. Salmela, Nikkinen and I have also employed it in our affective account of addiction. See Uusitalo, Salmela and Nikkinen (2013).

[195] As much as I like to have this distinction of caprice and weakness of will in understanding action, I do have concerns that weakness of will becomes something rare and too intellectualised if we keep it only to refer to cases in which resolutions have been formed. For similar concerns, see Henden 2008.

they know themselves (or their condition) well enough to see that at some point after abstaining the inclination to start drinking, smoking, using drugs and so on is likely to rise?[196] The will view seems to highlight that addiction is problematic as it challenges one's intentions, whether they are resolutions or simple ones. In light of this discussion, however, it seems that the decisive point before the question whether their will is strong enough is whether they believe that they have self-efficacy to start with.

By providing examples of addictive action that actually follow these rules of thumb instead of violating them, I hope to have managed to show that addictive action does not necessarily have to be weak willed when weakness of will is understood as "failures to act on a future-oriented intention" (Tenebaum 2013, 276).[197] It is not unimaginable to imagine addicted individuals acting in ways that are not considered to be cases of weakness of will but are cases of following these principles of reason. Still the discussion on addiction resonates with this kind of discussion of weakness of will, as my discussion also illustrates. Holton argues that in his account the agent does not act against his better judgement, but the agent fails to act on resolutions in cases where the agent realises that the merits of sticking with the resolutions would be greater than merely considering a single case.[198] (Ibid. 278.) Furthermore, I am not sure to what extent his view actually

[196] This aspect also highlights the fact that addiction is more than consecutive single actions. As the resolution to quit addiction is a long term goal, it needs to be the kind that defeats the rising inclinations not only once or twice but repeatedly.

[197] This intending should be distinguished from Davidson's (1980e, 89) pure intending which lacks "conscious deliberation or overt consequence," i.e. intending that does not result in action and which is not necessarily constitutive of action as intentions in another sense are. Davidson (1980e, 95) distinguishes pure intending from the belief that one will do what one intends. He suggests that the intention in pure intending is what he calls an all-out judgement that is "directed to future action, and made in the light of [the agent's] beliefs" (ibid. 102).

[198] As discussed in Chapter 3, this strongly resembles Ainslie's account of addiction in which the addicted individual prefers immediate smaller rewards of, say, using drugs to a long term great reward of abstaining.

differs from the standard cases of akrasia, i.e. acting against better judgement. As weakness of will involves violations in "the procedure of forming a practical judgement for good reasons and holding it in stable manner" (Tenebaum 2013, 280), we should turn our attention to the procedure of forming the practical judgement for good reasons in standard cases of akrasia and analyse how they fit addictive behaviour, and furthermore, whether they are something distinct of what Holton suggests for a proper account of weakness of will.

5.1.2. Akrasia: the problem of perception and forming practical judgements

The discussion of weakness of will seems to revolve around reasons on the basis of which judgements are formed. Acting against better judgement may result from mistakes in interpreting and evaluating the objects of desire and how they seem. In these cases, akratic action results from mistakes in the agent's perception of the situation. If they knew better, they would act differently. Davidson (1980c, 21) maintains that an instance of incontinence concerns the cognitive, but there is no need to involve a requirement of knowledge.[199] The issue is not on whether the agent judges the object of desire veridically, but it is enough to consider the issues in the way that they appear to the agent. Do addictive actions result from these kinds of mistakes? Wallace's (2003, 443) account deals with this aspect of weakness of will and he brings up the same issue as Davidson when he points out that "many A-impulses, construed as quasi-perceptual representations of a prospective course of action or experience as pleasant, are veridical". Here the important word is 'many', so Wallace does not assume that truth has to be involved. Still, being acquainted with

[199] I agree that talking about knowledge complicates the issue if it brings the question of truth in the picture. It seems to imply that there is one right kind of action in the occasion and a judgement of what one should do in that occasion has a truth value on the basis of that.

the relevant facts of the situation, at least with long term addicted individuals, it could be argued that they, in fact, do know about the effects and consequences of their addictive action probably better than anyone else. Claims about not knowing the consequences then seems to suggest a case of self-deception, as the repeated intake of a substance or repeated acts of other addictive action such as gambling probably has resulted in similar kinds of results and over the years these could be identified as patterns. Self-deception provides one explanation why addicted agents may act akratically. There may also be other factors in addition to self-deception that explain why addicted individuals do not respond to the probable consequences that may well be severely negative in nature.[200]

Even if the idea that akratic agents mistakenly take their action to be the best one to do in that situation has been generally abandoned in the action theoretical discussions, there seems, nevertheless, be traces of "the good" in the descriptions and explanations of akrasia. It is especially visible in discussions of addiction that concern akratic action. For instance, even the criteria of DSM-5 (2013, 491) for alcohol use disorder identify continuously acting in a way that results in negative consequences such as "a failure to fulfill major role obligations at work, school, or home" or "persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol". There seems to be a strong inclination to think that people always act on the basis of what they see to be good for them. Wallace (2003, 444) points out, too, that "[w]hat may be impaired by an intense A-impulse, however, is one's capacity to weigh these normative factors accurately and judiciously, in reflection leading to a verdict about what one has most reason to do on the whole" even if he is cautious

[200] For instance, heroin is a strong pain killer that reduces not only physiological sensations but psychological ones as well (Neale et al. 2012, 86). In this case, being numb as a result from the consumption of the drug may provide one reason why addicted individuals do not change their ways of acting in light of negative consequences. They do not *feel* the need to change their ways, literally. However, I will discuss the issue of reason-responsiveness in 5.3.

not to use the term 'good' here. The fact that addicted individuals often and repetitively seem to act in ways that are followed by severe negative consequences is a feature that might not necessarily give support to the idea that addicted individuals act akratically, as they may simply perceive and weigh the consequences differently. However, once the situation is perceived in a context in which addicted individuals are seen to act myopically, concentrating on the immediate pleasures (that may and probably have these negative consequences) whilst still, in the back of their minds appreciating the greater longer term rewards, their actions seem to be understood as cases of weakness of will. The strong belief in action in the guise of good can, of course, be questioned (see e.g. Velleman 1992b), but in discussion on weakness of will, we need to preserve some kind of notion of perceived good, allure or worthiness to make it intelligible.[201] Wallace talks about these with his "quasi-perceptual representations". It does not have to be a substantive requirement in which the goodness of the alternative ways of acting in a situation are evaluated in terms of, say, utility, but it suffices if the tension of acting weakly is explained in terms of comparative judgements like in Davidson's view. Furthermore, in light of this discussion, it seems that Holton's account of weakness of will of giving up resolutions because of unfounded reasons is not so different from these kinds of akratic accounts of weakness of will in which the agents are allured to acting against their better judgement by how things appear to them even when they may know how the things really are.

On the level of content of the judgements, this kind of view of addictive action being weak willed action have to, necessarily, involve an idea that addictive action considered on the whole or in Davidson's terminology with evaluative judgements sans phrase is something inferior or negative compared to, for instance, abstaining

[201] As I pointed out in Chapter 3, this kind of view may be questioned in relation to the so called hard cases of addiction.

from that action.[202] Wallace's (2003, 443) discussion on A-impulse-induced action explicitly rules out "that individual acts of drug consumption might be justifiable, in moral and prudential terms". This seems to support the ideal of abstinence as a guiding principle in one's action and suggests that in this view the addicted individuals are indeed mistaken in their better judgement of using drugs.[203] This comparison of different action alternatives is, however, made by the agent himself and of course there is a chance that he may be mistaken. In matters of moral concern this may be of relevance.

In the next section, I refuse to accept Wallace's decision to rule out the possibility of A-impulse-induced action as potentially justifiable morally and prudentially and I will look at the possibility of inverse akrasia in relation to addictive action in order to further highlight the normative aspect of understanding action. In my view, the origin of the action does not necessarily exclude the possibility of acting in a morally or prudentially acceptable way and, as I hold that consumption of drugs as an act is not morally or prudentially condemnable, I would need further premises (that I do not have) to arrive at the same conclusion as Wallace.

5.1.3. The problem of acting against the good

As weakness of will is about failures to recognise good reasons and forming practical judgements on the basis of those reasons, it is evident that we need a notion of good and depending on the perspective, it may well differ. My point is not to give substantive criteria for goodness here, but to concentrate on the tension between different perspectives. For instance, considering akrasia in evaluative terms, it seems obvious that willing addicted individuals do not fall into acting against their better judgement from their

[202] Davidson (1980c) himself emphasises that his view of incontinence does not focus on the content of the judgements in question (and in this way having deal with possible moral weakness), but the formation of those judgements.
[203] I will discuss the ideal of abstinence in later in this chapter. See 5.3.

perspective. Maybe this is the reason why Wallace does not wish to explore it further in his phenomenological consideration of addiction as a defect of will. There is no conflict in what the agents consider best to do in the situation and in what they then set out to do. They do not make mistakes about their reasons for action in this sense. However, whether addicted individuals are willing or unwilling, there typically seems to underlie an assumption that there is something wrong in addicted individuals' agency and action even when they are willing, i.e. when they believe and desire (and value) to act in a way that is in accordance with their addiction. A good example of this can be found in bioethics: Arthur Caplan's view on mandatory treatment for addiction which means that regardless of the addicted individuals' views on their own condition and their willingness to seek a way out of it, they ought to be treated with medication such as naltrexone.[204] There seems to be a strong implication that the addicted individuals' better judgement ought to contain the idea of abstinence, and with medication such as naltrexone the cravings are reduced and, thus, the logic goes, the addicted individuals judge their addictive substance consumption to be inferior to abstinence and refrain from addictive actions. Needless to say, Caplan's view is problematic in many respects, but here it suffices to pay attention to better judgements that are present. The case illustrates that regardless of whether one commits oneself to a view that addictive action is bad and should thus be abstained from it, questions of weakness of will necessarily admit to normativity that concerns irrationality or moral character (see Audi 1990, 270).

Yet, Nomy Arpaly (2000) has questioned the relation between (ir)rational action and weakness of will. She suggests that sometimes it may be rational for some agent to act against his best judgement in a particular situation (ibid. 491).[205] They may have

[204] I will discuss Caplan's view in more detail in 5.3.4.

[205] Arpaly's account has received criticism too. For instance Radoilska (2013) argues that the examples Arpaly gives on inverse akrasia can all be seen cases

good reasons for it even if they do not regard the reasons as good or even know about the reasons. A willing addicted individual who decides to use drugs, but does not follow his judgement may be considered to act akratically, but still rationally. In Arpaly's view, the coherence of the better judgement with the agent's other beliefs does not exclude the akratic action from being rational action. Since the judgement what one ought to do is one's personal judgement that he "reaches, having taken into account all the reasons one judges to be relevant, as to what would be best for one to do in a given situation" (ibid. 490), it is easy to imagine that one could be mistaken about what is best, i.e. rational in these circumstances. People are human: they err in considering what is best for them. Arpaly's distinction between what acting according to what one judges best and what is rational seems to distinguish a personal, subjective, view on the matter from a more general view that involves content that agents are expected to share. However, Arpaly's discussion seems to concern the epistemic aspects of reasons for action and the agent's best judgements, and to what he has access. With addictions, it could be argued that people generally tend to know about potential problems in, for instance, drug use and thus should be able to consider reasons in this respect. It is, however, another matter whether the potential problems outweigh other reasons they have for the drug use.

Furthermore, it seems that to some extent akrasia calls into question the idea that instrumental rationality is "the single unproblematic requirement of practical reason" (Wallace 2009)[206] when the agents do not recognise the good reasons *qua* good reasons and still act on them. While instrumental rationality does not employ any criteria for the kinds of ends the agent comes up with, substantive rationality, in contrast, seems to require an assumption that there are some kind of standards, based on

in which the agent actually recognises that they are acting on good reasons. For a discussion of this see Levy 2014.

[206] This is the way in which Wallace sees the modern era of philosophy of action.

objective reasons and values, that provide means for critical assessment of the agent's ends. Objectivity means that the reasons and values are independent from psychological circumstances which are realised on the basis of what people happen to believe and desire to do. (Ibid.) On this note, it may well be that addicted individuals act rationally, understood in an instrumental way, pursuing the objects of their addictions and this may be according to their best judgement, but what they happen to be motivated to do might not be rational objectively. Finding oneself with addictive desires and simply being motivated by them might not suffice as a solid basis for rational action even if one's instrumental rationality would then satisfy the better judgement that was constituted by the agent's psychological circumstances. If an addicted individual then fails to act according to his better judgement about using drugs or drinking alcohol or something in those lines, he is committing an akratic action, but still, at the same time, acting rationally, objectively speaking.[207] It has to be noted that Arpaly's discussion on acting against one's best judgement does not undermine for instance Davidson's account of weakness of will. Davidson (1980b, 26) argues that the conflation of content and act of acting on one's better judgement should be avoided when talking about incontinent action (and not moral weakness). It seems, however, that in discussions of addictive action, this conflation does occur.

Regarding addicted individuals' action as cases of inverse akrasia would require some objective norms and values in the light of which their actions would be evaluated. This could be done, but to regard addictive action typically as instances of inverse akrasia

[207] This discussion has also connections to moral responsibility. Arplay's point is also to say that people may be praiseworthy for their akratic actions. In these cases, agents' reasons for action go against their better judgement of what they ought to do, but at the same time the reasons which they act upon result in the action they have most reason to do objectively speaking. One of the examples Arpaly uses is the case of Huckleberry Finn who acts akratically and fails to report the slave with whom he has become friends. See for instance Arpaly & Schroeder 1999, 162. I am still not going to deal with issues of responsibility in detail, but I wanted to explicate Arpaly's mission as it sheds light to the context in which this discussion is taking place.

would require us to view addiction as unwilling agents caving into something that is praiseworthy. Addiction is, however, typically considered something undesirable and not something to be pursued as such. It would be a little unusual to consider that addicted individuals' caving into addictive action as rational and something that they have most reason to do objectively speaking. Just like instances of inverse akrasia in general are probably rather marginal, the cases of addicted individuals acting in a way that satisfy the criteria of inverse akrasia are too, but the important thing is to notice that addictive action could, in some cases, fall into this category. Nevertheless, it is safe to say that addictive action does not typically result from inverse akrasia and thus it is neither a sufficient condition nor a necessary one for addiction.

Inverse akrasia and akrasia, both, rely to some extent to the kind of judgement the agent has formed and which he has not dropped. Seemingly this does not cover the cases in which the agent seems to change his mind when he ought not to, but as I have pointed out along my discussion this latter case can be considered as a case of akrasia, too. In these kinds of cases of addiction, it is a question of a person quitting, changing his mind in the face of temptation and relapsing in this way back to addiction. This change of mind due to the temptation, however, has been seen to be result of strong desires and specifically the kind of strong desires that call into question the agent's control.

Described in this way, akrasia with strong desires seems to fit a common understanding of addiction. Addictive action is not typically something that we expect people to have good (enough) reasons (at least in the long run) for and at least in its severe forms, addiction seems to involve some kind of fluctuation of the agent's practical judgement of continuing and refraining from the addictive action because of strong desires involved in addiction.[208] On this note, I continue my analysis of weakness of will and its relation to

[208] It should be noted that it is not that difficult to come up with examples in which using drugs and drinking alcohol is the best alternative in an agent's life. See e.g. Watson 1999, 17–18.

addiction with Wallace's account of addiction and akrasia, and the issue that many find to lie in the core of akratic action, namely strong desires that override the agent's better judgement. Typically for akrasia, it is not considered that the desires render the action unfree, but in addiction, this kind of view is common. In the next section, I want to analyse whether these kinds of desires are necessarily constitutive of weakness of will and in this respect, addiction. In terms of understanding addiction, it is important to analyse what kind of desires are these desires with which the agent acts in a weak willed manner.

