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Making Space for Safer Use: The Ontological Politics of Drug Checking

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"There are no drugs in nature. [...] 'drug' is not a descriptive but an evaluative concept: it is a password automatically implying a prohibition."

(Ruggiero, 1999, p. 123)

"When I first saw people taking drugs, what, people are snorting drugs over there, I was also thinking to myself like: What the hack? What is going on with them? I really felt my heart racing and that's just because society and all sorts of people talk you into believing that it's wrong!"

- Emma, drug user (pseudonymized)

"My own understanding of [drugs] was that it is dangerous, that one should just stay away from it. Why exactly, that was, that was not clear to me, because it was just this general image of drugs that one has in one's mind: No, caution! Stay away! Better not use it!! Yeah, and as an image of drug users, I think you have some heroin addict in the corner who would do anything to get his next fix."

- Costa, drug user (pseudonymized)

"When people come and say either that it's insanely bad or it's insanely good, the substance must either be insanely good or insanely bad, and we can then prove the exact opposite based on the result and then, uhm, reflect with them that it is not just the substance that matters, but that it is very, very much about oneself."

- Manuel, drug checker

"[If I had never heard of drug checking], I think I would have a bad use practice and maybe, uhm, I would be dead."

- Max, drug user (pseudonymized)

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To me, research is a way of living in and seeing the world, it is about staying curious and trying to bring order to what often seems too messy to describe in words. Writing my thesis felt exactly like this, as trying to make sense of a complex matter – in this case drugs and their use – by molding it into a clear framework and coherent narrative. Throughout this 'molding process', I relied on the insights, feedback, and reassurance from various people, who supported me on this challenging but also interesting and fun journey, and whom I want to thank in the following paragraphs.

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1. Introduction

Drugs inhabit a very peculiar place in our societies and their regulation and classification is the topic of heated debates. While some drugs are important medical technologies like methylphenidate, better known as Ritalin, that help manage and treat illnesses, others like alcohol are used as recreational or stimulating consumer goods in our daily lives, while others like cocaine are considered so harmful that owning them constitutes a criminal offense (Seddon, 2010). Sometimes, these categories overlap, and the same substance is a cure in one context and an illegal good in another, which is the case for many opioids (Dollar, 2019). The regulation of so-called illicit drugs, henceforth referred to as drugs, is a contested topic that has occupied governments throughout history, especially in the past century, and continues to evoke strong opinions. Since the mid-20th century, a global prohibitionist approach to drug policy, which strives for a 'drug-free world' (Levine, 2003), has been enshrined in UN conventions that oblige their signatories to outlaw drugs like cannabis, cocaine, opiates, or MDMA and criminalizes users all over the world (Sánchez-Moreno, 2015). While this legal classification of drugs constitutes the backbone of almost all national drug policies, including the Austrian one, the last decades have been marked by growing criticism of this system and there is an increasing number of movements that call for alternative approaches to drug policy. This is also due to the significant risk that comes with drug use under current conditions and the high numbers of drug-related accidents and deaths. In Austria, for instance, there were 196 and 191 drug-related deaths in 2019 and 2020, respectively, also among young users, which is particularly worrisome (Busch et al., 2021; Wiener Zeitung Online, 2020). Within this context, the harm reduction movement is increasingly gaining ground, which, as the name indicates, focuses on reducing the harm associated with drug use through measures like syringe exchange programs, supervised injection sides, and drug checking. While the illegalization of drugs is still the dominant policy approach, it is a heavily disputed one and the question of how to conceptualize, classify, and regulate drugs continues to spark debates.

One harm reduction measure that has become increasingly relevant in recent years is drug checking. Drug checking is a service that allows people to get tested the illicit synthetic drugs that they want to consume and to receive information about their quality and dose. In contrast to other harm reduction initiatives, which mostly provide tools like syringes and info material, the service gives users access to a laboratory infrastructure, in which scientific analyses are performed on the samples. Thereby, the users can acquire concrete information about the content of their drugs, which they usually do not have on an uncontrolled drug market. Drug checking primarily targets so-called recreational drug users who consume synthetic drugs, which is a user group that is not reached by other drug programs. Due to the ambivalent legal status of drug checking and the considerable costs of the tests, the service is so far only offered in a few countries (Brunt, 2017). In Austria, there are two drug checking facilities, Checkit! in Vienna and the Drogenarbeit Z6 in Innsbruck, the latter constitutes the case site of my research. With

the rise of new psychoactive substances (NPS)¹ and other drug trends, which dramatically increase the risks associated with recreational or experimental drug use (Helander et al., 2020), a growing number of governments is considering introducing drug checking within their harm reduction policies. In Germany, for instance, the most recent coalition agreement explicitly states the aim of introducing drug checking by removing the legal barriers that have so far hindered the implementation of this service (SPD et al., 2021). While the establishing of drug checking facilities is welcomed by many, there are also significant difficulties involved in setting up a service to test drugs that people are not supposed to own in the first place. Drugs, it seems, are something that societies struggle to define and make sense of and, as the case of drug checking illustrates, there are different views on how they should be handled.

This ambiguity of drugs, which I became particularly aware of when reading about drug checking, was the starting point of my interest in the topic. I was puzzled by the range of meanings that drugs can have, as they are illegal in Austria while at the same time there exists a service like drug checking that encourages users to bring their substances to get them tested. To disentangle this multiplicity, I rely on literature from the Science and Technology Studies (STS), which has a long tradition of studying the different ways in which people know and order the social and natural world and of challenging the idea that reality is stable and predetermined (cf. Jasanoff, 2004; Latour & Woolgar, 1979). More specifically, I will draw on Annemarie Mol's (2002) notion of ontological politics, which conceptualizes reality and its objects as made through practices, meaning that drugs, for instance, are not defined by some inherent qualities but by how people do and understand them in a given situation. Depending on how an object is practiced in a particular instance, it may thus be something slightly different, which Mol refers to as ontological multiplicity. Importantly, in relation to drugs this does not mean denying their pharmacological and chemical properties but rather to acknowledge the psychosocial, cultural, and political ramifications that also influence a drug's harmfulness and effect. Investigating drugs through the lens of ontological politics thus allows me to make sense of the multiple ways in which they are understood and practiced, and the meanings that people attribute to them.

In this thesis, I will explore this multiplicity of drugs and drug use in more detail by studying the processes and practices at the drug checking facility Z6 in Innsbruck, Austria. I consider a drug checking facility an interesting site to investigate the meaning of drugs due to its peculiar position at the

¹ New psychoactive substances are substances that are not prohibited by drug law but often mimic the chemical structure and effects of established. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (n.d.) defines a new psychoactive substance as "a new narcotic or psychotropic drug, in pure form or in preparation, that is not controlled by the United Nations drug conventions, but which may pose a public health threat comparable to that posed by substances listed in these conventions". Such substances are also referred to as 'legal highs', 'research chemicals', or 'designer drugs'. Users may prefer NPS as they can often be legally purchased on the internet.

intersection of legal, political, scientific, and cultural concerns. Since the service is designed to support users, I hope that by conducting my research there I will have the opportunity to learn about their perspective on drugs in particular, which is often underrepresented in discussions on drug policy and drug use.

What further makes drug checking a fitting case for researching drugs is that it is usually set up as an official facility, which is located in a building where people go to bring their drugs. In that, drug checking is a space that is assembled in a way that allows offering the service to users. This makes it easier to access the case site as a researcher as I can focus on a specific locality rather than, say, a discourse or digital service, and am more likely to observe how people speak about and practice drugs. The spatial setup of drug checking also constitutes an interesting subject of investigation in its own right. Within STS, there is a strong interest in so-called socio-material networks that comprise objects, people, discourses, institutions, and various other things, and which are conceptually based on the idea that the social and material aspects of our world are intricately linked (cf. Callon, 1984). Within this understanding, the materiality of our surroundings is entangled with how we practice, know, and value things therein, which Law (2016) tries to capture with his concept of knowing spaces. This sensibility towards spatial and material aspects and their implications for how people do and know things is useful for my investigation of drug checking, as it allows me to study people's understanding of drugs in relation to the location and material setup of the facility. Moreover, it helps me investigate how a service like drug checking, which seems to contradict Austrian drug policy and law, is possible in the first place and what actors and institutions are needed to establish such a space. While drug checking seems to be a straightforward service from afar, which 'simply' tests users' drugs, I am interested in learning about the processes taking place behind the scenes and the socio-material networks enabling these.

Another aspect of drug checking that sparked my interest as an STS scholar is the role of science within the service, as the drug testing requires a lab infrastructure and scientific know-how. While there is considerable research on psychoactive substances in the sciences, for instance in chemistry, pharmacology, or the neurosciences, it usually takes place in a sphere that is separated from and inaccessible to users. The findings of these disciplines commonly only take into account users when they try to explain and treat conditions like addiction, thereby often imposing on users definitions of pathology and deviance (Acker, 2002; Campbell, 2007). The sometimes problematic relationship between science and citizens, users, or patients is a topic that has gained considerable attention within STS, with researchers discussing the complicity of science in discriminating against certain social groups (Rajagopalan et al., 2016) or upholding unequal power structures (Suryanarayanan & Kleinman, 2016). What strikes me in the case of drug checking is that the opposite seems to apply, as scientific methods are used to support users, a group that is usually criminalized and stigmatized. Another aspect that I find interesting about drug checking is that the test result comes in a scientific format and is based on a chemical analysis. I am interested in how the users make sense of this result, as translating scientific knowledge into non-scientific contexts is not an easy task. As scholars like Wynne (1996) and Felt and

Davies (2020) have argued, the scientific representation of the world may not conform to how so-called laypeople understand it, which is likely to be the case for drugs, which can have very personal meanings and effects. In the context of drug checking, I am thus curious to learn about how scientific methods and expertise are integrated into the facility in Innsbruck as well as how the test result and other scientific knowledge is communicated to and made sense of by the users.