5.1.4. The problem of strong desires

When thinking about weakness of will, it is easy to come up with examples of akrasia that involve instances of temptation or other kind of strong sensations that undermine the agent's actions according to his practical judgements. A dieter decides to eat a dessert high in calories when he sees the dinner menu even if he has decided to eat in a healthy way that evening. The way in which this has been explained is to say that the desire for the dessert is simply stronger than the desire to diet at that moment. The desires are causal forces the strongest of which wins. Wallace (2003) rejects this kind of conception of the way in which we act as a description of human agency. The main target of Wallace's criticism is what he calls "the hydraulic conception" of desires which does not distinguish between compulsive action or akratic action regarding the strong desire that dictates the action. A common way of thinking in philosophy is, however, the following: weakness of will is a form of acting against better judgement, because the will is too weak as opposed to an appetite, for instance. (Watson 2004b, 44.) In this kind of view, the desires overtake the rational self in the agent's action. For instance Plato and Aristotle both viewed that non-rational desires bring about incontinent action (Homiak 2011, Plato 1997 R, 1070–1071, [439e–40a], Aristotle 1996 NE, 1813

[1147[b]15], see also Hume 1896/1978, T 2.3.3, SBN [18];[209] Davidson 1980c, 28).[210] In this kind of framework, there are two familiar competing systems that we have come across in previous chapters as well: reason and desire. This picture of akrasia as the battleground of reason and non-rational desires is probably one of the reasons why people tend to associate addiction with akrasia.

Addiction is regarded as involving strong desires even if it involves intentional action. Similarly a dieter caves in to his desire for calorie-rich desserts. In fact, it is not uncommon that addictions are seen as appetites even if they are acquired and disordered (Watson 1999a). The desires to use drugs, drink alcohol, smoke cigarettes and so on resemble hunger or thirst; they occur periodically and persist till they are satisfied. Wallace (2003, 426) agrees with this kind of characterisation of addiction. He describes the appetitive desires in a way that suggest that they are non-rational. He uses the term of A-impulse that seems to suggest a rather mechanistic picture of human action as mere reactions to stimuli.[211] One of the characteristics of this kind of desire is, in his words, resilience. Addictive desires assail the agent periodically when they have been left unsatisfied and, moreover, they "seem detached from our deliberative verdicts about the value to be gained by satisfying them" (ibid.). This kind of characterisation fits the picture of the agent acting against his better judgement because of this kind of motivation that seems unaffected by the practical

[209] The page number of Hume's work refers to the version edited by L.A. Selby-Bigge in 1896, revised by P.H. Nidditch in 1978. The abbreviation is found in the references.

[210] Incontinence and akrasia are not strictly speaking one-to-one synonyms, as Davidson (1980c, 21), for instance, points out, but here I will use them synonymously.

[211] Wallace's choice of words does not give away his account of human agency, though. On the contrary, he discusses "reflective agency" in which "[r]easoned action requires the capacity to determine what one shall do in ways independent from desires that one merely finds oneself with" (Wallace 2003, 434–435).

judgements that the agent has made in that situation.[212] There seems to be tension between the two alternatives that stem from different kinds of sources of motivation.[213] This tension seems to be a common idea associated with weakness of will and also with addictions even if it is not evident that the origin of the motivation should matter.

Davidson, nevertheless, proposes that weakness of will is explainable in terms of evaluative judgements as long as there is tension.[214] Unlike the previously mentioned battle metaphor, he defines this tension in terms of comparative judgements because in his view there is incontinent action in which the agents "succumb to temptation with calm" (ibid. 29). He argues that if comparative judgements are formed and the agent, whilst believing that he is free to do the one he ranks higher, chooses some other way of acting, it is sufficient for incontinence. In other words, the lesser action of the agent need not be motivated by a strong desire on the basis of which the agent caves in and follows it. This is probably

[212] Wallace, however, makes a distinction between akrasia and acting on A-desires, i.e. addiction, in counterfactual terms. He rejects the idea that A-desires are literally irresistible by nature, but they are, unlike desires involved in akrasia, sufficiently great in causal power that even when the agent is equipped with the kind of beliefs and desires required in self-control, he would probably still act in accordance with A-desires. Only with *extraordinary* techniques, the addicted agent may succeed in acting against an A-desire. (Wallace 2003, 435, emphasis in the original).

[213] This again resembles the categorization Wallace makes about two kinds of desires that I brought up in Chapter 2. However, as I argued there that this kind of desire-centred view of addiction faces problems when considering addicted individuals and their agency, not because addicted individuals lose their agency to the addictive desires, but because understanding addictive action merely on the basis of addictive desires leaves important aspects of addiction aside. I will consider weakness of will more as a volitional or motivational problem in 5.3.

[214] It should be noted here that Wallace (2003) acknowledges the evaluative aspect too, as he is specifically concerned with reflective agency and addicted individuals' choices in this picture. He, however, concentrates particularly on the A-impulses and their effects on the decision-making. In my view, this is a common way of characterising addiction. However, situations such as decisions to get rid of addiction need not be made in this kind of circumstances in which A-impulses are "on".

true of unwilling addicted individuals and their everyday choices. It seems unlikely that their days are filled with the drama of two conflicting desires in a battle over the agent's next moves. It, however, seems more likely that unwilling addicted individuals have formed some comparative judgements what they were better to do and it could be that due to the circumstances that they are in, they are also resigned to maintain their addiction even if they judge it better to abstain.[215] It may seem that Davidson's view discords with Wallace (2003), as Wallace focuses on the phenomenal aspects of the desire and seems to consider only instances of addictive action which involve A-desires with a promise of instant reward, play of pleasure and pain, but even Wallace talks about the phenomenal aspects of the desires as perceptions and not as sensations.

If I judge best to learn Japanese and fail to enrol to a language class, it does not seem to be a typical instance of weakness of will with a battle of desires.[216] In contrast, if I judge best to stop watching a film and go to bed late in the evening, and I fail to do so, it is considered to be a case of weakness of will. The cases seem different in the sense that although both of them concern lack of motivation, the case of learning Japanese does not involve a conflict, a battle or even comparative judgements; there is no other action that I would have an inclination or temptation to do and for which to form another judgment, overruling (without authorisation) my better judgement. Whereas, in the case of turning in, the better judgement implies that not staying up too late and

[215] Davidson (1980c, 39) solves the puzzle of weak-willed action by distinguishing two kinds of evaluative judgements that are in play here. For him, there is no logical contradiction with the two judgements as p and not p. Instead, there are two types of judgements, namely all things considered judgements which are relational and unconditional judgements.

[216] According to Tenenbaum (2013, 274), it is a case of 'accidie' in which "the agent recognizes that there is something of value that he can and ought to bring about, and yet he does not engage in any action to bring it about -- ". However, in a broader notion of weakness of will, it is perceivable that an omission can be regarded as an action and refraining from the thing one ought to do, according to one's better judgement, is creating the comparative evaluation.

having a good night's sleep is good for me, but it conflicts my desire to watch the film to the end. Indeed, in cases of incontinence, there need to be some kind of tension between motivations and evaluations how one should act in the specific circumstances.

Frankfurt's unwilling addicted individuals, for instance, face a conflict between their effective first order desire to use drugs and their second order desire to abstain on the level of action. The first order desire to use drugs seems unaffected by the second order desire with which it clashes. The tension between the desire to use drugs and the desire not to use them is the starting point of the addicted individuals' unwillingness in Frankfurt's terminology, and addicted individuals' second order volitions, i.e. the desires they have about their first order desires and the desires that they identify with, are not in line with their action. They do not consider the effective first order desire of using drugs to be the kind of desire they as persons wish to act upon. This makes them unwilling. However, if addiction, i.e. using drugs, drinking alcohol, smoking cigarettes or something similar to those lines, is not evaluated to be undesirable or ranked below the other alternative ways of acting, it automatically fails to function as a motivating feature in an addicted individual's action when that action is considered as weak.

There seems to be two aspects in which akrasia functions, both of which can be seen to involve the kind of ideas we may have about addictive action as well: akrasia can be considered in terms of evaluation which may concern defects in intellectual issues and/or execution, both of which may also concern motivation (Mele 2012).[217] For Socrates strict akrasia, that is, knowingly acting

[217] Dill and Holton (2014) identify three stages of self-control, namely deliberative, volitional and implementational stages. This differs from the categorization made by Alfred Mele, due to a different kind of notion of intentional action behind their view. I try to discuss my topic by balancing between the different views, not really committing myself to either, as I find problems with both the simple "Humean model of motivation" or its "augmented" version as Holton (2003) calls it, and the volitional view with a separate faculty of will. According to Dill and Holton (2014), weakness of will can take place in any of these stages of self-control. In this section, I have

against one's good was unintelligible. Aristotle along with Socrates promote this kind of fuzzy akrasia in which the agent suffers from cognitive states that concern defective knowledge at the moment of action (Homiak 2011). This kind of akrasia does not necessarily involve conflict. The agent makes a mistake when he pursues action in accordance with his better judgement. The judgement in question is not the best judgement, after all. Wallace's account seems to resemble this too even if he works with desires. He (2003, 441) does, however, suggests that "more satisfactory approach to such desires is to think of them on the model of perception rather sensations." Does this mean that addicted individuals (and akratics for that matter) err every time they give in to their A-desire that they consider they ought not to? Maybe there are such cases, but this does not seem to describe the everyday phenomenon of addiction.

The discussion in this section so far has aimed to illustrate that akrasia need not involve strong passions to be akrasia. The same applies to cases of addiction that involve acting against one's better judgement. Whilst the rationality discussion about addiction is important in the context of choice and decision-making, it is also equally important to discuss the irrationality of weakness of will in terms of moral psychology and responsible agency such seems to be the case at least in Wallace's account.[218] In some sense then a weak willed action can be seen as an instance of blameworthy negligence of acting the right way (see also Watson 2004a, 19).[219]

---

mainly been concerned with the deliberative and to some extent volitional stages.

[218] In fact, this kind of rhetoric of moral psychology seems to be another prominent branch in philosophical discussions of addiction: For instance, because of the underlying possibility of moral judgements, Wallace (2003, 443) explicitly states his intention not to deal with addictive action that may be morally justifiable and also addiction as an excuse. The relationship between morality and action is complex to put it in a modest way, but for instance the control condition of moral responsibility requires the agent be in control of his action in order to be morally responsible for his action.

[219] The questions of blameworthiness are complex. Here my point is merely to say that the agent's action can be considered to be worthy of blame because the

The lay conception of addiction seems to capture this idea of addiction as a moral flaw of some kind (see Pickering 2006, 26) or at least morally blameworthy of the emergence and continuation of addiction. On a side note, this kind of "moral model" of addiction (see Brickman et al. 1982) is also compatible with the choice view of addiction and implies that the agent has control over his actions in the same way as any normal action such riding a bicycle or eating breakfast is under the agent's control.[220] In contrast, the disease view of addiction has been motivated at least in part by attempts to remove stigma and blame from people suffering from addiction (e.g. Hyman 2007) and they do this by emphasising that addicted individuals do not make choices (and in this way they do not act akratically either).[221] In their view, addicted individuals do not have the required control over their actions, because they are suffering from a brain disease.[222] The idea of removing blame and stigma and, by doing this, improving the chances of addicted individuals to begin their recovery without extra burdens of

---

agent is sufficiently in control of his agency and he could be blamed for not acting in the right way.

[220] The self-reports of (recovering) addicted individuals of different substances and behaviour typically include emotions such as shame and guilt (see for instance Neale et al. 2012, 91, see also Flanagan 2013, 4) regardless of whether or not they have been actually blamed for their actions. The questions of moral responsibility are complex and deserve more attention than I can give them here. Nevertheless, my attempt is to unravel a little the connection of addiction to morality implicit and explicit in different kinds of accounts of addiction, but not to focus on questions of moral responsibility even if I believe that the agency of addicted individuals involves a moral dimension just like in the case of non-addicted individuals' agency (cf. Uusitalo 2015).

[221] The choice view does not support akrasia either, as it requires one to act according to one's preference. However, the choice view relies on addicted individuals' abilities to make decisions.

[222] In some sense the disease view emphasises the passive role of the addicted individual as an agent in his action. It is, nonetheless, weakness of will in one sense when intentions that result in action are seen as the agent's inactivity in his own agency. According to the disease view, it is activity of this kind that the addicted individuals lack in their agency. The control is not in the hands of the addicted individual in this picture, but the behaviour is motivated by addiction which, in turn, reduces to desires. However, as we saw in Chapter 2, strong desires do not provide a sufficient account of addictive actions.

psychological stress of this kind seem plausible, but at the same time the costs on the assumptions about the agency of addicted individuals become too high. All these considerations attributed to different views on addiction rely on question of freedom as control;[223] furthermore, it seems that the reason why morality seems to sneak into the discussions of addiction seems partly rest on the ambiguous notion of control.[224] For instance, Wallace (2003, 433) starts his critique of the hydraulic conception with issues related to freedom and the ability to do otherwise.

Next I will have a brief look at the question of freedom in order to show how Wallace's account actually differs from the standard choice views that I discussed in Chapter 3 and to consider whether akratic and addictive actions are free with the help of the notion of control.

5.2 The will and freedom

In the discussion about acting against better judgement, addicted individuals are seen to be compelled to act against it, while akratics are not.[225] However, both of these conceptions rest on a problematic

[223] See for instance Fischer and Ravizza 1998. I will discuss reason-responsiveness more later in this chapter.

[224] The ambiguity does not end there, though. Watson (1999, 3) mentions that the controversy of addictive action is partly due to moral ambiguity, which in my view is connected to the issues of control too.

[225] Alfred Mele (2002), for instance, in his *Akratics and Addicts* touches upon the concern whether addicted individuals and akratics are distinguishable regarding the nature of their action. Mele concentrates solely on analysing the intentionality and freedom of action in different accounts of acting against better judgement and groups addicted individuals "and others who supposedly are compelled to act as they do" (ibid. 153). However, Mele's analysis of akratics is thus relevant for our considerations of addictive action even if he seemingly polarises addicted individuals with akratics. In my view, Mele seems little skeptical about the compulsiveness of addicted individuals' action. He (2002, 154) hedges his statements about addicted individuals with words such as "supposedly" even if he agrees that individual addicted to crack cocaine "are occasionally compelled" to act intentionally in the way in which is against their better judgement. However, it is not the case that addiction is

view of agency, or so Wallace claims. With this kind of view, free agency that is meaningful is rather impossible to achieve. In what follows I will discuss the possibility of free agency in relation to akratic and addictive action in order to highlight the similarities and differences and by doing this reinforcing my argument that addiction may but need not involve akrasia.

As mentioned above, Wallace (2003, 432–433) constructs the view he opposes and calls it "the hydraulic conception of desires". According to this conception, desires "are given to us, states that we find ourselves in rather than themselves being primitive examples of agency --" (Wallace 2009, 432). Further, "[t]hey determine which action we perform by causing the bodily movements that we make in acting, the assumption being that the strength of a given desire is a matter of its causal force in comparison to the other given desires to which we are subject" (ibid. 433). This kind of conception of desires raises a question of any kind of free action in this kind of framework. In the previous chapters I have discussed the different notions of desire that seem to be in the play in the choice view and the disease view, namely preference and phenomenal desire. In light of this discussion, I argue that Wallace's will view can be regarded as a modification of the choice view even if it suggests that addicted individuals suffer from defects of will. The considerations in that context concern mostly preferences and (ir)rational behaviour in addiction, but as pointed out in Chapter 3 in a strict rational choice view, there is no room for akratic action. It is an anomaly. For Wallace (2003), addiction does not amount to mere irrationality, in fact, he

compulsive in the sense that the desire forces the agent to act according to its dictate and in this chapter I have so far illustrated that addictive action may involve, probably often does, weakness of will. Another example of this kind of philosophical focus on addiction is Lubomira Radoilska's (2013) recent monography *Addiction and Weakness of Will* which primarily focuses on action that is against the ways in which the agent ought to act. In fact, Neil Levy (2014) begins his review of the book by stating that it is not a book about addiction as such, but it deals with the issue of moral responsibility for akratic action.

explicitly distinguishes addictive "defect of will" from irrationalities which he still accepts to exist.[226]

In general, whether addiction is differentiated from or equated with weakness of will typically depends on how these two phenomena are defined in terms of freedom and responsibility.[227] Wallace provides the standard way of distinguishing the two in the views that, according to him, support the hydraulic conception of desires, but his view on desires is more nuanced than them being mere causal forces the strength of which determines one's actions. Next I will explore what kind of control the agent can have in Wallace's view over his actions in order to analyse the freedom of action regarding addiction and weakness of will.

5.2.1. The problem of ambiguous notion of control

The freedom of addictive actions and akratic actions have been claimed to be distinct from each other, but I argue that these actions may be the same action, too. It seems clear that something more needs to be said about it. Wallace (2003, 433), too, sets off his analysis of the will with questions of freedom. In what follows, I will discuss the question of freedom with the notion of control in order to clarify the notion in relation to human agency in akratic and addictive actions.[228]

---

[226] Gary Watson (1999), for instance, is a little skeptical whether one can actually distinguish one's volition to be independent of rationality.