While drug checking is interesting from an intellectual and conceptual perspective, one of the main reasons for me to study the topic is its political significance and the influence that it can have on the safety of drug users. Drug use comes with risks that are exacerbated when people do not know what exactly they are consuming. Against this backdrop, I want to investigate how users navigate the uncertainties of drug use and whether services like drug checking can positively influence their use practices. I also consider my research an inquiry into the processes and effects of harm reduction and drug checking more generally, as I want to understand what users learn at the facility, how they perceive the service, and what impact participating in it has on the safety of their use. To study the impact of drug checking, I also have to investigate how users view and consume drugs under 'normal conditions', for instance before they learn about drug checking or when they do not have the opportunity to use the service. I will thus also investigate how users experience the conventional approach to drugs in Austrian society and how they make sense of and consume drugs within this setting. In that, my aim is not only to examine the processes and practices taking place at and through drug checking but to also get insight into the difference that offering such as a service makes for users. In line with Mol's notion of ontological politics, I thus want to explore the political implications of the ways that people (can) practice, know, and value drugs through drug checking. Bringing these several lines of interest together, the main question structuring and guiding my research, is:

How do people practice and understand drugs at and through drug checking, how do the versions they enact in this space compare to the mainstream² approach to drugs, and how does participating in the service shape how users (can) understand and use drugs?

The case site of my research is the drug checking facility that is situated at the Drogenarbeit Z6 in Innsbruck. The drug checking service at the Z6 was established in 2014 and is one of two facilities in Austria that allow users to get their drugs tested in a fixed location and continuously throughout the

² Throughout this thesis, I frequently refer to the 'mainstream' approach, 'mainstream' society, or 'mainstream' enactments. Using this formulation, I mean "the way of life or set of beliefs accepted by most people" or things that are "considered normal, and having or using ideas, beliefs, etc. that are accepted by most people" as defined by the Cambridge Dictionary (Cambridge University Press, n.d.). The understanding of what is 'considered normal' in this thesis is based on the views of my interview partners, Austrian drug policy, and my assessment of the depiction of drugs in the media and public discourse.

year. I will conduct my research by combining the methods of ethnographic observation and semistructured qualitative interviews. This allows me to observe the practices and processes taking place at the facility and to learn about the perspective of the checkers working in the project as well as of the clients who get their drugs tested. In doing so, I gain insight into what is happening at the facility but also have the opportunity to talk to people about how they practice drugs more generally or about the work that went into establishing the service. I also plan to conduct an interview with the chemist that leads the analytics team that performs the chemical analyses for the Z6, which will allow me to get a more complete understanding of drug checking, including the work that is performed at the lab. Taken together, I hope that my research will give insights into the multiple ways in which drugs can be understood, valued, and practiced and the impact that drug checking as a harm reduction measure has on how safely users can consume drugs.

I will begin this thesis by outlining relevant literature for my case and situating my project therein. My research is located at the intersection of STS and drug studies and I will draw on works from both fields that either contribute to my case conceptually, including literature on ontological politics or science communication, or thematically, such as publications on harm reduction or the experiences of users. To give the reader some general information on the context of this study, I will then introduce my case site, the drug checking facility Z6 in Innsbruck. After outlining my research questions in more detail, I will discuss the conceptual framework of my research endeavor, which draws on Mol's (2002) ontological politics and Law's (2016) concept of knowing spaces. Next, I will explain my methodological approach, which comprises semi-structured qualitative interviews with users, checkers, and a scientist, as well as an ethnographic observation at the facility. Having laid out the structure of my research, I will present my empirical findings, which constitutes the main part of this thesis. I will first explore the ways in which drugs are practiced in Austrian mainstream society, how users experience this approach, and how they consume drugs in this context. Second, I will take a closer look at the setup of the drug checking facility, its processes and practices, and the multiple versions of drugs that the people involved in the service enact. I conceptualize drug checking as a knowing space, which allows me to understand the interplay of people, objects, and discourses and how drugs are known and practiced in these socio-material assemblages. Lastly, I will touch upon the impact that drug checking has on how the clients understand and consume drugs. In the concluding chapter of my thesis, I will summarize and discuss my findings, review their relevance for STS, drug research, and drug policy, and present some potential avenues for future studies.

1.2 Some words on definitions and terms

Before diving into my research, I want to briefly reflect on and define the vocabulary that I will be using throughout the thesis, specifically the words *drugs* and *drug user*. While the word *drug* has an ambiguous meaning in English that encompasses both medical drugs and illicit drugs, in this thesis, I

will use the term as referring to the latter, similar to the meaning of the German term *Drogen*. This includes substances like cannabis, cocaine, MDMA, heroin, and psychedelics. As this listing indicates, the term drugs is an umbrella term that encompasses a wide range of different psychoactive substances, whose effects, harms, and cultural connotations can vary strongly. In this thesis, I will still largely use the word drug or drugs and only name a particular substance when my interview partners explicitly mentioned it. Most of the time, however, people speak about drugs in general, despite the differences among substances, which is also due to the legal, political, and cultural frameworks that constitute the narrative infrastructures that people think with. Since I am interested in the ways that people classify and make sense of things, I have decided to stick to the established category of drugs throughout this thesis, as it was also used by my interview partners, although I am aware of the variety of substances that are somewhat arbitrarily subsumed under this term. This does not mean that I do not question this categorization as such and there are many moments throughout my thesis where different actors actively challenge this broad category of illicit drugs.