[227] In the domain of psychology, Brickman et al. (1982) have suggested an influential categorization of responsibility attributions in therapeutic setting that make distinctions of whether the agent is responsible for causing the problem and whether the agent is responsible for solving the problem. This model has been applied for addictions too. These two aspects seem to be the ones typically suggested to differentiate between weakness of will and addiction, e.g. Mele 2002, Watson 2004b, Levy 2013b.

[228] In Chapter 2, I maintained that questions of freedom that is understood as the ability to do otherwise do not differentiate addictive action from non-addictive actions on this level. Addiction does not force the agent to act in a certain way in a robot-like manner; it is not unfree in this sense.

Wallace (2003, 425) is sceptical of "the simplifying assumptions that addictive behaviour is non-voluntary and that the impulses generated by addiction are irresistible." In fact, he suggests that Frankfurt's (1988) influential account of addiction represents this kind of will view. The freedom of the action in Frankfurt's view depends on the congruence of the agent's first and second order desires, not about the truth of determinism like the discussion about freedom as the ability to do otherwise does. Frankfurt's unwilling addicted individual fails to be free, because his second order desire to refrain from using drugs is not realised on the level of desires that lead to action. His second order desire of not to desire drugs is not consistent with his effective first order desire that results in action. On the first order, the desire to use drugs is stronger than the desire not to use drugs. So, even if the desire to use drugs is one of the addicted individual's desires, it does not accord with the second order desires that agent has about the first order desires he wishes to have and act upon. The action of using drugs is then non-voluntary.[229] But, when the second order desire accords with the first order desire, the action is free. The desire for drugs, for instance, thus does not make the addicted individual's action necessarily unfree in this metaphysical sense and make it bypass the agent altogether.

Partly because of these kinds of considerations, I do not present any arguments against or for the truth of determinism here, but merely assume that free actions, as such, are possible. In Chapter 2, I argue that as far as standard action is free, addictive actions do not differ from those actions in terms of this kind of metaphysical freedom. The same applies to akratic actions. Insofar as typical actions such as riding a bike, writing a paragraph or having pea soup for lunch are free actions, other things being equal, akratic actions seem to have the same kind of freedom. What I

[229] This is the term Foddy and Savulescu (2010) also use. Freedom and voluntariness are closely related terms and in this section I talk about them interchangeably, but they can be distinguished from each other by referring to one's willingness.

mean by this is that, first, all these actions involve intentionality. By intentionality I, roughly, refer to the point that the actions involve a certain purpose because of which and under its dictate they are typically carried out. This implies some kind of control over the action.[230]

Second, in some cases it would be difficult to argue for the coerciveness of the desire to act in a particular way that is against one's better judgement. Alfred R. Mele (2002, 155) has presented an example which illustrates this point. He introduces an agent who is on a diet and goes to have lunch. The dieter judges best to order a low calorie cottage cheese salad, but is tempted by several other options in the menu. At the moment of ordering the agent chooses a cheesesteak instead of the salad even though he is aware that it is against his better judgement. In this kind of situation, it is easy to see that the better judgement was not realised in the choice, but one faces challenges in explaining why the agent would have been compelled to choose the cheesesteak and not, for instance, a hamburger or a sandwich which also appeared tempting to the agent when he was studying his options. In light of these other options, the agent's choice does not seem to be coerced in the sense that these other tempting options would not have been available for him for some reason or other at the time of choosing. The example does not, however, show that the agent was free to choose the salad, but only that he was free to choose from a variety of options. In this sense, it fails to overrule the possibility of unfreedom in akratic actions. Nevertheless, in akrasia it is typically assumed that the agent should have acted according to his better judgement and this 'should' implies that, things being equal, the circumstances are the kind that the agent would normally be able to act according to his better judgement.[231] Moreover, one could also argue that in the

[230] Of course intentionality is not a sufficient condition for freedom.

[231] Of course, if freedom entails that one acts according to better judgement, then akratic actions are necessarily unfree. This kind of freedom seems, however, too demanding rendering akratic action such as procrastination unfree.

case of addiction, the choosing is different, as one of the options is more tempting than the others.[232]

The problem of (not having the right kind of) control still remains. The phenomenal characteristics of the desire, for instance, make it difficult for an agent to resist or act against it. Wallace (2003, 426-427) characterises it as persistent. It does not stop assailing the agent unless it is satisfied and it seems to defy the agent's reflections on it should they be contrary to it. This has been described by making an analogy to noise from a party next door: No matter what you try to do or how hard you try to concentrate on something else, you cannot escape and forget the noise. (Watson 1999, 10.) The desires are typically experienced as intense and this intensity just grows if the desire is left unsatisfied. A hungry person, for instance, becomes ravenous. Wallace (2003, 427) points out that this characteristic makes people to describe these desires as cravings. Technically, the term 'craving' can be understood to mean that the desires are literally irresistible, but Wallace explicitly denies using it in this way. I, too, claim that this literal irresistibility is not plausible in relation to human *action* in which the person's agency is necessarily involved in a more meaningful and active sense than the person being a mere platform to stimuli in a puppet-like manner.[233]

Caving into a choice that is against one's better judgement seems then to involve other matters than purely cases of unfreedom such as coercion or compulsion as seizures or spasms. In these former kinds of cases, it is clear that control over bodily movements is not in question. The bodily movements of the action in question are under the agent's voluntary control, but something else seems to

[232] This is basically the same idea that Heyman talked about as the toxic nature of addiction. What is different though is that Heyman thinks that the nature of addiction affects one's preferences and the agent does not then act against his better judgement. Further, this kind of idea that seems very typical regarding addiction has been contested with some empirical studies in which drug-addicted individuals have shown to choose other options than drugs when given the choice. (Cf. e.g. Hart et al. 2000 & Wesley et al. 2014).

[233] I have discussed the problem of compulsion in 2.2.1.

make the action less than ideal. This way of expressing the puzzlement over addictive behaviour is common. It is unclear how and why an addicted agent would consume the object of his addictive desire when he judges that he ought to refrain from that consumption and, yet, when he has not lost the control over his bodily movements. (Levy 2013b, 2.) This is a clear indication that there are different kinds of control involved in human agency and action. It seems that we come to the questions of self-control; for instance, what is it to refrain from an action for which you experience strong desires and what it is to act against your better judgement? Now, Wallace (2003, 437) suggests that in order to analyse the circumstances of addiction, we need to acknowledge that in human agency there are volitions which translate as a "kind of motivating state that, by contrast with the given desires that figure in the hydraulic conception, are directly under the control of the agent -- ".

For Wallace (2003), desires are not merely causal forces the strongest of which determines the agent's action, but more like ingredients in the agent's motivation and this is explained in the way in which the desires appear to the agent. This seems to be a Kantian supplement to the straightforward causal model of desire-belief pair in the sense that the desires as such do not cause action.[234] Wallace suggests that addictive desires play the kind of role in one's agency that explains what makes addicted individuals judge that fulfilling the desire is more rewarding than it might turn out to be. This is understandable, as Wallace's interest lies in reflective agency and the phenomenal characteristics of the desire provide support for his view; because of the desire's characteristics described above, the addicted individual chooses differently than how he would have, had the desire not assailed him. The desire involves the agent to focus on the anticipated pleasures and it may be intensified by other painful sensations and emotions. In

[234] In a Kantian model of motivation, desires do not cause actions but merely serve as reasons for the agent's choice concerning the action (see for instance Reath 2006, 13).

Wallace's (2003, 444) words, then, "someone subjected to such a quasi-perceptual state will presumably find it difficult to think clearly about the overall balance of reasons bearing on the decision to consume or abstain from consuming the drug." This kind of view on the desire explains the lure of addiction and formulates addiction more in terms of temptation than compulsion, thus leaving room for agency and underlining challenges in terms of irrationalities. It does also fit descriptions of akratic action, and further the difficulty in practical thinking does not automatically strike as a cause of unfreedom.[235] But, as such, it hardly presents a description of addictive action that covers the phenomenon thoroughly.

Now, the control of the agent is challenged in Wallace's account and in the will view in general in the form of strong desires, but equally it could be argued that it is challenged in another sense, namely that addiction is habit and in this way in some sense out of the reach of one's self-control, as the actions are carried out in terms of some kind of automatism (see Wallace 2003, 428–429). Habits pose an interesting challenge to the agents: once they have been acquired, they are difficult to lose. This is easy to see with bad habits such as nail-biting. (Pollard 2013, 75.) The action is intentional, but when the agent wills to stop the habit, it may turn out that the habit seems to have "a will" of its own, defying the agent's attempts to control it. Next, I will analyse what kind of challenges habitual behaviour may be seen to pose to an agent's self-control in order to show that habitual action is a salient feature of addictive action, too. Acknowledging this helps us to see that addiction is not simply akratic action but involves other types of action as well. Furthermore, it also contributes to the framework of continuity in which different kinds of actions can be understood to amount to addiction.

[235] Wallace 2003 is aware of this and his point is to show how addiction is more than the kind of decision-making akrasia involves.

5.2.2. The problem of habits and self-control

As mentioned above, Wallace (2003) highlights the point that addictive action may be considered to be voluntary. It seems clear that addiction does not necessitate a break between what the agent judges best to do and what he is, in fact, most motivated to do. However, there is another nut to crack with the notion of self-control and addiction. I have spent time showing how addictive actions are typically understood as action in which the agent is strongly involved; not necessarily in the sense that the action is, what David Velleman (1992a) calls, a full-blooded action, but in the sense that the addicted individual is confronted with the urges and, whether he complies with them or not, he takes or is given a stand in the process. But, as Wallace (2003, 428) also points out, another aspect of addiction, nonetheless, is its habitual nature.

> "Such automatic routines as the addict exhibits presumably develop through habituation, as adjustments to one's state of dependency, ways of staving off the unpleasant effects of continued substance deprivation" (ibid.).

In fact, it has been named as one of the aspects that in combination of expected rewards bring about patterns of behaviour that may be very difficult to break (Pickard 2012).

Wallace (2003, 428–429) discusses automaticity that is involved in addictive behaviour. He argues that simply because addiction involves habitual behaviour, it does not directly mean that this habitual behaviour implies defects in the agent's will. From the fact that the agent does not control his behaviour through reflection we cannot directly infer that he was unable to do so. Habitual behaviour does not undermine one's will in the sense that it automatically questions the agent's control. Imagine an agent going for a morning run. The daily action of a runner as such may stem from the habit without any conscious deliberation or planning and yet the action does not seem problematic in the sense that it is performed by the agent, from the beginning to the end.

Smoking is probably the most telling and common example of this kind of habit that is involved in addictive action. And just because an agent starts his day with a cigarette without actually paying much attention to his routine, it does not mean that his will is undermined even if that action does not activate the will to a great degree in those circumstances. Wallace leaves his discussion of habits to this, as the point he emphasises culminates in the agent's reflection, but I would like to continue a little further, as the challenges of explaining habits seems to bring out more aspects that seem relevant in understanding addiction.

At a more general level, in philosophy of action, habitual action poses a challenge to the standard views of action and agency (see Pollard 2013, 74–75). It could be seen as an instance of intentional action that the agent does not have a conscious intention to carry out.[236] A person who bites his nails does not necessarily have an intention to do so, yet, the action is intentional. There seems to be something similar in habitual action to action that is carried out half-heartedly. The agent *qua* agent is not fully active in some sense. The problem is particularly visible with bad habits, as it seems quite challenging for the agent to change his ways when the whole acting seems to be away from the centre stage of one's agency. Addictions may be seen as bad habits.[237] Smoking is a good example of this. People find it difficult to quit smoking, as it is integrated to their daily behaviour like habits typically are. If

[236] Of course this distinction between acting intentionally and acting with an intention can be questioned, as for instance Davidson (1980b, 6) does when he argues that acting intentionally can be defended as an action done for a reason. The nail biting can be then described with a reason that the agent wanted to do it. However, this kind of view seems to leave the understanding of action to a very basic level. Every action can be explained by stating that the agent wanted to do it. I find this level of explanation insufficient in understanding action in addiction.

[237] Maybe the disease view refers to this when the proponents argue that addiction is not about choice. However, it would be a drastic move to argue that bad habits, in general, are relapsing brain diseases. I do not think the disease view takes the habitual aspect to be the core problem in addiction, but I do think it recognises it as a part of the problem.

everything goes like it usually does, the agent need not pay much attention to his actions and he can let the habit lead him. Smoking a cigarette in these kinds of circumstances is definitely not a battle of desires the strongest of which wins, but rather the action seems to realise without the participation of the agent. He seems to be there only as a puppet. How will the agent control oneself if the whole acting does not seem to be fully in the agent's control to begin with?

The traditional opposition of the agent's being active or passive in his actions seems to break when habits are understood in a more positive light. There are prominent philosophers starting with Aristotle and Hume who have considered habits as constitutive of full-blown moral action, for instance. In this kind of framework, habits are dispositions or something that realise a principle of human nature.[238] (Pollard 2013, 76.) In light of this, not being aware and alert about the reasons and intentions of one's action at the time of acting need not be a sign of passivity, but it could be a sign of a truly virtuous person who just knows without contemplation what to do and how to act virtuously. Furthermore, many skills are acquired in this manner. Riding a bike or walking, for that matter, need not concern the agent's full attention during the whole activity. Typically, I argue, people do not pay attention to these kinds of mundane actions unless there are some exceptional circumstances such as ice on the ground or some other obstacles that alert the agent to pay more attention to the task at hand. I have not maintained that human action requires conscious reasons for action or intentions in order to even qualify for human action. In my view, that would be over-intellectualisation of human agency. However, it still seems problematic if this kind of habitual action is not fully available for and responsive to the measures of self-control.

[238] In some sense habits are something that the agent is truly constitutive of. They express in some sense authenticity; the ways in which the agent acts in the world. An interesting question is, then, how this authenticity relates to the notion of autonomy, if autonomy is understood as self-rule.

With habitual addictive actions, problems are likely to occur if the addicted agent has specifically formed an intention to refrain from this kind of action. Davidson (1980c) says that in order to act intentionally, one need to want y more than x and believe to be free to do so. And it has also been pointed out that forming intentions requires the belief that one can perform the intention (Pickard 2012). The point about habitual action in addiction, for instance, is that the agent does not really think about whether one is free or not to do anything. The question of freedom as a requirement for intentions typically becomes more relevant when the agent tries to break a habit. Forming an intention and sticking with it is an active effort of the agent, but as habits seem to be somewhere in the periphery of conscious intentional agency, it seems plausible that the measure of one's self-control may easily miss their target. The nail-biter may not realise that he is engaging in his habitual action, reinforcing the routine, even when he has specifically decided not to do so again.

This kind of discussion relates to the discussions of different sources of motivation in the agent's action. Agency seems not to be a simple platform in which everything is reachable to an equal extent. The Humean account of motivation rests on the idea of desire with a means-to-an-end belief and that these are constitutive of action explanations (Smith 2013, 153) and the strongest desire provides the motivation for action. But this kind of picture leaves out the habitual tendencies as well as the unruly phenomenal desires that do not conform to the agent's normative evaluations what one is better to do, both of which seem to accord with the typical addictive actions.[239] Furthermore, it needs to be mentioned that habitual behaviour is difficult to tackle with, not because of some brain (mal)functions in addiction, but because of the nature of

[239] Of course we can question how rationalistic should our understanding of human agency be. Rationality seems to be an important characteristic of human agency, but in some cases it is also an ideal that is not supported by empirical evidence of actual human behaviour. Just like the criticism presented towards the rational choice view, it seems obvious that human beings are far from being perfectly rational in their actions.

habits and their roots in human agency in general.[240] It is not only in addiction when people struggle to change their habits – whether it is learning a new habit, modifying a current one or simply stopping it for good. Habitual actions also reflect the intensifying nature of addiction: The longer the agent smokes, the more difficult it becomes to change the habit, not only because of the dependence on nicotine but by repeating the action the habit gains strength. Addiction is a matter of degree and the more solid the habit is, the more likely it is to affect the agent's possibilities of changing it. That seems to require strength from the agent and in akratic actions, in turn, this is exactly the thing that seems to be lacking. With the combination of habitual behaviour and akratic action, addiction does indeed seem to pose challenges to the agent's self-control over his actions – maybe to the extent in which it can be considered as a disorder. I take this as my cue and I will next continue to analyse the will view of addiction in light of different accounts of impairment of self-control in order to show that even with this kind of framework, addictive action is varied and does not fall into one type of action. In what follows, I will consider what it means that addiction is characterised as severe loss of self-control, not as a question of freedom, but as a question of impairment of one's agency.