The term drug user is not without problems, either. In 2018, the Global Commission on Drug Policy published a report that advises policymakers and the media to avoid terms like 'drug user', 'addict', and 'junkie' as these may present people who use drugs as "physically inferior or morally flawed" (Global Commission on Drug Policy, 2017, p. 28). Instead, they suggest using the formulations 'person who uses drugs' or 'person with drug dependence'. While I initially planned to follow this advice and use the term 'people who use drugs' instead of drug user, I changed my opinion throughout my research process as I observed that my interview partners self-identified as the latter. While they felt like drug users were frowned upon by society, they did not consider the word as such problematic but rather people's attitude to it. This might also be more so the case since in German the term DrogennutzerIn or DrogenkonsumentIn may carry different connotations than the term drug user in English-speaking countries. Eventually, I decided to stick with the term drug user, too, as this is how my interview partners were referring to themselves. Moreover, I believe that using the term in my thesis, which critically examines the ways that drugs and drug users are understood in society, can also contribute to showing that using drugs does not define people and that calling someone a drug user should thus not be considered derogatory. Nevertheless, I am aware that this is a sensitive topic and that in other cases and contexts a different choice of wording may be more appropriate.

I am further aware that the drug users I interviewed at the drug checking facility do not represent 'drug users as such' and that there is no such thing as *the* drug user. When I refer to users throughout my thesis, I mean those that I spoke to as well as others that were mentioned by my interview partners. Even though I hope to also give some general insights, for instance into how drug users experience current drug policy, it is important to keep in mind that there can be huge differences between how different user groups are treated and represented in our society. Such differences are due to various forms of discrimination, such as racism, sexism, or economic disadvantages, just to name a few. The experiences of the users I interviewed, and my analysis thereof, can thus not be generalized and applied

to all drug users. As I tried to make clear throughout the thesis, my findings are local in that they are shaped by my fieldwork at the facility in Innsbruck, the clients that this service usually attracts, and, most importantly, the drug users I spoke to.

2. State of the Art

There are many discourses and publications within and beyond the Science and Technology Studies (STS) that provide thematic, conceptual, and/ or methodological input for my thesis. I have organized the literature that I will draw on into four parts, in each of which I first introduce a strand of STS followed by a discussion of related literature on the topic of drugs and drug use. I will begin by outlining relevant works on ontological politics and the interrelation of knowledge, classificatory practices, and social order. After that, I will introduce research on the perspective of patients and users and discuss some works on knowing spaces and science communication. Lastly, I will outline relevant publications on harm reduction and drug checking.

2.1 Multiplicity and practice

2.1.1 Ontological politics

The first strand of STS literature that is relevant for my thesis comprises works that draw on Mol's (2002) notion of ontological politics, which conceptualizes reality as multiple and constituted through practice. Ontological politics also constitutes the conceptual framework for my research, which I outline in Chapter 5. Before diving into this literature, however, I want to briefly trace back the tradition of research within STS that forms the conceptual basis of Mol's approach. This will make it easier for readers from other fields than STS to understand the conceptualization of knowledge and reality that Mol's ideas build upon. One of the central interests of STS scholars has been and still is the critical investigation of simplistic accounts of the world, such as the supposed separation between the natural and the social, facts and values, or objects and people. STS thus provides a large body of literature that tries to open up so-called 'black boxes' by questioning simple and closed representations of reality and taking a closer look at the complex, often scientific, processes that shape how we understand things (cf. Latour, 1999, p. 304). To do so, STS scholars attend to the "diverse assemblages of cognitive, social, material, and technological realities" (Felt et al., 2016, p. 2) as well as the practices through which people act in and know the world. Starting from the idea that the stuff of reality is not out there to be discovered but made through our interaction with it, various STS researchers have shown that knowledge production is, as the name indicates, a making of facts rather than an unveiling of them (Knorr-Cetina, 1999; Latour & Woolgar, 1979). The strand of Actor-Network-Theory (ANT) within STS has further emphasized the role of material objects, so-called non-human actors, in co-constituting our world and ideas. While the earliest ANT work by scholars like Callon (1984) or Latour (publishing under the pseudonym Johnson, 1988) primarily focused on disentangling networks of human and non-human actors, thereby assuming a 'flat ontology' of its different parts, more recent so-called post-ANT authors like Mol increasingly attend to the role of power and politics (cf. Gad & Jensen, 2010). Conceptualizing reality and our understanding of it as produced through networks of people, objects, ideas, and practices, ANT and related strands within STS have laid the grounds for critical work on how we know and value the world.