5.3. The failed acts of will as impairment

Typically action seems to involve the right kind of motivation or the right kind of control over the action and, in Wallace's view on addiction, this is called into question. Also in akratic action this is questioned. As discussed above, many agree that addiction also seems to contain an idea of some kind of impairment of self-control. Addiction is often characterised as loss of control (e.g. Levy 2013b) and Wallace (2003) refers to it as a defect of will. This loss, however, is not all consuming deterioration of one's agency

[240] Of course these may be considered to be reducible to brain functions, too.

that would amount to something that violates the "ought implies can" principle. In all consuming deterioration of one's agency the ability to act would be undermined and this is clearly not the case in addiction nor is it typically considered to be the case in akratic action, either. Instead, depending on the view, addiction can be seen as a loss of control in terms of volitional control that may concern moral implications. This challenge to one's reflective agency that is constitutive of one's volitions, is what Wallace (2003, 437) has in mind when he discusses the impairment addiction may cause especially in reflective agency. In this section, I will explore the different ways of understanding this impairment of self-control in addictive action and by doing this, I also hope to show that addictive action need not involve akrasia and, further, that this impairment does not render addictive action as a single type of action, but allows the variation that I have presented in this chapter as well as in the previous ones. I start with how to conceptualise the alleged loss of control in addicted individual's agency without losing this agency completely.

5.3.1. The problem of loss of control in addiction: exercising will-power

Wallace does not talk about self-control even though his use of the notion of will seems to cover some of the same aspects that I discuss here. His view does not seem to need the notion of willpower understood as strength, as the recalcitrant desires are not sensations but perception-like states. So far, in this chapter I have discussed weakness of will and in that discussion occasionally mentioned the notion of self-control. If weakness of will is not merely understood as a battle of desires and beliefs (and intentions), there is space for the notion of strength of will or will-power that is separate from the strength of desires or any kind of pro-attitudes that Davidson identifies (see for instance Holton 2009, Pickard

2012).[241] As I hope to have shown, the problems addicted individuals may face in their agency need not concern akrasia, i.e. acting against their better judgements, with or without the battle between desire and reason, but the question of self-control still remains.[242] What is it that addicted individuals are claimed to struggle with? Is it a struggle in the first place? What do people mean when they say that addicted individuals are out of control? So far in my thesis it has hopefully become clear that losing control cannot mean a total lack of control over one's actions. Addicted individuals perform actions the movements of which do not lack, for instance, motor control. Their actions are also intentional in the sense that they serve a purpose. They even seem to act for reasons and react to different kinds of reasons. Furthermore, their action also seems to involve motivation that is not merely circumstantially triggered (as is the case with cues and sometimes with appetitive desires). Where is the control then lost? In this section I will consider whether addictive action concerns problems in exercising will-power understood, first, either as a faculty or, second, as a some kind of break in the agent's act of will.

---

[241] Holton (2009, 128), for instance, wishes to separate will-power from self-control, arguing that self-control is lacking when the agent acts contrary what he holds best to do, i.e. the cases which I have discussed as cases of akrasia, and that will-power or strength of will is a separate faculty. Henden (2008, 83) agrees with Holton's distinction even if he considers Holton's understanding of willpower too narrow. Holton requires the existence of resolutions whilst Henden stresses that in general willpower is the ability to align the agent's deliberations, decisions and voluntary bodily actions in the face of resistant inclinations. For a nice summary of their views see Horstkötter 2009, 35–36. In any case, using self-control in relation to better judgements and will-power in relation to muscle-like functions, the two seem to distinguish one's rational self from the capacity to stick with one's intentions no matter what they are. I agree that this kind of distinction can be made, but I will ignore it here for I am not sure whether the muscle like capacity can be emptied from all kinds of normativity.

[242] There is always a question whether akrasia or Holton's (2009) account, for instance, are sufficient in describing weakness of will. See e.g. Henden 2008; Tenebaum 2013, 278; Mele 2012. The question what is weakness of will is partly motivated how the conception of will is understood.

Wallace (2003, 437) suggests that "we need to expand our conception of the basic elements involved in reflective agency" to include volition. Furthermore, in the recent years there has been a suggestion for a separate faculty of self-control that has been supported by empirical evidence.[243] In this kind of view, self-control is seen as a muscle-like entity that the agent can practice. Like with muscles, exercise is probably effortful, but training will result in the agent's having more self-control in the long term. It is, nevertheless, a resource that eventually runs out when used (see for instance Levy 2006a, Pickard 2012, Kennett 2013).

The views of addiction that rest on strong desires seem to suggest that addicted individuals experience strong "pull" of drugs that is greater than the attraction provided by natural rewards. Furthermore, the drugs may affect addicted individuals' abilities to resist the pull.[244] (Levy 2013b.) Managing one's agency in this kind of framework quite clearly requires effort to control it, especially when this kind of pull has played its part in the drug use, for instance, becoming a strong habit (Pickard 2012).[245] Also, the way in which Wallace (2003, 426) characterises what he calls A-impulses or A-desires suggests that the agent requires a great deal of effort to control the desires that are not affected by the agent's

[243] There is also an on-going debate whether these studies actually measure self-control and whether the results lend support to this kind of a view. See for instance Horstkötter (2009) for a brief review of the empirical evidence a few years ago. Nonetheless, it need to be said that the notion of separate faculty of will in itself is far from being very recent in philosophical literature; even Plato introduces a tripartite division of the soul in *Phaedrus* (1997 P, 524–532, [246a–254e]) with an allegory of two horses in a chariot with a charioteer.

[244] Addictive desires and cravings need not be understood only in relation to drugs or other addictive substances. The role of drugs may be questioned as being the centre of the problem in addiction. For instance, recently there has been a growing interest in the role of affects in addictive behaviour. The case of problem gambling or pathological gambling is telling, as it is an exemplar of addictive behaviour without any effects of exogenous substances. See Uusitalo, Salmela & Nikkinen 2013.

[245] Habitual action has its conceptual challenges in terms of the agent's participation in the action not only in relation to addiction but also in general. I have discussed addiction and habits in this chapter, in 5.2.2.

judgements and keep persisting unless they are satisfied. If we imagine an agent trying to keep a rolling stone from rolling down the hill with his muscle strength, it seems clear that at some point he runs out of strength and the stone will roll. In the same way, if the addictive desire persists and little by little eats away the agent's self-control, at some point the agent is likely to comply with the persistent desire.[246]

This kind of view of strength of will or will-power has received criticism due to its simplistic executive function. The critics argue that the use of will-power as self-control cannot be reduced to mere muscle-like mechanics, but that there is always a normative aspect in play when the agent employs will-power to his actions (see for instance Horstkötter 2008, 36–38; 2014). It has been argued that a capacity for self-control is simply not "a mental analogue of brute physical strength" when talking about normal agents (Mele 2012, 93). When people resist temptations, they learn to employ promises of rewards and vivid images of negative consequences were they to cave in (ibid.). This is definitely more than the exercising muscle-like effort. Wallace (2003) acknowledges that the problems addicted individuals face might not be only about the (overpowering and/or persistent) strength of desires, but their resilience. One of the essential features of this resilience is, according to Wallace, its immunity or unaffectedness of the agent's deliberative judgements. The insistence of the desire does not cease just because the agent comes to the conclusion that it is best not to satisfy the desire. And in any case, the desires in this framework should not be understood as sensations, but they have a conceptual dimension.[247] The conceptual structure does not

[246] The muscle metaphor that has gained strength from the empirical studies of psychological researchers such as Muraven or Baumeister is not the only case when the empirical research has had influence on the views on self-control or will. For a review of this kind of research see Muraven and Baumeister 2000 and a philosophical categorization see Horstkötter 2014.

[247] "Desires to obtain some prospective pleasure or to avoid a prospective pain may be conceived as quasi-perceptual modes of presentation of these anticipated sensations. They are like perceptions in exhibiting conceptual

necessarily amount to full-blown judgements. It is clear that with desires like these that exhibit conceptual structure, the use of self-control or will-power cannot be exercised in a mere muscle-like manner.[248]

Furthermore, even if we accepted that the addictive desires triggered by cues consume the muscle-like resource of addicted individuals' self-control due to the repetitious battles against the allure of the desires, it is not clear that the problem of addiction lies in this kind of loss of self-control. In fact, it has been pointed out that addicted individuals do have a capacity for self-control "that can enable them to resist and overcome these desires" and it is at their disposal (Dill and Holton 2014). They do not differ from non-addicted individuals in this respect (ibid.). However, even if it is recognised that addicted individuals have self-control, it is still understood as control of the self and not by the self (cf. Horstkötter 2014). In light of this kind of framework, an unexpected point about the capacity for self-control has been voiced out in first person: an alcoholic claims that addiction is anything but a failure of will power. Instead, he insists on the opposite:

> "Ask yourself what it takes to do that [i.e. drinking], say, every day. I tell you what it takes: it takes will-power. You have absolutely got to stop listening to your body; you have to overcome a thousand bodily recalcitrances and make yourself keep pouring." (Sartwell cited in Kennett 2013, 153–154.)[249]

The point the quote raises seems plausible if it is compared to, say, a more mundane case of forcing oneself to eat when there seems little or no motivation due to for instance nausea or nervousness, or maybe the agent is in circumstances in which it is considered

---

structure, without necessarily being or resisting on full-blown judgments." (Wallace 2003, 441)

[248] This seems to apply to most if not all human desires and self-control, though.

[249] Kennett (2013) does not question the truthfulness of the self-report that she cites, but takes it on face value.

impolite not to. It takes effort to work through the food. The point of the quote is to illustrate that the typical problems of losses of self-control associated with addiction may not be sufficient for "a full understanding of the losses of control characteristic of addiction" (Kennett 2013.).

The critical philosophical considerations and addicted individuals' self-reports of their self-control are not without support from the empirical sciences, either. Recently, there has been research conducted on self-control of problem gamblers (e.g. Bergen et al. 2014). In one of the studies the researchers found that the research participants who were categorized as problem gamblers (as opposed to lower risk gamblers) performed no worse than the lower risk gamblers in their persistence of solving an impossible tracing task after a 15-minute session of playing slot machines.[250] Their will-power had not run out differently from the gamblers who do not suffer from problem gambling. Indeed, this does not sound very surprising given the characterisation of will-power in this section. If self-control is understood in this muscle-like will-power, then it seems plausible to expect that with exercise this ability will be enhanced, just like doing physical exercise will usually provide the agent with more muscle-power.[251] However, concluding from this that addiction does not involve challenges with self-control is obviously not justified. Instead, I suggest that the point to be taken from this discussion is that different aspects of self-control play a role in different aspects of agents' action and their agency.

[250] This kind of examples should still be treated with caution. As far as I am familiar with these kinds of studies, the overall discussion of these self-control studies is notorious in whether they are actually measuring the very thing that they are supposed to measure.

[251] Of course this could be seen to be balanced with claims that the effects of drugs bring about stronger inclinations than what one has to control as a non-addicted agent that the addicted agent has to control and they would then need more self-control to start with. Kennett (2013) discusses this kind of view when she points outs its shortcomings. Holton has also expressed a similar kind of view concerning the strength of cravings and drug-related desires to the view that Kennett criticises (Dill & Holton 2014).

As I stated in the beginning of this chapter, addiction is typically characterised with loss of self-control. What seems to be important is that it is acknowledged that this loss may be of various kinds and what is more, it need not rise from the object of addiction such as drugs or gambling. A more nuanced notion of self-control is called for than the muscle-like function that has been described in this section. It has been pointed out here as well that the ways in which people use control over their own action exceed the idea of self-control as the strength of will that resembles muscle strength (e.g., Mele 2012, Kennett 2013, 152, Horstkötter 2014).[252] There also seems to be a difference in terms of self-control when the agent merely resists temptation or refrains from doing something that he finds himself motivated to do and when he judges that he should refrain from doing it and holds on to that decision. The former, I believe, can roughly be understood in this muscle-like function (though it does not need to be restricted to this kind of "muscular" resistance) and the latter concerns more about the agent's beliefs, judgements and will. It seems that the impairment of self-control in addiction resembles more the impairment of rationality that is involved in cases of akrasia than problems in the use of muscle-like power. This brings us to the issue of responding to reasons.[253]

Wallace changes the nature of the battle of control from the causal forces and strength of the desires in terms of sensations to a conflict that involves "quasi-perceptual representations" stemming from those addictive desires. He (2003, 445–446) argues that a characteristic of A-impulses, i.e. "resilience precisely consists in the unresponsiveness of desires to evaluative reflection" and he

[252] This is a similar criticism that I have raised towards the too mechanistic and fractional view of agency in the choice view. If we take a desire and then resist it with effort that eventually runs out, it does not leave room for the agent to employ other means to resist the temptation, i.e. means that involve cognitive content.

[253] A concise analysis of addicted individual's reason-responsiveness can be found in Uusitalo, Salmela & Nikkinen (2013, 39–40). I discuss this in the following section. The analysis in the following section is a more detailed analysis than what we have in the original published article.

elaborates that it is the "reflection about what one has most reason to do". This brings us to the notion of control again in terms of reason-responsiveness (that qualifies the agent's to be hold morally responsible for their actions, too, according to a view by John Martin Fischer and Mark Ravizza 1998). I will next discuss the problems the requirement for reason-responsiveness may cast on addicted agents when they engage in addictive action in order to obtain more nuanced view on addictive action. Are the challenges the same kind that weak willed agents have in their agency?

5.3.2. The problem of responding to reasons

Control over one's action can be considered in terms of how the agent recognises reasons and reacts to them (Fischer and Ravizza 1998). As already shown in Chapter 2, failure along these lines has been attributed to addicted individuals. However, could it also be that addicted individuals do respond to reasons regarding their addictions? Wallace (2003, 448) suggests that "[t]he focusing of attention that is constitutive of desire becomes a clear defect of rationality only to the extent that it impinges on our ability to form true beliefs and to draw correct inferences from them". He goes on by saying that the cases he has considered in his view were not supposed to be that kind, as "we were to suppose that A-desires do not cause impairments of these kinds" (ibid. 448). Nevertheless, the US National Institute of Drug Abuse (2010, 20) for instance, disagrees with this. Their report states that "[d]rug addiction erodes a person's -- ability to make sound decisions --". This alleged defect does not seem to concern instrumental rationality as such, but calls into question willing addicted individuals' decisions as well as offers an explanation to unwilling addicted individuals' actions. One way to analyse this is to consider whether addicted

individuals' decision-making satisfies the criteria of being responsive to reasons.[254]

Moderate reason-responsiveness consists in, first, reasons-receptivity that is regular. Second, moderate reason-responsiveness consists in reasons-reactivity of the actual sequence mechanisms that reacts at least weakly to reasons and results in the action. (Fischer and Ravizza 1998, 89). If addiction defects the agent's sensitivity to take in reasons and react to them, the addicted individual is not reason responsive enough for having control over his action regarding the addictive behaviour and the action does not qualify the agent as full-blooded with moral responsibility for that action.[255] Even if Wallace (2003, 448) argues that A-desires as such are not supposed to cause impairment in one's ability to form true beliefs and draw correct inferences from them, he is of the opinion that a requirement for rationality is "that we choose in accordance with our conclusive practical judgements about what we have reason to do". Weakness of will does not qualify for Wallace's requirement for rational action, and insofar as addictive action is akratic, it fails to satisfy the requirement too, but does addictive agent's action fail the criteria for reason-responsiveness?

It is important to have a look at the two features in more detail in order to see whether addictive action involves problems in either. The first feature is reason-receptivity. An agent has a functioning mechanism of reason-receptivity when he recognises

[254] I use John Martin Fischer and Mark Ravizza's (1998) account of control as reason-responsiveness that they call guidance control and that they use for determining whether an agent is responsible for his action.

[255] It needs to be acknowledged too that it is not only in the case of addiction that some reason appears more attractive or possibly even irresistible to the agent than the others. It seems that every instance or action that is done because the agent strongly values her cause or is otherwise motivated is the same kind of case of not being moderately reasons-reactive. It does not seem plausible to consider that, say, my urge to finish this chapter on the cost of being late from a meeting with my dear friends on a New Year's Day is due to compulsion even if it fails to be moderately reasons-reactive. Reasons-responsiveness does not seem to be able to distinguish between actions that we consider to be free and unfree (or compelled) when the motivation is so strong that other reasons are overridden.

the reasons as sufficient (to affect his plans for action) (Fischer & Ravizza 1998, 41).[256] Addicted individuals seem to take in reasons in terms of understanding the pros and cons of their addictive action, as I have pointed out in Chapter 3, but whether or not this receptivity is taking place as recognising reasons as normative reasons for action is another thing.[257] It may be that they are disillusioned about some false idea about their addiction. However, even if this were the case in some instances, addiction does not seem to involve this kind of defect even if it can be interpreted that empirical evidence such as attentional bias supports this kind of disillusionment.[258]

The cognitive biases typically reported in addiction such as attentional bias seems to create disturbance that has been compared to noise in the addicted individuals' decision-making process (cf. Watson 1999, 10).[259] The addicted individual keeps on thinking

[256] Fischer and Ravizza (1998, 41) name delusional psychosis as an example of a failure in this kind of recognition.

[257] It could, of course, be the case that addicted individuals are unable to understand the facts about the harm they are causing themselves (and others) with their addictions. As mentioned in 5.2.1, it could be a case of self-deception. However, negative emotions such as shame are common in addiction and this suggests that it is not the kind of self-deception in which the agent would oblivious about the deception he is imposing on himself.

[258] Sometimes the phrase "I can quit whenever I want" is taken to be a proof of this kind of disillusionment. The question whether it is accurate statement is of course empirical, but there is no decisive evidence that the answer is definitely one or the other. In fact there is evidence of both. Some people quit on their own (see e.g. Heyman 2009) and some need help in doing so (e.g. Uusitalo & Broers 2015). It seems to be at least partly related to the capacity of self-control, and addicted individuals like non-addicted individuals have this capacity to varying degrees. See Dill & Holton 2014.

[259] The empirical studies on attentional bias in addiction (see for instance Attwood 2008) suggest that this idea of "quasi-perceptual" approach can be found in neuroscience too: the ways in which addicted individuals perceive situations in which they engage in practical reasoning are biased. The portrayal of the situation may be affected by this attentional bias and in this way distorting the perceptual experience. Attentional bias is a form of selective attention and there has been studies for instance how alcohol, heroin, smoking and gambling stimuli draw attention. In neuroscience, this has been suggested to be connected to the agent's behaviour.

about the object of the desire that seems to dominate his attention. Wallace (2003, 447), too, discusses "the perception of the forbidden foodstuff" in which "one's immediate awareness of a set of options as concrete and appealing alternatives for action".[260] However, this does not suggest that this capture of attentional resources would prevent the agent from taking in or having access to other kind of reasons even when it is acknowledged that the requirement for reason-receptivity involves regularity. The receptivity is regular even though there may be systematic "noise" when encountering addiction related stimuli. It is regular if the agent has a pattern of receiving reasons (Fischer and Ravizza 1998, 70–71). This pattern in addicted individuals may be biased to highlight addiction-related cues, but every agent does have attentional bias in their ability to take in reasons. Being biased to addiction-related cues does not suffice as such for undermining that regularity. So basically the addicted individual needs to have a mechanism for receiving reasons that functions in a regular manner in recognising reasons and their different weights, and how the reasons fit together.

Of course, the state that addicted individuals have on promoting addiction-related cues still poses some kind of challenge for reasons-responsiveness,[261] but there is no reason to question whether addicted individuals can take in reasons if receptivity is

[260] Neuroscientific research lends support to this view: Lubman et al. (2009, 206), for instance, report that "drug cues can selectively capture attentional resources as well as reliably activate key regions within the brain's reward system." The attentional resources they are referring to are basically conditioned drug stimuli which produce an increase in dopamine levels in the corticostriatal circuit, in particular the anterior cingulate gyrus, amygdala, and nucleus accumbens. This in turn serves to draw the subject's attention towards a perceived drug stimulus. The process results in motor preparation and a hyperattentive state towards drug-related stimuli that, ultimately, promotes further craving and relapse. (Franken 2003, 563.)

[261] The state could perhaps be compared to a social situation with a group of friends and a television that is on, the attention of the group of friends is easily drawn to the television even when there is nothing particularly interesting on. What one requires in that particular moment is effort in order to focus on the things one finds to be more interesting such as a discussion with the friends around.

considered only in terms of having addiction, when addiction is understood as a disposition with susceptibility to particular types of desires. The case seems different if there are immediate rewards available. Even in my discussion of the heroin-addicted individuals and their informed consent in Chapter 3, it was important to consider the chance of participating in the research without any incentives for immediate rewards. The addicted individuals did not receive a dose of heroin immediately after consenting to the research, for instance. In that way, the researchers tried to prevent situations in which the addicted individuals' decision-making would have been subjected to activated drug-related stimuli and along with them, craving for the drugs.

What about reactivity then? A failure to react to reasons can take two forms. First, it can be a failure to choose according to the reasons, so the agent fails to be appropriately affected by them. Second, it can be considered as a failure to execute the choice. (Fischer & Ravizza 1998, 41–42.) Is addiction a problem of reasons-reactivity? In light of the discussion about weakness of will above, it seems so. However, criteria for reactivity should not be understood to be necessary for responsible agency, but it suffices if there is a counterfactual chance that the agent satisfies the criteria (ibid.). Does addiction somehow incapacitate the addicted individual and make it extremely difficult to react to reasons in a proper way counterfactually as well as actually? Making it extremely difficult to react to reasons would suffice for addicted individuals to fall outside "moderate reason-responsiveness". Maybe it is the case that addiction lures the agent in committing actions that he would not have otherwise done by making the reason to act in an addictive way seem more attractive than it would normally be,[262] but as I hope to have shown already, addicted

[262] Again, neuroscience provides support for this: For instance Lubman et al. (2009, 211) discuss enhanced event related potential responses to drug-related stimuli and suggest that "drug cues capture processing resources and influence behaviour". If this is correct, one way of reading it is that the attentional bias seems to affect the addicted individual's agency on some fundamental level. However, it is unclear how the influence on behaviour should be understood.

individuals may well act on the basis of other reasons. There have been studies indicating that addicted individuals react to reasons such as extensive changes happening in their lives or even price changes in the market (see Levy 2006a, Foddy & Savulescu 2006a). There is even evidence that individuals addicted to heroin decide by themselves to undergo withdrawal in order to lower their tolerance and thus manage and control their consumption (Ainslie 2000, 80). This is hardly an instance of being out of control in the sense that the agents cannot determine what they do. Their decision to go through withdrawal does not seem to be dictated by their addiction in the sense of simply satisfying the addictive desire and obtaining immediate pleasure, but there seems to be other reasons involved. Further, this kind of behaviour does not seem to be in any way weak willed but the contrary. These observations and studies do not suggest that addicted individuals do not react to reasons because of their addiction.[263]

If the consequences change and addicted individuals know this, it should affect their actions by having an effect on the reasons for acting accordingly. If for instance the addicted individual suffers from an infection caused by a dirty needle, then the

---

Even if one embraced a reductionist view interpreting human action, i.e. that human action is most fruitfully investigated at the biologically most fundamental level, whatever it may be, the effect of 'influence' is unclear. Surely the researchers are not suggesting that the cues take over the agency leaving the addicted individuals without any say on their action. This, as has become clear throughout my thesis, is implausible view of addictive action.

[263] It should be mentioned too that, in the context of free action, the reason-responsiveness is problematic, namely because reason-responsiveness does not provide an independent test for the action being free or not, as there may be other compelling reason that makes the agent act. The view has also been criticised among other things about the fact that the notion of mechanism needs more clarity (Levy 2007, 126–7). Being responsive to some reasons is not directly an indication that the action is free, as it can be another, yet, stronger compelling force that moves the agent (Watson 1999, 9). For instance a person who suffers from two phobias may find herself in an unfortunate situation in which both objects of her phobias are present and she has to "choose" the lesser phobia which she faces. It can be argued that the person did not choose on the basis of reasons, but took the option that contained the phobia with less force.

consequences of injecting heroin will probably have some additional risk factors and negative outcomes than before. Acknowledging this, it should affect the addicted individual's consideration of whether or not to use drug (in that way). This seems to be the idea in harm reduction policies such as providing clean needles for free for drug users. For instance in Switzerland the amount of infections of HIV in heroin users who inject heroin has declined over the years, partly because of syringe exchange programs (Reuter & Schnoz 2009). This gives reason to believe that addicted individuals do not simply have a tunnel vision for drugs, but they are concerned about their health and safety, for instance.

All in all, there is plenty of evidence that in general addicted individuals do respond to reasons. They mature out of their addictions and change their behaviour for good enough reasons and feasible options. Therefore it seems fair to say that addicted individuals are reason responsive. Their cognitive abilities to understand reasons and to react to them might not reflect the ways in which a non-addicted individual typically reacts to reasons if we think about the kind of reasons people react to. However, that being said even the most severe cases of addiction seem to maintain the agent's ability to understand reasons. What addicted individuals in general may have problems with is to do with reacting to reasons in the way in which they would be reacted to by non-addicted individuals.[264] Their evaluation of the expected rewards may differ from that of a non-addicted individual or they may lack motivation to actually carry out the change in their action if they do not even see reason to change it. What this kind of observation implies is that there seems to be objective values in light of which we can judge their action to deviate in terms of reason-responsiveness. The questions that rise from this concern are whether there are those kinds of values and what they could be. Wallace seems to be of the

[264] Watson (1999, 9–10) discusses a film about a drunken character who, in the end, drinks himself to death on purpose. However, Watson does not question the character's ability to understand reasons (nor his ability to resist the desire to drink), but he claims that what the character suffers from is the incapacity to care.

opinion that as long as the agents' choose in accordance with their conclusive practical judgements about what they have reason to do, they are reflective agents. However, it is still a normative requirement and next I will analyse the possible failure of addictive agents' action, not only in terms of irrationality, but in light of normativity in order to nuance, again, the way in which addictive action is understood.

5.3.3. The problem of normativity of failed acts of will

If addictive action is not necessarily a failure of rationality, it can still be a normative failure. For instance, in addiction, action seems to involve excess instead of moderation.[265] In what follows, I will explore this kind of possibility to see whether addictive action necessarily realises this kind of failure or whether there may be addictive action in which normative failures are not necessarily present.

As Wallace (2003) suggests, the addicted individuals may have problems in weighting normative reasons in their decision-making.[266] Indeed, it seems that the impairment, if there is one, does involve normativity. In light of the previous discussions, it seems that muscle-like function is not enough in covering the notion of self-control relevant in addicted individuals' action or in human agency in general.[267] Another aspect that relates to self-control concerns the issue of whether addiction and weakness of

[265] Of course this is relative and sometimes it may be that the value of the thing that involves excess implies whether it is considered a problem. Compare, for instance, drinking to studying hard.

[266] This is also something that Charland (2002) argues. See Chapter 2.

[267] In light of different kinds of views on addiction, Gideon Yaffe (2001, 183–184) has provided a review in which he makes a distinction between theorists who accept weakness of will, but their views do not require a break between the agent's judgement and their action. He names George Ainslie to be among these theorists and, on the basis of my discussion of Richard Holton's account, Holton would fall to this group, too. This kind of failure seems to be committed to motivational internalism and it is a different kind from the views on weakness of will in which a break is possible.

will involve a break between the agent's judgement and their action (see Yaffe 2001). As I have already pointed out here, it depends on the view of action whether the break is possible and, in any case, neither addictive action nor weakness of will necessarily requires the break.

Furthermore, even if a break is not possible, a change in the agent's practical judgement is still possible.[268] There has also been suggestion to view addictive action in which the judgement "shifts" due to depleted resources of self-control. Now, this could be seen as a failure of the muscle-like control, but if we understand self-control as guidance by the self, it becomes an issue with a normative dimension. In fact, in psychological terms the ego is depleted and, according to the view, "ego-depletion seems to degrade the quality of argument assessment" (Levy 2013a, 270). The shift does not involve anything mysterious, but rather it is suggested that the agent's capacity for critical deliberation is reduced and with an incentive for, say, drugs or a drink around, the agent's better judgement shifts uncritically in favour of satisfaction of that desire even when he has valued abstinence over consumption before the occasion.[269] There is an assumption that, were the capacity intact, the shift might not occur. It is also assumed that the agent shares a view what is the kind of action that is generally speaking desirable.

The will view can accommodate this kind of discussion as long as the battle of control is understood in a way that allows for this kind of a break between the agent's better judgement and action.[270] Wallace maintains that the requirement for rationality

[268] In Chapter 3 I discuss Ainslie's hyperbolic discounting in which the temporal order of rewards affects the agent's preferences even when the distal reward may be considerably greater than the reward that is closer.

[269] Levy (2013b, 270) presents evidence of research that outcome of which suggests that when there are not enough resources to adequately assess claims, people tend to believe the claims as true.

[270] In contrast, as mentioned, the choice view, however, seems to fall short in this kind of discussion of addicted individuals' action in terms of failed acts of will when this is understood as a break between evaluation of what is best in the circumstances and motivation to do so. Their view requires that there are

holds true that the agent acts in accordance with his conclusive practical judgement what he has most reason to do. He does, however, realise that this is not always the case. He allows for this kind of irrationality to occur in action, but it focuses on the formation of the judgement.

In Chapter 3, I expressed my scepticism in the assumption that all preferences are motivational to the degree in which they realise in action. If one considers preference merely as an evaluation of some issue being rated higher than another, it does not yet suffice that this motivates the agent to act accordingly. However, the break does seem impossible if preference is understood simply as that which motivates the agent's actual action.[271] That way of understanding 'preference' does not seem to offer much to the understanding of different kinds of human action. I would like to suggest though that despite the intimate relation between the evaluative and motivational parts of preference, they should be separated to explain failures that happen in weakness of will (and in this way, in addiction, too).[272]

If we reflect this on the action theoretical framework that I have been using, in some sense Frankfurt's unwilling addicted individual is an exemplar of this kind of break when the unwilling addicted individual's second order desire fails to affect the first order desires that lead to action. He acts on the first order desire

---

no breaks between what the agent judges better to do and what motivates him the most to engage in an action.

[271] Mele (2012, 61–62) distinguishes the two aspects of intentional action. He mentions a motivational perspective on intentional action according to which information why the agent was in the motivational condition contributes to understanding why the agent acted in the way he did. Intellectual perspective, in turn, assumes an intellectual being whose intellectual activity, i.e. considering options, choosing between them, making judgements about what one would be better to do plays a substantial role in explaining actions of that being.

[272] I understand this to be a great metaethical discussion that I am tapping into and a discussion to which I cannot go in depth in light of the scope of my thesis. See for instance Jacobson 2011. Instead, I will try to keep the discussion in addictive action and merely reflect on the possibilities what kind of a break it can be.

that motivates him the most, but on the second order he does not want that the effective first order desire is the one which results in the action, e.g. the desire to use drugs. Frankfurt's hierarchical model of desires does not really leave room for contemplation about the action after these desires exist. The desires are what they are and only with the second order desires the agent seems to be able to express a subjective attitude to the first order desires.[273] In Frankfurt's (1988, 16) account, it is not enough that a person has second order desires as such, but some of the second order desires qualify as second order volitions. These second order volitions are constitutive of the agent as a person; what he wants to be his will. Even if there is no room for contemplation, this kind of agency seems more complex than a simple view of desires and beliefs in action in the lines of Humean account of motivation. It also seems to involve a normative aspect, even if Frankfurt is cautious about the nature of the agent's identification with his second order desires.[274]

There seems to be at least two ways in which the break between the evaluative and motivational aspects of action-forming can come in play.[275] First, that there can be a "wrong" kind of

[273] This subjective attitude that is constitutive of the agent's will has raised discussion. There has been discussion about Frankfurt's notion of will which has been seen to take form at least in three different ways (Cuypers 1998). Taylor (2005) provides a lengthy discussion of how the agent identifies with the second order desires that are called second order volitions. In my licentiate thesis I also have analysed this identification in relation to addictive action and freedom (Uusitalo 2013c). I will not go into the metaethical discussion that concerns 'fitting attitudes' here.

[274] As far as I understand Frankfurt's motivation, it seems that he needs to have a normative element to qualify some second order desires to be more intimate to the self rather than all of them. At the same time, he needs to be cautious not to produce too demanding a process that might require yet another level or another element in the picture. To some extent, Frankfurt's problems reflect the challenges of a simple Humean account of motivation in which the strongest desire wins and which faces the causalist's problems, namely the lack of agency and the randomness of the desires.