Building upon these works, Annemarie Mol (2002) developed the concept of ontological politics in her book The Body Multiple. She is interested in the interplay of materials, meanings, and practices as well as their ontological and political ramifications. The main argument of her book is that objects are made through the ways in which people practice them and that, since there are different ways to do so, there are multiple versions of an object. Mol developed the concept of ontological politics based on the fieldwork she conducted in a Dutch hospital, where she observed the processes involved in the examination, diagnosis, and treatment of atherosclerosis. Depending on where in the hospital ward and by whom the disease was practiced, varying methods, tools, and discourses were invoked, so that atherosclerosis looked a little different in each setting. For instance, when a patient came in complaining about leg pain, she was enacting the disease differently compared to a pathologist, who cut open a leg to assess the severity of the illness. Rather than conceptualizing these variations as a matter of epistemological perspective, Mol holds that the atheroscleroses practiced in these instances are ontologically distinct and constitute different versions of the disease. She thus argues that atherosclerosis is multiple. To maintain a coherent understanding of the disease as a single thing, people need to coordinate its different versions, which is easy when they coincide but can also be difficult if they are in conflict. In most cases, it is one version of an object that wins. In the context of medicine, it is usually the one practiced by doctors with the help of medical equipment and knowledge that is dominant. Ontological politics thus conceptualizes reality and the objects inhabiting it, in this case a disease, not as predetermined and stable but as coming into being through people's practices. In doing so, the concept sensitizes scholars to look out for what people do, which instruments and narratives they use, and how their practices are entangled with wider networks of things, institutions, and values.

Much of the literature on ontological politics deals with medical topics like the enactment of diseases, including Mol's (1999, 2002) own work. One reason for this may be that medicine is one of the scientific fields where experts' practices are visible and accessible to outsiders, who often play an active role in the diagnosis and treatment, which involves the viewing, touching, and measuring of people's bodies. This makes it an interesting case site for investigating how things are known and enacted as patients, doctors, illnesses, and drugs interact and get practiced together. Another good example of this is Willems' (1998) study of different medical approaches to asthma. Comparing two cases of how the lung disease is diagnosed and treated, he argues that practicing asthma in different ways, for instance by treating it with different drugs, results in the patients having different conditions. Similar to Mol's findings on atherosclerosis, Willems (1998) argues that "Carl and Steven [two asthma patients receiving different treatments] not only think and talk differently about their asthma, they have different asthmas - asthmas made different in the practices they are involved in" (p. 107). He aptly outlines how diagnosing and treating asthma in different ways results in the patients having ontologically different diseases and that objects like medical conditions are thus not predefined, fixed

objects. Willems' chapter is not only interesting for my research due to its focus on ontological multiplicity but also because it specifically addresses the role of drugs in the making of diseases and patients. Following an ANT approach, he notes that "[d]rugs and devices do not operate in an isolated fashion, but as parts of a network" (p. 117) as they affect and connect different parts of the body and change the health and experience of the patient. Moreover, the use of drugs also forges new groups of people "that may be wildly dissimilar on other criteria but that [are] similar in this one respect: they all use a specific type of drug" (p. 118). Although Willems speaks about medical drugs, his insights are also relevant for studying the use of illicit drugs, which are also part of networks and entangled with the construction of bodies and social groups.

Conceptualizing reality as made through practices is not only an ontologically insightful approach but also one that makes visible that the world is not set in stone but could also look differently. As Mol (1999) writes in her article on the enactment of the disease anemia "the real is implicated in the 'political'" (p. 74). Based on her analysis of the different versions of anemia, she argues that how we practice things is of social, cultural, and economic significance as it influences, for instance, how likely a disease is detected in a person, how it is treated, and which identities are implicated in these practices. Another example of how the framework of ontological politics is useful for disentangling the connection between ontologies, practices, and politics is Marques' work on local knowledges (2014) and public policies (2012) in Latin America. Following the idea that knowledge production does not discover the truth of a stable world but is complicit in making it, he argues that conventional science is not the only way of knowing reality, thereby opening up a space for reconsidering the ontology and value of local knowledges. More specifically, Marques points to the intricate relationship between Western science and colonial violence, which was grounded in and legitimized by the belief that the scientific representation of reality is the only correct one while local ontologies were deemed false and backward. For him, adopting a stance of ontological multiplicity is thus a political project that allows for the practicing and knowing of reality in multiple ways rather than imposing one dominant world view on all. Marques shows that the question of how to practice and thus conceptualize reality is also about power and politics in that it may delegitimize the experiences of some people, exclude them from discourses, or harm them in other ways. This sensitivity to power and discrimination is particularly relevant for the study of drug use, which usually takes place within an ontological regime that criminalizes and stigmatizes users instead of acknowledging their view on drugs.

2.1.2 The ontological politics of drugs

The ontological turn in the social sciences, which Mol's ontological politics is part of, has also influenced the social studies of alcohol and other drug use, which I subsequently refer to as drug studies. As Fraser (2020) outlines, there is an increasing awareness that drugs, drug use, and drug users are not stable and predefined concepts but that our understanding of them is entangled with material practices,

political narratives, and social norms. She aptly summarizes how a sensibility to the ontologies of drugs challenges established assumptions about drugs, their effects, users, and policies:

These features — the self-evidence of the pure, non-drugged body that underpins the stigmatisation of drug use, the perception of the stability and commonality of drug effects that underpins drug laws, the presumption of the political neutrality of ideals of rationality that underpins addiction fears, and the pursuit of reifying diagnostic categories such as 'substance use disorder' and 'drug dependence' that underpins medical models of care — have, as a result, undergone intense scrutiny. (Fraser, 2020, p. 2)

One of the earliest scholars to apply such a critical ontological approach to the study of drugs is Gomart (2002, 2004), whose work centers on the definition, diagnosis, and treatment of addiction, and the different versions of drugs that are made through and enmeshed in diagnostic practices and treatments. In her paper Methadone: Six effects in search of a substance, Gomart (2002) challenges conventional assumptions about the nature of psychoactive substances and their effects. Investigating two experimental trials of methadone substitution, she finds that both of them not only define the difference between methadone and heroin in a different manner, but that they each describe "a different methadone" (p. 94). While one research report concludes that methadone is a promising medication as a substitute for heroin, the other finds that it is too similar to heroin to be of medical use. Importantly, Gomart argues that these assessments of methadone are not only different perspectives on the same matter but that the objects of study were performed through different practices in each study, resulting in different methadones to be researched. She thus aptly shows that the question of what a drug is, in this case methadone, is misleading in that it presupposes an object out there to be discovered. Instead, she argues that the drug in question is being made through the way it is practiced and studied, thereby highlighting how the performance of an object, for instance in scientific research, is intricately linked to how it is understood on an ontological level.

Other scholars in the drug studies have adopted an ontopolitical perspective to investigate how social categories and identity constructions of users are entangled with their representation in public discourse. Studying health promotion material on hepatitis C, Fraser and Seear (2016) show, for instance, how the conceptualization of the disease, which can be transmitted through the sharing of needles, is closely linked to framings of injecting drug use and people who inject drugs. More specifically, they argue that

there is a morphological connection between the meta-narrative of hepatitis C – which accounts for the virus as simultaneously hidden, sneaky, duplicitous, cunning, inconveniently persistent and unpredictable – and broader conceptualisations of people who inject drugs as similarly cunning, duplicitous, sneaky and unpredictable. (p. 55)

Their analysis shows that the depiction of problematic conditions like diseases is interwoven with imaginations of the people at risk and their behavior. This is particularly the case for groups that are already stigmatized, like people who use drugs. As Fraser (2010) argues in an article on the framing of hepatitis C in self-help literature, people who use drugs are often conceptualized as responsible for the

harm they experience, in this case conflicting the disease, while other patients are portrayed as passive victims. Without denying that injecting drug use is a risk factor for getting hepatitis C, Fraser nevertheless claims that the "mainstream moral values, for instance, those relating to illicit drug use as compared with alcohol consumption" (p. 78) are implicated in the versions of the disease attributed to different patient groups. While Fraser is primarily interested in the multiple framings of hepatitis C, her research is situated within and relevant to the field of drug studies as she makes visible the intertwinement of medical information, health promotion, notions of responsibility, and identity constructions of drug users. This is relevant for my research, as drug checking is also a form of health promotion whose practices of drugs and drug use are entangled with ideas about the people it addresses, i.e., the users.

Another strand within drug studies that has adopted an ontological lens is research on drug policy and health interventions. Drawing on STS literature like ANT and Mol's ontological politics, Rhodes and Lancaster (2020; 2019) challenge the idea that health interventions in drug policy merely implement stable and predefined programs. Instead, they argue, such interventions are being made as they are practiced and shaped by the assemblage of the actors, objects, and narratives that constitutes them within their local context. Lancaster and Rhodes use the example of a case study on methadone therapy for HIV to show that, depending on how and where the intervention is implemented, methadone is enacted in different ways. Contrasting how the therapy is taken up in Kenya and Kyrgyzstan prisons, they argue that methadone is multiple, showing "that technologies are never 'given' because their possibilities and power-of-acting are situated in implementation practices" (p. 5). Rather than positing that programs like methadone therapy can be smoothly translated from theory into practice, Rhodes and Lancaster (2019) argue that "[b]oth evidence and interventions are in-the-making, matters of becoming" (p. 1) as they are performed through the material, discursive, and social forces that they draw on. Any health intervention is thus multiple as shaped by the local specificities of its setup and environment. As the authors summarize their point, "evidence and interventions are made-to-matter in health [...] as inherently ontopolitical practices which interfere with (and enact) realities" (p. 1). In that, they frame health interventions as coming into being through the local socio-material assemblages they are part of and through which they enact ideas, identities, objects, and knowledge. Lancaster and Rhodes' ontological take on drug policy and health intervention provides a useful backdrop for my research on drug checking as it underlines the importance of conceptualizing drug programs as shaped by the networks that constitute them.