[275] In metaehtics there is a discussion about fitting attitudes that concern the object of a pro-attitude. The idea of theories that concern the fitting attitudes is generally that what is for an entity to be good is to be a fitting, appropriate,

reason that motivates the agent to act. This is when the object of the desire is something that fails to be good and yet there is motivation for carrying it out. For instance, consider a person who is in the grip of grief and is motivated to tear his hair or a tennis player who has suffered a humiliating defeat in the match and desires to hit his opponent in the head with the racket (Hursthouse 1991, 60; Watson 2004a, 19).[276] If the agent considers maintaining addictive behaviour to be, if not bad, then at least not good and he still finds motivation to act in such ways that maintain his addiction, he is in this kind of break between evaluative and motivational aspects. This could be seen as an instance of two different sources of motivation. Nevertheless, this could also be seen as an instance of the kind of weakness of will that Davidson (1980c, 23) suggests even if he maintains the premise in which agent's wants are intimately connected to values. If we do not want to commit ourselves to an explanation with different sources of motivation that come into play, we could follow Davidson's account. The judgement that the agent makes concerning what would be the best to do in that situation may only concern the reasons that point to the thing that is not good. So the agent has reasons for, say, using drugs, but he has also in his view better reasons for not using drugs (Davidson 2006, 144). In these kinds of cases, Davidson calls for a reason why the agent acted on those first reasons instead of the reasons that would be all things considered better, but claims that there are no reasons (Davidson 1980c, 40–41). The agent is simply incontinent in his practical judgement and, in result, in his action. The break comes then in the way in which the agent comes about to

---

proper, rational, or warranted object of a pro-attitude towards that entity (Jacobson 2011). As already mentioned, I am not going to participate in that discussion, but I will use two of the common objections that are expressed against these kinds of theories. The theoretical discussion of fitting attitudes discusses reasons and values and their relations to something that is good.

[276] Hursthouse suggests that her examples of arational actions that are intentional, but lack rationality, provide a source for examples of this kind. However, it could be argued that these kinds of responses to emotional states for instance may be similar to reflexes and do not amount to being actions.

the action, in the formation of the practical judgement that leads to the action. These kinds of breaks are normative, as they do not concern for instance intruding sources of motivation such as strong emotions or desires that deprive the agent's powers of making evaluations and acting on them.

Second, there can be cases in which an agent values something but fails to have motivation to perform it. This is not in the strict sense a case of weakness of will, but it is an instance of failed acts of will.[277] If abstinence is regarded as an ideal state, an addicted individual may still fail to have any reasons for acting towards that ideal.[278] Failure to have any reasons for action that aims to satisfy or realise that ideal may be explainable with a view that there may be values that are incommensurable in the sense that they cannot be reduces to a single value unit such as pleasure (Mason 2011). Maybe the addicted individual has a different value in mind when evaluating the situation. He recognises the value in abstinence but is drawn to the opposite option due to another value that is not more valuable in the same scale (e.g. in terms of utility, reward or pleasure). The agent simply chooses this second value, not because it offers more utility or pleasure, but it offers something different entirely.[279]

If we accept that there can be cases of accidie, i.e. cases in which the agent fails to have motivation to execute his practical judgement, one typically starts to look for explanation why the value does not motivate. At least in cases of addiction, there seems to be a danger of arguing for improving an addicted individual's

[277] Tenebaum (2013, 274) identifies these instances as cases of accidie, and gives an example of a depressed person who knows that he ought to go to work but fails to do so.

[278] This taps into the issue of value that I discussed in chapter 3 in relation to the criticism that has been presented towards the choice view and its presumptions.

[279] Since proponents of the choice view commit to value monism they rather explain this kind of situation in other ways. My mission here is not to solve the question whether value pluralism or value monism is preferable.

autonomy by helping his ”true self” to become effective.[280] Susan Wolf (1990, 87, 129, see also Watson 1999, 23), for instance, has specifically argued that addiction undermines the agent's normative competence by influencing the agent's conceptions of what he values.[281] Normative competence in Wolf's (1990, 124) view contributes to what an able agent has; psychological features that enable him to act “in accordance with the True and the Good”. She talks about an agent's capacity to act upon the reasons there are in that situation (ibid. 125). As far as the capacity is understood as the mechanisms of reason-responsiveness, I have already argued that there may not be anything different from a non-addicted agent's responsiveness to reasons. The mechanism of weighing reasons related to one's addiction is not as such compromised, though most likely affected by it, just because the agent is addicted to something, i.e. dependent on a substance, for instance.

Furthermore, it is worth noting that it is not clear what the influence of addiction is in this case. It seems that everything that an agent does and has some kind of continuous project regarding the issue affects his conceptions of what he values. Consider a person who takes a dog; surely it can affect and probably does the ways in which this person decides to spend his time, how he spends his holidays, or what kind of house he wants to live in, for instance. It seems that this kind of normative competence view requires an assumption that addiction is bad in some sense, and the influence

[280] For instance Caplan (2008) has raised this issue not only in relation to naltrexone but also with novel treatment methods such as deep brain stimulation for addicted individuals. For critique see Uusitalo 2013a. Of course, if the addicted individual is clearly dysfunctional due to, say, continues drug consumption, treatment such as deep brain stimulation may turn out to be indispensable for the addicted individual. It is indeed important to distinguish difficulty from controlling influences. I am not denying that there are addicted individuals such as these, but I am arguing that not all addicted individuals are like these extreme cases and addictive action should not be understood merely in light of these extreme cases.

[281] She also claims that addiction distorts the agent's ability to use instrumental rationality and make estimations of probability, but this is a claim that can be questioned in light of empirical evidence on the addicted individuals' decision-making.

addiction has on the agent's competence is not desirable. Of course it may be that addiction provides such an influence that is undesirable on the whole.[282]

Addicted individuals may suffer from different kinds of failures of will such as having wrong kind of reasons or wrong kind of values. However, it is not clear that they necessarily do so, as that requires us to present the right kind of reasons and values that are commonly agreed upon.[283] This may prove to be more difficult than expected on closer scrutiny. Ideas that seem easy enough to be commonly agreed upon, may turn out problematic. Next, I illustrate this by introducing an ideal that is typical in the discussion of addictive action in order to showcase the difficulty of identifying values that addictive action always undermines or violates.

5.3.4. A case of normativity: the ideal of abstinence

Discussions of addiction always seem to juxtapose addictive action with something else, and often this counterpart is abstinence.[284] Abstinence is something that addicted individuals ought to strive

[282] Earlier I discussed the effects of certain drugs that are literally painkillers. This kind of influence leaves the addicted individual in a state in which he is not motivated by anything. In this way, addiction can be seen to cause failed acts of will in the sense that it leaves the agent in such numb a state that he does not react to judgements or other reasons, no matter what the evaluative judgement may be. In this case, the fix is easy. If it is the pharmacological effects of the drug that deprive the agent from his motivation, the agent can try stop the effect by not consuming the drug. For instance, recovering addicted individuals report that physiological withdrawal is not the most difficult part in trying to quit addiction (Neale et al. 2012).

[283] Providing a meaningful list of these is indeed a challenging task that I am not committing myself into here. As I noted in chapter 3, I am even skeptical about the possibility of reducing the notion of reward to a single value in terms of which all human action can be understood. Understanding human agency in a nuanced way, or even merely weakness of will in a smaller scale, may require pluralism in order to capture different kinds of actions and agency that produces those actions.

[284] Addiction is juxtaposed with abstinence instead of, say, other kinds of substance use.

for. However, this does not always seem to happen and this gives reason to suspect that there is something wrong in addicted individuals' agency. For instance, Wallace (2003, 48) suspects that addicted individuals may have difficult time to give "full concentration on the normative conclusions that they accept", and this is in line with Aristotle's *akrates* regarding their abilities to focus on their better judgements.[285] Something along these lines can be found in the framework of addiction treatment, too. The discussion about the possibility of imposing mandatory treatment for addicted individuals in the United States with the help of naltrexone, a drug that blocks the sensations of pleasure when consuming alcohol, cocaine and heroin has been voiced (Caplan 2008).[286] In this discussion an analogy of patients with "devastating injuries or severely disfiguring burns" who refuse treatment (and wish to die) has been made in relation to addicted individuals who refuse treatment (ibid.). The competence of these patients is not in question. They have justified reasons for their views. Similarly addicted individuals may have justified reasons for their views, in this view. For instance, the fact that addiction coerces the addicted individual is this kind of a reason. The coercion is the kind does not undermine addicted individuals' competence to make decisions and plan. Also addicted individuals typically know their state as addicted to a substance and what it means in an everyday life. They are competent agents in this sense.

While accepting the competence of these patients with injuries and burns, nevertheless, their requests of not receiving treatment are initially ignored and they are given counselling that

[285] If we reflect on these considerations of akrasia in relation to the different views of addiction, a resonance can be found with accounts of the disease view, too.

[286] The inference Caplan makes on the basis of the effects of the drug does not seem well-grounded. Drawing the conclusion that addicted individuals are freed from coercion and craving because naltrexone takes away the feeling of pleasure from using drugs seems to contain premises that have not been explicated in the text and in any case, Caplan seems to promote the desire-centred view of addiction that I have already criticised in Chapter 2.

typically helps them to adjust to the new situation. The severely injured people know where they are and they know what is going on, but still their better judgement is seen to be flawed in some sense, as they have not adjusted to the situation yet. It is assumed that these people usually "start to 'adjust'" after training, counselling and having been taught adaptive skills (Caplan 2008, 1921). Thus they initially mistake that refusing treatment is, in their situation, the best alternative when first confronted with the question. Furthermore, it seems to be assumed that some addicted individuals in search of treatment may have the same kind of idea that they do not want to abstain from using drugs, but were they devoid of coercion and compulsion from their addiction, they would see that abstinence is the best option and thus go for it.[287] Without any "counselling" or equivalent for their situations, the addicted individuals make a mistake when making their better judgement about maintaining their drug consumption.[288]

In light of this kind of view that resembles the error view of akrasia, then, it is argued that mandatory treatment would not be so bad after all, as it would be justified by restoring the addicted individual's autonomy (Caplan 2008).[289] It seems that the addicted individuals are not free to reach their better judgement even if they are competent to make decisions. Similarly to the case where a straight stick is standing in the water and appears bent, the idea of

[287] As far as I understand Caplan's view, he does not say that the coercion and compulsion of addiction necessarily affects the competence of addicted individuals, but the coercion and compulsion take addicted individuals' freedom to form better judgements. Maybe it is the fear of withdrawal or a false promise of pleasure that make the addicted individuals form their better judgement of not participating in treatment.

[288] This also resonates with Davidson's view on incontinent action when all things considered judgements clash with the unconditional judgement of the agent.

[289] As a side note, the Global Commission on Drugs Policy has released a report on different kinds of policies involving drug users in September 2014 and the general attitude of the report towards "compulsory treatment" for drug users is very critical (Global Commission on Drug Policy 2014, 9). I have criticised the kind of justification of coercive treatment of addiction that Caplan relies on, too. See Uusitalo 2013a and Uusitalo & van der Eijk 2015.

using drugs seems like a good idea to the addicted individual. The treatment would serve as a means to tackle the coercion that the agent is imposed to. By blocking the addicted individuals' sensations of pleasure from the addictive substances, the coercion would be reduced. The mandatory treatment would provide the addicted individuals with means to see what would really be the best thing to do in that situation.[290] Here, the first person authority that we usually grant to agents is called into question with addicted individuals who allege to continue their addictive action willingly. If they knew better – or in this case were without the coercive influence of addiction – they would choose otherwise. As Wallace only talks about the cases in which one is confronted with A-impulses, he leaves it open whether in his view, treatment for addiction requires abstinence.

Nevertheless, it seems that usually abstinence could be regarded as an objective goal, especially in addiction. Consider, the common idea that once a person who is addicted wants to get rid of his addictive behaviour (and succeeds in it), he cannot gain or maintain controlled behaviour over that kind of action that has become addictive action, be it drinking alcohol, smoking, gambling, using drugs and so on. The Alcoholic Anonymous in the United Kingdom, for instance, report on their website that their "primary purpose is to stay sober -- ". The ideal of abstinence has been pervasive in the prevention and treatment of addiction, in general. The insistence of abstinence is understandable because addiction is, after all, characterised by impairment of self-control, and engaging in the same kind of action that once was part of the agent's addiction may be seen as a potential trigger for relapse. In light of this, it is easy to accept that abstinence is an objective value or a goal in general. However, this insistence has been called into question, not only by addicted agents who are able to control their

[290] If this kind of action is understood as Socratic akrasia, it seems not to require any tension between the best way of acting and the one that the agent goes for. If an agent mistakenly takes a course of action to be the best one, there is no conflict with another course of action in the sense that choosing the other course of action would amount to be better than the one the agent chose.

addictive actions, but also for instance by health care professionals. The assumption about abstinence as the ideal way of recovery has been questioned in recent years in various forms of therapy that do not commit to abstinence but aim at controlled use.[291] These treatment forms seem to rely on a different assumption about the controllability of addiction than abstinence-based treatments. This casts more doubt to the idea that abstinence should be considered an objective goal for anyone who suffers from addiction.

Furthermore, Wallace's (2003) discussion of "the perception of the forbidden foodstuff" could be considered as a case against the ideal of abstinence, as it seems that once something is forbidden, it may appear even more appealing than it was previously considered. This seems to be the case when people try to lose weight and find themselves thinking about food far more than what they do in cases when they do not try to lose weight. This does not only apply to food but it could be argued that forbidding any use of some substance may increase the attention that very substance receives in one's mind.[292] In light of this, it seems that the ideal of abstinence may not be the kind of value that everyone should embrace.[293] All in all, I hope my discussion of abstinence

[291] In some sense this, of course, seems incompatible with the idea that addiction involves weakness of will, i.e. action that is not in full control of the agent in the sense that he would act in accordance with his conclusive practical judgements. However, insofar as these kinds of treatments that aim for controlled use are successful, they provide empirical evidence that addiction is not the kind of impairment that is ultimately uncontrollable by the agent.

[292] In fact, it is recognised that the risk of the addicted individuals' lethal overdose increases in addicted individuals who stop their substance consumption completely. In this light, the ideal of abstinence is not so unproblematic after all.

[293] Having said this, I want to clarify that I am not denying that some addicted individuals simply seem unable to control their addictive actions just like some non-addicted individuals cannot control their desire to eat chocolate if they know that they have a bar in the cupboard, for instance. Some people have more self-control than others. My point, however, is to say that these problems are not exclusive to addicted individuals, but cover non-addicted individuals too. While it may be true that people with less control rather than more may become more easily addicted to anything, it would be unfounded to conclude that all addicted individuals have problems with self-control in this respect. In

illustrated the difficulty of identifying values in light of which we would be able to argue that addicted individuals should not act in accordance with their addiction if their actions are based on different values and they thus judge their actions differently.

5.4. Concluding remarks

I hope to have been successful in this chapter in suggesting that there are many cases of weakness of will that can be understood also as instances of addiction. However, I hope that I have also managed to argue that not a single one of them is a necessary feature in addictive action. For instance I have shown that addiction is characterised by repetition and it is called a habit (e.g. Wallace 2003, 428–429) which implies that there may be some automatism involved that in some sense makes the agent passive regarding his own actions. Also, it should be noted that repetition is not sufficient, but addictive action should be understood in terms of the agent's motivation to continue addictive actions regardless of contingent circumstances of individual situations. The varieties of actions that seem to realise in addiction make it also a case that it is a complex phenomenon. A classic akrasia and weakness of will as giving up resolutions may be very typical cases of addiction especially when the agent tries to get rid of it. Still, it is not evident that they will occur even in occasions such as the individual attempts to abstain. What is important, however, is to realise that addiction sometimes involves implausible assumptions. In light of this, it is of utmost importance to call into question the kind of conceptualisations which rely on our understanding of addiction and which reduce addictive action to single kinds of actions.

---

fact, there is a recent study in pathological gambling that the gamblers had a good resource of self-control as a result from the continuous gambling and they did not perform any worse in the research tasks that required self-control from non-gamblers (Bergen, Newby-Clark & Brown 2014).

6. Concluding remarks

The thesis has provided a nuanced description of addictive action. A fundamental assumption and motivation for this research has been that addiction does not automatically deprive the agent alternatives more than other sources of action do. This stems from the main results of my licentiate thesis, namely that the reference to free will and compulsion in this sense (i.e. alternatives or their lack) is not fruitful in capturing the alleged difficulty in addicted individuals' agency. Furthermore, by discussing addiction, I have illustrated the need for more nuanced theories of action that the general theories, such as the choice theory or Davidson's framework provide if we want to understand phenomena that involve different kinds of action (e.g. addiction).

With the help of the main chapters I hope to have shown that strong desire, myopia, biased decision-making and weakness of will are typical characteristics in addiction. My argument is that they are jointly sufficient but not, on their own, necessary conditions of addiction, as long as they are understood in the framework of continuity and not merely repeated instances that occur in the agent's actions.[294] I have here focused on giving an account of addictive action in which four characteristics jointly form a sufficient condition for addiction that would describe and increase our understanding of addictive action and agency. Reducing addictive action and agency to single actions with certain criteria is bound to fail. In this light, I have argued that none of the introduced characteristics is as such necessary or sufficient. I started with the notion of strong desire; I have here argued for two notions of desire that are both relevant in conceptualising addictive action. The phenomenal notion brings clarity to the first person perspective, but it does not contribute to the causal explanation as

[294] These characteristics thus form a model of addiction that does not try to cover all instances of addiction, but which serves as a prototype.

an irresistible force. Desire as preference in turn seems to rest on too narrow an assumption on the principle(s) of action. It just seems too narrow to argue that all human action, insofar it is rational, rests on utility maximisation and rewards.

As addiction is typically described as somehow out of control and the strong desire is not what takes the control by brute force, I turned to this control in terms of rationality. Regarding the issue of (ir)rationality in relation to addictive action, I brought up three distinct aspects, namely that of biased decision-making, myopia and akrasia. My discussion of these aimed to show not only their interconnectedness but also that they are not necessary in addicted individuals' action even if they often seem to describe addictive action.

Academic discussions do not seem to hold a consensus of what exactly addiction is like and how it affects agency and action. In my discussion, I utilised what I consider the main views in these discussions – the disease view, the choice view and the will view – in order to motivate my reasons for considering the four features that I identified as salient features of addiction (to be understood in terms of continuous, active agency). Each of these accounts is claimed to be sufficient in explaining addiction. In this light, by selecting the typical characteristics of these three views, my characterisation of addiction should present a strong picture of addictive action that is sensitive to the actual phenomenon.

However, as I discussed the characteristics with the help of main views on addiction, I also demonstrated the problems they face when they commit to too narrow views on addictive action – whether that narrowness was due to action theoretical premises in general or assumptions about addictive action, in particular. The disease view and the choice view each served as cases to show that the reliance on mere desire is insufficient in understanding different kinds of actions. The will view in turn rests on the idea that addiction involves impairment of self-control, but this issue does not seem to suffice on its own, either, as the discussion on habits aimed to show, for instance. As well as these different views

captured aspects of addictive action, they failed as such to provide a view that covers different kinds of action that jointly suffice for addiction.

Because there seems not to be necessary or sufficient conditions that would restrict the group of actions involved in addiction, I argue that in order to capture the phenomenon, we should consider addictive action to contain many kinds of addictive action. In this thesis I have argued for the importance of describing the phenomenon of addiction, but this, as pointed out, has implications for explaining addiction. My view that addictive action should be understood in a plural way also provides critique to the insistence of causes in addictive action with the cost of disregarding other aspects. Also, when we accept that there is no single (necessary or sufficient) identifiable "addictive act", then we notice that the different kinds of addicted actions may have different kinds of causes. Maybe finding the causal sources of some specific problematic action helps to respond to the medical, social, legal and ethical challenges in relation to some addicted individuals, but by acknowledging the variety of different kinds of action helps us in understanding that addictive action also has different kind of reasons and that there are different ways in which addictive action can be affected, if there is need for change.

Finally, I want to mention that I have not addressed the question whether addiction is a disease as such, i.e. condition that requires resources from the society, for instance. The critique I expressed against the disease view does not stem from the refusal to accept the concept of 'disease', but it arises from the kind of action and agency theoretical assumptions that the view, as I construed it, maintains. It may well be that addiction is a disease under another description of the term 'disease'; in sum, I am not against labelling the phenomenon a disease or a disorder, as long as we are clear what we mean by these and the meaning of the terms also captures

the phenomenon.[295] It seems clear that some addicted individuals do need help to gain control over their actions and in this their actions differ from non-addicted actions such as riding a bike or drinking water. Insofar as disease refers to conditions similar to cancer in which human agency does not make a difference in the course of the disease, for instance, I reject the notion of disease.[296] The critique that I have expressed not only against the disease view, but also against the choice view and the will view, focuses on the ways in which human agency is conceptualised in these views of addiction. By focusing on action, I hope to have made clear that even within understanding action the human agency is so complex that to reduce it to any single feature with the help of which then we describe a phenomenon, the attempt is bound to fall short either by being flawed (e.g. susceptible to counterexamples) or being too insufficient (e.g. too narrow view on addicted agency and/or action).

[295] Having said this, I want to point out that addiction as a phenomenon is far from being clear and distinct and thus an account that tries to capture it ought not to aim for more precision that the phenomenon provides.

[296] Of course people can have effect on their diseases such as cancer by engaging in preventive measures and seeking treatment, but refraining from action does not seem to be at issue to the same extent in cases such as breast cancer as it is with addiction.

References

Ainslie, George. 2000. “A researched-based theory of addictive motivation.” *Law and Philosophy* 19(1):77–115.

Ainslie, George. 2001. *Breakdown of Will*. Cambridge & New York: Cambridge University Press.

Albritton, Rogers. 2003. “Freedom of will and freedom of action.” In Watson, Gary (ed.). *Free Will.* Second Edition. Oxford: Oxford University Press: 408–423. Originally published in *The Proceedings and Addresses of The American Philosophical Association* 59/2(1985):239–51.

Alcoholics Anonymous. 2014. Frequently Asked Questions. Available at www.aa.org. [Accessed 15 April, 2014]

Alvarez, Maria & Hyman, John. 1998. “Agents and their action.” *Philosophy* 73(284):219-45.

American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorder. DSM-5.* Fifth Edition. Washington DC & London: American Psychiatric Publishing.

Aristotle. 1996. *Nicomachean Ethics.* In Barnes, Jonathan (ed.). *The Complete Works of Aristotle.* The revised Oxford Translation. Volume Two. Bollingen Series LXXI, 2. Princeton NJ & Chichester: Princeton University Press. = NE

Arpaly, Nomy. 2000. “On acting against one’s best judgment.” *Ethics* 110(3):448–513.

Arpaly, Nomy & Schroeder, Timothy. 1999. “Praise, blame and the whole self". *Philosophical Studies* 93(2):161–188.

Attwood, Angela S., O’Sullivan, Hayley, Leonards, Ute, Mackintosh, Bundy & Munafó, Marcus R. 2008. “Attentional Bias training and cue reactivity in cigarette smokers”. *Addiction* 103:1875–82.

Audi, Robert. 1990. “Weakness of will and rational action.” *Australasian Journal of Philosophy* 68(3):270–81.

Becker, Gary & Murphy, Kevin. 1988. “A theory of rational addiction.” *Journal of Political Economy* 96(4):675–700.

Bergen, Anne E., Newby-Clark, Ian R. & Brown, Andrea.2014. “Gambling increases self-control strength in problem gamblers.” *Journal of Gambling Studies* 30(1):153–62.

Bicchieri, Cristina. 2004. “Rationality and game theory”. In Mele, Alfred R. & Rawling, Piers. (eds.), *The Oxford Handbook of Rationality*. Oxford: Oxford University Press: 182–205.

Blackburn, Simon. 1996. *The Oxford Dictionary of Philosophy*. Oxford: Oxford University Press.

Blanken, Peter, Hendriks, Vincent M., van Ree, Jan M. & van der Brink, Wim. 2009. ”Outcome of long-term heroin-assisted treatment offered to chronic, treatment-resistant heroin addicts in the Netherlands”. *Addiction* 105:300–08.

Bratman, Michael, E. 2012. “Time, rationality, and self-governance*”. Philosophical Issues.* A supplement to *NOÛS* 22:73–88.

Brickman, P., Rabinowitz, V., Karuza, J., Coates, D., Cohn, E., & Kidder, L. 1982. Models of helping and coping. *American Psychologist,* 37,368-384.

Caplan Arthur. 2008. Denying autonomy in order to create it: The paradox of forcing treatment upon addicts. *Addiction* 103:1919-1921.

Charland, Louis C. 2002. “Cynthia’s dilemma: consenting to heroin prescription.” *American Journal of Bioethics* 2(2):37–47.

Charland, Louis C. 2012. “The varieties of compulsion in addiction”. *American Journal of Bioethics Neuroscience* 3(2):50–64.

Cuypers, Stefaan E. 1998. ”Harry Frankfurt on the will, autonomy and necessity.” *Ethical Perspectives* 5(1):44–52.

Davidson, Donald. 1980a. “Agency.” In Davidson, David. *Essays on Actions and Events.* Oxford: Clarendon Press: 43–61. Originally published in Binkley, Robert, Richard Bronaugh &

Marras Ausonio (eds.) *Agent, Action and Reason* University of Toronto Press, 1971.

Davidson, Donald. 1980b. "Actions, reasons, and causes" in Davidson, Donald. *Essays on Actions and Events.* Oxford, Clarendon Press: 3–19. Originally published in *Journal of Philosophy* 60, 1963.

Davidson, Donald. 1980c. "How is weakness of will possible?" In Davidson, Donald. *Essays on Actions and Events.* Oxford: Clarendon Press, 21–42. Originally published in Feinberg, Joel (ed.), *Moral Concepts.* Oxford Readings in Philosophy, 1970.

Davidson, Donald. 1980d. "Mental Events" In Davidson, David. *Essays on Actions and Events.* Oxford, Clarendon Press. 207–227. Originally published in Foster, Lawrence & Swanson J.W. (eds.), *Experience and Theory.* The University of Massachusetts Press and Duckworth, 1970.

Davidson, Donald. 1980e. Intending. In Davidson (ed.) *Essays on Actions and Events.* Oxford, Clarendon Press, 83–102. Originally published in Yovel, Yirmiaku (ed.), *Philosophy and History of Action.* D.Reidel and the Magnes Press, The Hebrew University, 1978.

Davidson, Donald. 2006. Paradoxes of Irrationality. In Davidson, Donald; Lepore, Ernie (Introduction by); Ludwig, Kirk (Introduction by). Essential Davidson. Oxford: Oxford University Press, 138–153. Originally published in Wollheim, R. & Hopkins, J. (eds.), *Philosophical Essays on Freud*. Cambridge: Cambridge University Press, 289–305.

Dill, Brendan & Holton, Richard. 2014. "The addict in us all". *Frontiers in Psychiatry* Volume 5; Article 139.

Dretske, Fred. 2004. "Psychological vs. Biological Explanations of Behavior". *Behavior and Philosophy* 32: 167–177.

Eidgenössisches Department des Innem EDI, Bundesamt für Gesundhheit BAG, Nationale Präventionsprogramme, Schweiss. 2012. *Die Heroingestützte*

Behandlung/Behandlung mit Diacetylmorphin (HeGeBe) im Jahr 2011, Juni 2012. Available at: www.bag.admin.ch.

Elster, Jon & Skog, Ole-Jørgen. 1999. "Introduction". In Elster, Jon & Skog, Ole-Jørgen (eds.). *Getting Hooked: Rationality and Addiction.* Cambridge: Cambridge University Press, 1–29.

Field, Matt & Cox, W. Miles. 2008. "Attentional bias in addictive behaviors: A review of its development, causes, and consequences". *Drug and Alcohol Dependence* 97: 1–20.

Field, Matt, Munafò, Marcus R., Franken, & Ingmar H. A. 2009. "A meta-analytic investigation of the relationship between attentional bias and subjective craving in substance abuse". *Psychological Bulletin* 135(4), Jul, 589–607.

Fischer, John Martin & Ravizza, Mark, S.J. 1998. *Responsibility and Control: A Theory of Moral Responsibility.* Cambridge Studies in Philosophy and Law. Cambridge, Cambridge University Press.

Ferrero, Luca. 2009. "What good is a diachronic will?" *Philosophical studies* 144: 403–430.

Ferrero, Luca. 2012. "Diachronic constraints of practical rationality". *Philosophical Issues. A supplement to NOÛS* 22: 144–164

Ferri Marica, Davoli, Marina & Perucci, Carlo A. 2006. "Heroin maintenance for chronic heroin-dependent individuals: A Cochrane systematic review of effectiveness". *Journal of Substance Abuse Treatment* 30: 63–72.

Flanagan, Owen. 2013. "The shame of addiction". *Frontiers in Psychiatry: Addictive Disorders and Behavioral Dyscontrol* Volume 4, Article 120.

Foddy, B. 2011. "Addiction and its sciences—philosophy". *Addiction* 106: 25–31.

Foddy, Bennett & Savulescu, Julian. 2006a. "Addiction and Autonomy: Can Addicted People Consent to the Prescription of their Drug of Addiction?" *Bioethics* 20(1): 1–15.

Foddy, Bennett & Savulescu, Julian. 2006b "Autonomy, Addiction and the Drive to Pleasure: Designing Drugs and Our Biology: A Reply to Neil Levy". *Bioethics* 20(1): 21–23.

Foddy, Bennett & Savulescu, Julian. 2010. "A liberal Account of addiction". *Philosophy, Psychiatry, Psychology* 17(1): 1–22.

Franken IH, Hendriks VM, Stam CJ, & van den Brink W. 2004. "A role for dopamine in the processing of drug cues in heroin dependent patients". *European Neuropsychopharmacology* 14: 503–8.

Frankfurt, Harry G. 1988. "Freedom of the will and the concept of a person". In Frankfurt, Harry G. *The Importance of What We Care About.* Cambridge: Cambridge University Press. 11-25. Originally published *Journal of Philosophy* LXVII (1), 1971.

Frankfurt, Harry G. 1997. "The problem of action." In Mele, Alfred R. (ed.). *The Philosophy of Action.* Oxford Readings in Philosophy. Oxford: Oxford University Press, 42–52. Originally published in *American Philosophical Quaterly 15*: 157–62, 1978.

Global Commission on Drugs Policy. 2014. *Taking control: pathways to drug policies that work*. September 2014. Available at: http://static.squarespace.com/static/53ecb452e4b02047c0779e59/t/540da6ebe4b068678cd46df9/1410180843424/global_commission_EN.pdf [visited Nov 12, 2014]

Haasen, C., Verthein, U., Eiroa-Orosa, F.J., Schäfer, I. & Reimer, J. 2010. "Is Heroin-Assisted Treatment Effective for Patients with No Previous Maintenance Treatment? Results from a German Randomised Controlled Trial." *European Addiction Research* 16: 124–130.

Hansson, Sven Ove & Grüne-Yanoff, Till. 2012. "Preferences". In Zalta, Edward N. (ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2012 Edition). Available at: <http://plato.stanford.edu/archives/win2012/entries/preferences/>.

Hart, Carl L., Haney M, Foltin R.W. & Fischman M.W. 2000. "Alternative reinforcers differentially modify cocaine self-administration by humans". Behavioural Pharmacology Feb;11(1): 87–91.

Hempel, Carl G. 1961-1962. "Rational action". *Proceedings and Addresses of the American Philosophical Association* 35: 5–23.

Henden, Edmund. 2008. "What is self-control?" *Philosophical Psychology* 21(1):69–90.

Henden, Edmund. 2013. "Heroin addiction and voluntary choice: the case of informed consent." *Bioethics* 27(7): 395–401.

Henden, Edmund, Melberg, Hans Olav & Røgeberg, Ole Jørgen. 2013. "Addiction: choice or compulsion?" *Frontiers in Psychiatry* Volume 4, Article 77, 1–11.

Heyman, Gene, M. 2009. *Addiction: A Disorder of Choice*. Cambridge, MA: Harvard University Press.

Heyman, Gene M. 2013. "Addiction: an emergent consequence of elementary choice principles." *Inquiry: An Interdisciplinary Journal of Philosophy* 56(5): 428–45.

Holton, Richard. 2003. "How is strength of the will possible". In Stroud, Sarah & Tappolet, Christine (eds.). *Weakness of Will and Practical Irrationality*. Oxford: Oxford University Press: 39–67.

Holton, Richard. 2009. *Willing, Wanting, Waiting*. Oxford: Oxford University Press.

Homiak, Marcia. 2011. "Moral Character". In Zalta, Edward N (ed.). *The Stanford Encyclopedia of Philosophy* (Spring 2011 Edition). Available at <http://plato.stanford.edu/archives/spr2011/entries/moral-character/>.