2.2 Knowing and ordering

2.2.1 Regulation and classification

Ontological politics, and ANT more generally, are not the only STS approaches that are useful for studying the production of knowledge, objects, and their relation to society and politics. Another strand

of STS literature is co-production, a concept introduced by Sheila Jasanoff (2004) to show how "the ways in which we know and represent the world (both nature and society) are inseparable from the ways in which we choose to live in it" (p. 2). As she argues, knowledge and technology are not separate from the social sphere but influenced by it while also shaping it in return. Within STS, numerous authors have explored this relationship between knowledge and social order, for instance by investigating how the sciences and law define seemingly natural categories like obesity (Rich & Evans, 2005) or deviance (Conrad & Schneider, 1992). One example of this is Schiebinger's (1991) seminal analysis of the depiction of female skeletons in the medical literature throughout history. She shows that the supposedly objective scientific representation of the female anatomy was shaped by the social imaginations of women. The interrelation of scientific research and assumptions about gender difference has also been discussed by Haraway (1990), who argues that the design of the surrogate mother experiment in primate research was strongly shaped by assumptions about family constellations, more specifically the nuclear family. Another related topic that has been discussed by STS scholars is the relation between science and racism. In their chapter in the STS Handbook, Rajagopalan, Nelson, and Fujimera (2016) show how research on race has historically been connected to power structures and social ideologies, while also critically discussing the growing representation of the topic in biomedicine and genetics. Bowker and Star's (1999) analysis of race classification in apartheid South Africa is a good example of this dynamic as it makes visible the conflation of scientific and normative arguments for the sake of maintaining and legitimizing a particular social hierarchy. As they show, seemingly 'natural' orders that are 'discovered' by science are actually co-produced with normative ideas about social and political order.

One influential way of ordering the social and material world is by classifying, standardizing, and regulating things through legal and regulatory practices. In modern societies, the state and related bodies are increasingly responsible for assessing and managing the risks of behaviors, technologies, products, or environmental threats, and to craft policies that minimize these (cf. Beck, 1992). Such regulation and risk assessment usually involves the classification of objects, such as biotechnologies or drugs, and their legitimate uses (Alaszewski, 2011; Daemmrich & Krücken, 2000; Davis & Abraham, 2011). Studying the interrelation of law and science, Jasanoff (1995, 2000, 2004) argues that these two domains of power co-constitute each other, even though they are sometimes conflicting. In her work on the regulation of the life sciences and novel biotechnologies as dealt with in US courts, she aptly shows the relevance of the law in ordering and making sense of the world and its objects. Jasanoff (2002) also points out the ontological import of this regulatory work, writing that:

Institutions of governance, such as legislatures, courts, and administrative agencies, create order by sorting the complexity of human experience into categories that can be rationally dealt with. Their opinions in this sense do metaphysical work, because they express binding, collective judgments about the nature of things in the world. (p. 895)

Jasanoff's analysis highlights the powerful role of legal and political institutions in governing the social and natural world, thereby co-producing the reality they claim to merely regulate. As she and other

scholars show, knowledge and social order are closely related. STS thus has a long tradition of critically studying the relation between the understanding, categorizing, classifying, and thereby practicing of reality and its political and normative import. While classification and regulation are important ways to enable the smooth processes of our modern world, they can also result in discriminatory systems that naturalize social categories and justify their order with scientific knowledge.

2.2.2 Categorizing drugs and users

Knowing, classifying, and ordering things and people are practices that are relevant to the study of drugs, as the regulation of psychoactive substances, their uses, and users is a major political concern that is also related to or justified by scientific research, specifically in the addiction studies (cf. Acker, 2002). The fact that illicit drugs are usually defined based on their legal classification, i.e., by referring to their illicit status, indicates how powerful the regulation of drugs is in defining what they are. The legal classification of drugs as illicit worldwide rests on three major United Nations conventions on global drug policy that have been formulated since the 1960s (Levine, 2003). Within this framework, psychoactive substances like LSD, MDMA, cocaine, and cannabis, are 'scheduled' as harmful and thus outlawed for personal non-medical use (UNODC, 2020). While the criminalization of drugs and their use is the most widespread, pervasive, and influential regulatory approach worldwide, Seddon's (2010) historical investigation of drug policy shows that the prohibition of drugs and their framing as a criminal threat is a modern political concept that evolved in the 20th century as social values and scientific knowledge changed. Underlining his argument, he cites Ruggiero (1999) claiming that "there are no drugs in nature ... 'drug' is not a descriptive but an evaluative concept' (p. 123). The rigid prohibitory classification scheme has come under much criticism by scholars and policymakers alike, with Levine (2003) arguing that "[g]lobal drug prohibition is in crisis" (p. 150). With many criticizing the political nature of the classification of drugs, there is increasing resistance against the current global drug policy regime, which many believe to cause more harm than good.