Horstkötter, Dorothee. 2009. *Self-Control Revisited: Varieties of Normative Agency.* An academic essay in Social Science. Doctoral Thesis. Enschede: Ipskamp Drukkers.

Horstkötter, Dorothee. 2014. “Self-control and normativity: theories in social psychology revisited.” *Theory and Psychology* early online 1 December, 2014, doi: 10.1177/0959354314561487.

Hume, David. 1896. *A Treatise of Human Nature by David Hume,* reprinted from the Original Edition in three volumes and edited, with an analytical index, by L.A. Selby-Bigge, M.A, revised by P.H. Nidditch in 1978. Oxford: Clarendon Press. Available at: http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Fperson=231&Itemid=28 (November 11, 2013) (3=book.2=part) Part III.: Of the Will and Direct Passions. = T

Hyman, Steven E. 2007. “The Neurobiology of Addiction: Implications for Voluntary Control of Behavior”. *American Journal of Bioethics* 7(1): 8–11.

Jacobson, Daniel, "Fitting Attitude Theories of Value". In Zalta, Edward N. (ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2011 Edition). Available at: <http://plato.stanford.edu/archives/spr2011/entries/fitting-attitude-theories/>.

Jones, Denna. 2012. ”Creatively confronting addiction”. *The Lancet* 379 (Jan 7): 20.

Kalivas, Peter W. & Volkow, Nora D. 2005. “The Neural Basis of Addiction: A Pathology of Motivation and Choice”. *American Journal of Psychiatry* 162: 1403–1413.

Kennett, Jeanette. 2013. “Just Say No? Addiction and Elements of Self-Control”. In Levy, Neil (ed.), *Addiction and Self-Control.* Oxford: Oxford University Press, 144–164.

Kennett, Jeanette & McConnell, Doug. 2013. “Explaining Addiction: How far does the reward account of motivation take us?” *Inquiry: an Interdisciplinary Journal of Philosophy* 56(5): 470–487.

Kennett, Jeanette, Matthews, Steve & Snoek, Anke. 2013. ”Pleasure and addiction”. *Frontiers in Psychiatry* Volume 4: Article 117: 1–11.

Korsgaard, Christine. 1999. "Self-Constitution in the Ethics of Plato and Kant." *The Journal of Ethics* 3: 1–29.

Korsgaard, Christine. 1986. Skepticism about Practical Reason. *The Journal of Philosophy* 83(1): 5–25.

Kraemer, F., 2013. "Authenticity or autonomy? When deep brain stimulation causes a dilemma". *Journal of Medical Ethics* Online first 2013, Jan 26 10.1136/medethics-2011-100427

Leshner, Alan. I. 2005. "Ethical Issues in Taking Neuroscience Research from Bench to Bedside". In Glannon, Walter (ed.), *Defining Right and Wrong in Brain Science: Essential Readings in Neuroethics.* New York & Washington D.C.: Dana Press, 75–82.

Levy, Neil. 2006a. "Autonomy and Addiction". *Canadian Journal of Philosophy* 36 (3): 427–448.

Levy, Neil. 2006b. "Addiction, Autonomy and Ego-depletion: A Response to Bennett Foddy and Julian Savulescu". *Bioethics* 20(1): 16–20.

Levy, Neil. 2011. "Addiction, Autonomy and Ego-depletion". In Poland, Jeffrey & Graham, George. (eds.), *Addiction and Responsibility*. Cambridge, MA & London: The MIT Press, 89–111.

Levy, Neil. 2013a. "Addiction and Compulsion". In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's companion to Philosophy: A Companion to Philosophy of action*. Chichester: Wiley-Blackwell, 267–273.

Levy, Neil. 2013b. "Addiction and Self-Control: Perspectives from Philosophy, Psychology, and Neuroscience". In Levy, Neil (ed.). *Addiction and Self-Control.* Oxford, Oxford University Press, 1–15.

Levy, Neil. 2014. "Lubomira Radoilska, *Addiction and Weakness of Will,* Oxford University Press*,* 2013" *Notre Dame Philosophical Reviews* 2014.07.34.

Loewenstein, George. 1999. A Visceral Account of Addiction. In Elster, Jon & Skog, Ole-Jørgen (eds.), *Getting Hooked.*

Rationality and addiction. Cambridge: Cambridge University Press, 235-264.

Lubman, Dan I., Yücel, Murat, Kettle, Jonathan W. L., Scaffidi, Antonietta, MacKenzie, Trudi, Simmons, Julian G. & Nicholas B. Allen. 2009. "Responsiveness to Drug Cues and Natural Rewards in Opiate Addiction Associations With Later Heroin Use". *Archives of General Psychiatry* 66 (2), FEB: 205–213.

Mason, Elinor. 2011. "Value Pluralism". In Zalta, Edward N. (ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition). Available at <http://plato.stanford.edu/archives/fall2011/entries/value-pluralism/>.

Martinez-Alier, Joan, Munda, Giuseppe & O'Neill, John. 1998. "Weak comparability of values as a foundation of ecological economics". *Ecological Economics* 26: 277–286.

Mele, Alfred R. 2012. *Backsliding: Understanding Weakness of Will.* Oxford: Oxford University Press.

Mele, Alfred R. 2002. "Akratics and addicts". *American Philosophical Quarterly* 39(2): 153–167.

Mill, John Stuart. 1987. Utilitarianism. In Ryan, Alan (ed.*), John Stuart Mill and Jeremy Bentham. Utilitarianism and Other Essays.* Harmondswoth, Middlesex: Penguin Books Ltd.

Miller, Christian. 2008. "Motivational internalism" *Philosophical Studies* 139: 233–255.

Millgram, Elijah. 2013. "Pluralism about action". In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's companion to Philosophy: A Companion to Philosophy of action*. Chichester: Wiley-Blackwell, 90–96.

Müller, U. J., Voges, J., Steiner, J., Galazky, I., Heinze, H., Möller, M., Pisapia, J., Halpern, C., Caplan, A., Bogerts, B. & Kuhn, J., 2012. Deep brain stimulation of the nucleus accumbens for the treatment of addiction. *Annals of the New York Academy of Sciences* aheadofprint 1–10 doi: 10.1111/j.1749-6632.2012.06834.x

Nagel, Thomas. 1970. *The Possibility of Altruism*. Oxford: Clarendon Press.

National Institute on Drug Abuse. 2010. *Drugs, brains and behaviour: The science of addiction*. NIH Pub No. 10-5605.

Neale, Joanne; Nettleton, Sarah & Pickering, Lucy. 2012. *The Everyday Lives of Recovering Heroin Users.* London: The RSA.

Oxford English Dictionary. McPherson, Fiona (senior online ed.), Holden, Richard (online ed.). Oxford University Press. Available at: www.oed.com

Oviedo-Joekes, E., Brisette, S., Marsh, D. C., Lauzon, P., Guh, D., Anis, A. & Schechter. M. T.. 2009. "Diacetylmorphine versus Methadone for the Treatment of Opioid Addiction". *New England Journal of Medicine* 361(8): 777–786.

Petry, N. M., Alessi, S. M., Hanson, T. & Sierra, S. 2007. "Randomized trial of contingent prizes versus vouchers in cocaine-using methadone patients". *Journal of Consultative Clinical Psychology*. Dec; 75(6): 983–91.

Petry, N. M.,Alessi, S.M. & Rash, C. J.. 2011. "Contigency management treatment of drug and alcohol use disorders". In Poland, Jeffrey & Graham, George (eds.), *Addiction and Responsibility*. Cambridge, MA: The MIT Press, 225–245.

Pickard, Hanna. 2012. "The Purpose in Chronic Addiction". *AJOB Neuroscience* 3(2): 40–49.

Pickard, Hanna. 2013. "Psychopathology and the Ability to Do Otherwise". *Philosophy and Phenomenological Research* 1–29, early on-line 8 April, DOI: 10.1111/phpr.12025

Pickard, Hanna & Ahmed, Serge. 2014. "Addiction, Choice, Value". A presentation in *Addiction, Disease and Choice* Conference, June 2-3, the Centre for the Study of Mind in Nature, University of Oslo, Norway.

Pickering, Neil. 2006. *The Metaphor of Mental Illness.* Oxford: Oxford University Press.

Plato. 1997. *Republic*. Transl. G.M.A. Grube, rev. C.D.C. Reeve. In J. M. Cooper (ed.), *Plato Complete Works*. Indianapolis & Cambridge: Hackett Publishing Company. = R

Plato. 1997. *Phaedrus*. Transl. A. Nehamas & P. Woodruff. In J. M. Cooper (ed.), *Plato Complete Works*. Indianapolis & Cambridge: Hackett Publishing Company. = P

Pollard, Bill. 2013. "Habitual actions". In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's companion to Philosophy: A Companion to Philosophy of action*. Chichester: Wiley-Blackwell, 74–81.

Radoilska, Lubomira. 2013. *Addiction and Weakness of will*. Oxford: Oxford University Press.

Raz, Joseph. 2008. "On the guise of the good". *Legal Research Paper Series* 43/2008. University of Oxford.

Reath, A. 2006. *Agency and Autonomy in Kant's Moral Theory: Selected Essays.* Oxford: Oxford University Press.

Reuter, Peter & Schnoz, Domenic. 2009. "Assessing Drug Problems and Policies in Switzerland, 1998-2007". Bern: Swiss Federal Office of Public Health, November 16, 2009. Available at: www.bag.admin.ch.

Robinson, Terry E. & Berridge, Kent C. 1993 "The neural basis of drug craving: an incentive-sensitization theory of addiction**".** *Brain Research. Brain Research Reviews* Sep-Dec;18(3): 247–91.

Robinson, Terry E. & Berridge, Kent C. 2008. "Review. The incentive sensitization theory of addiction: some current issues". *Philosophical Transactions of the Royal Society of London 363*, 3137–46.

Rubinstein, Ariel. 1998. *Beyond Bounded Rationality*. Cambridge, Massachusetts & London, England: The MIT Press.

Sandis, Constantine, 2009. "Introduction". In Sandis, Constantine (ed.), *New Essays on the Explanation of Action.* Basingstoke: Palgrave Macmillan, 1–9.

Sandis, Constantine. 2012. *The Thing We Do and Why We Do It*. Basingstoke: Palgrave Macmillan.

Savary, J., Hallam, C. & Bewley-Taylor, D. 2009. "The Swiss Four Pillars Policy: an Evolution from Local Experimentation to Federal Law". *The Beckley Foundation Drug Policy Programme.* Briefing Paper 18. Available at: http://www.beckleyfoundation.org/

Schueler, G.F. 1995. *Desire. Its Role in Practical Reason and the Explanation of Action*. Cambridge Massachusetts, & London: The MIT Press.

Schumacher, J. E., Milby, J. B., Wallace, D., Meehan, D. C., Kertesz, S., Vuchinich, R., Dunning, J. & Usdan, S. 2007. "Meta-analysis of day treatment and contingency-management dismantling research: Birmingham Homeless Cocaine Studies (1990-2006)". *Journal of Consultative Clinical Psychology* Oct 75(5): 823–8.

Schroeder, Tim. 2014. "Desire". In Zalta, Edward N. (ed), *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition). Available at: <http://plato.stanford.edu/archives/spr2014/entries/desire/>.

Sehon, Scott. 2013. "Teleological explanation". In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's companion to Philosophy: A Companion to Philosophy of action*. Chichester: Wiley-Blackwell, 121–128.

Sinnott-Armstrong, Walter & Pickard, Hanna. 2013. "What is addiction?" In Fulford, K.W.M., Martin Davies, Martin, Gipps, Richard G.T., Graham, George, Sadler, John Z. , Stranghelllini, Giovanni & Thornton, Tim (eds.), *The Oxford Handbook of Philosophy of Psychiatry.* Oxford: Oxford University Press, 851–864.

Sixx, Nikki. 2007. *The Heroin Diaries: A Year in the life of a Shattered Rock Star*. New York, NY: Pocket Books.

Smith, Michael. 2013. "Humeanism about motivation." In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's*

companion to Philosophy: A Companion to Philosophy of action. Chichester: Wiley-Blackwell, 153–158.

Stoecker, Ralf. 2013. "Davidson." In Sandis, Constantine & O'Connor, Timothy (eds.), *Blackwell's companion to Philosophy: A Companion to Philosophy of action*. Chichester: Wiley-Blackwell, 598–605.

Strawson, Galen. 2011. "Cognitive Phenomenology: Real Life". In Bayne, Tim & Montague, Michelle (eds.), *Cognitive Phenomenology*. Oxford: Oxford University Press.

Taylor, James Stacey. 2005. "Willing Addicts, Unwilling Addicts, and Acting of One's Own Free Will". *Philosophia* 33(1–4): 237–262.

Tversky A. & Kahneman, D. 1986. "Rational Choice and the Framing of Decisions". *Journal of Business* 59: 251–278.

Uusitalo, Susanne. 2013a. "Autonomy and DBS treatment for addicts". *AJOB Neuroscience* 4(2): 49–50.

Uusitalo, Susanne 2013b. "Addictive action and difficulty". The 23rd World Congress of Philosophy 4.-10.8.2013, Athens, Greece. (forthcoming in the conference proceedings).

Uusitalo, Susanne 2013c. *Addiktio ja toiminta. Filosofinen katsaus addiktion ja toiminnan suhteesta.* University of Turku, Licentiate thesis.

Uusitalo, Susanne, Salmela, Mikko & Nikkinen, Janne. 2013. "Addiction, agency and affects: Philosophical perspectives". *Nordic Studies on Alcohol and Drugs* 30: 31–50.

Uusitalo, Susanne. 2015. "Addiction, Moral Agency and Recovery". *International Journal of Alcohol and Drug Research*. Online first, http://dx.doi.org/10.7895/ijadr.v2i0.190

Uusitalo, Susanne & Broers, Barbara. 2015. "Rethinking informed consent in research on heroin-assisted treatment". *Bioethics* 29(7):462–469.

Uusitalo, Susanne & van der Eijk, Yvette. 2015 "Scientific and Conceptual Flaws in Coercive Treatment Models in

Addiction". *Journal of Medical Ethics* Online First, published on October 13, 10.1136/medethics-2015-102910

Velleman, J. David. 1992a. "What Happens When Someone Acts?" *Mind* 101(403): 461–481.

Velleman, J. David. 1992b. "The Guise of the Good". *Nôus* 206(1): 3–26.

Wallace, R. Jay. 1996. *Responsibility and Moral Sentiments.* Cambridge MA & London: Harvard University Press.

Wallace, R. Jay. 2003. "Addiction as a defect of the will: some philosophical reflections". In Watson, Gary (ed.), *Free Will, Second Edition.* Oxford: Oxford University Press, 424–452. Originally published in *Law and Philosophy* 18(6): 621–654, 1999.

Wallace, R. Jay. 2009. "Practical Reason". In Zalta, Edward N. (ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2009 Edition). Available at: <http://plato.stanford.edu/archives/sum2009/entries/practical-reason/>

Watson, Gary. 1999. "Disordered appetites: addiction, compulsion and dependence". In Elster, Jon (ed.), *Addiction: Entries and Exits.* New York: Russell Sage Foundation, 3–28.

Watson, Gary 2004a. "Free Agency". In Watson, Gary. *Agency and Aswerability: Selected Essays*. Oxford: Clarendon Press, 13–32. Originally published in *Journal of Philosophy* 1975 72/8.

Watson, Gary 2004b. "Skepticism about Weakness of Will". In Watson, Gary. *Agency and Answerability Selected Essays*. Oxford: Clarendon Press, 33–58. Originally published in *Philosophical Review* 86: 316–39, 1977.

Wesley, M.J. Lohrenz, T., Koffarnus, M.N., McClure S.M. De La Garza, R 2nd, Salas R., Thompson-Lake, D.G. Newton, T. Bickel W.K. & Montague P.R. 2014. "Choosing Money over Drugs: The Neural Underpinnings of Difficult Choice in Chronic Cocaine Users". *Journal of Addiction* 2014:189853. doi: 10.1155/2014/189853.Epub 2014 Aug 14.

World Health Organization. 2003. *International statistical classification of diseases and related health problems, ICD* (10th revision). Available at: http://www.who.int/classifications/icd/en/

Yaffe, Gideon. 2001. "Recent Work on Addiction and Responsible Agency". Philosophy & Public Affairs 30 (2): 178–221.

Ylikoski, Petri. 2002. “Kymmenen haastetta kausaalisen selittämisen teorialle”. *Ajatus 59*: 155–177.