Within the critical drug studies, researchers have further investigated how the current legal and medical frameworks conceptualize people who use drugs and how such classifications are enmeshed with social and political concerns, and thereby often reinforce discriminatory structures. Dollar (2019) argues, for instance, that the criminalization of drug use is employed selectively, depending on who is affected. More specifically, she points out "that socio-political reactions to drug "concerns" largely depend on the social group that is associated with the drug's production, sales and use" (p. 306). Thus, substances used by racial and socio-economic minorities are often criminalized whereas users from the white middle-class are commonly framed as being sick and in need of help. Dollar (2019) further holds that the "opioid "epidemic" has received more medicalized reactions due to opiate's association to middle- and upper-class Whites—social groups that are traditionally protected" (p. 305). She argues that the formulation and implementation of drug policy is intimately tied to social imaginations of different

kinds of drug users and marked by stereotypes, thereby often punishing hardest those that are already marginalized. In doing so, she shows that the classification of objects, in this case drugs, is closely linked to social categories and normative ideas about which behavior or social role is deemed acceptable, thereby influencing the lives of people that do not conform to these ideals.

Another way of ordering drugs is through scientific classifications, which usually focus on the question of how to define drug abuse and addiction. The most important medical classificatory system to do so is the Diagnostic and Statistical Manual of Mental Disorders (DSM), which defines criteria for the diagnosis of all sorts of mental illnesses. The DSM itself is not fixed but regularly updated, which sometimes also leads to a re-definition of drug abuse and addiction. Assessing the most recent version of the DSM, the DSM-5, Hasin et al. (2013) discuss the changes made, which address questions like "whether to retain the division into two main disorders (dependence and abuse), whether substance use disorder criteria should be added or removed, and whether an appropriate substance use disorder severity indicator could be identified" (p. 1). Even though their analysis does not critically examine the classification process as such, it makes visible that scientifically defining drug-related conditions like abuse and addiction is a practice that involves uncertainties and disagreements even within the medical community. In that, such classifications contribute to the creation of the conditions they describe.

This argument is in line with Vrecko's (2010) and Campbell's (2007) research on how addiction came to be framed as a brain disease or medical condition. Vrecko (2010) argues that the conceptualization of addiction as a disease is linked to the rise of the brain sciences and a political interest in explaining the 'drug problem' in neuroscientific terms that gained ground during the Nixon era in the 1960s and 1970s. Campbell (2012) makes a similar point claiming that recent scientific developments have led to a shift of focus to the neurochemical and molecular effects of drugs and resulted in an increased perceived responsibility of the individual "to manage and maintain the health status of one's brain" (p. 21). While Campbell acknowledges that the medicalization of addiction has impacted our understanding of drug use more generally, she argues that these processes have been highly uneven and incomplete and only work "for some addicted populations and not others, within some cultural geographies and not others" (p. 23). Campbell thus emphasizes the pervasiveness of social, cultural, and economic factors in shaping the legal and scientific classifications through which societies understand drugs and those who use them. While my research on drug checking is not primarily concerned with the legal and scientific classification of drugs and users or the definition of addiction, attending to these ordering systems is still important as they constitute the backdrop for how users and other actors view drugs, most likely also at the drug checking facility.

2.3 Other ways of knowing

2.3.1 Patients, users, and 'laypeople'

While STS scholars have convincingly shown the pervasive power of scientific and classificatory practices in co-producing the natural and social order, there is also a considerable body of work focusing on knowledge 'from below' (cf. Harding, 2008). Such literature is interested in how people who are not considered experts in a certain domain know, make sense of, practice, and experience things. Within STS, this usually encompasses patients, users of a technology, and so-called lay experts, who all have knowledge about a topic or object that is usually but not always different from scientific and official expertise. Much of this research is grounded in the understanding of knowledge as "situated" (Haraway, 1988), which results in the acknowledging of a multiplicity of knowledges rather than only one supposedly objective one. While this approach has been primarily used to scrutinize scientific knowledge production, it also enables a more open and heterogeneous understanding of expertise in general by showing that science itself is a practice (Latour & Woolgar, 1979) and culture (Knorr-Cetina, 1999). Many works on patient movements and user knowledge challenge the rigid boundary between scientific expert knowledge and expertise acquired and produced by laypeople (Epstein, 2008). Moreover, there has been a growing interest in the experience of non-experts as a means to knowing. As Prior (2003) argues, "[h]ow people feel, how they think, and the content of lay beliefs, ideas and language have become central to diverse aspects of social-scientific research" (p. 42). Below, I will introduce some relevant STS works on patients and users that will help me analyze the expertise and experiences of the drug users I interview for my research.

One of the most studied groups of laypeople in STS are patients and their relatives or spokespersons. This comes as no surprise as patients have special knowledge about their bodies and conditions, which medical professionals do not have, namely their own experience of how they feel or how different treatments are working for them. Moreover, one's personal health or that of loved ones is a topic of great concern for people, which is why they are more likely to inform themselves and speak out when they feel like their condition is misrepresented or they do not receive the care they should. One way to approach the topic of patient expertise is by focusing on people's lived experience with their own bodies and the "embodiment" of medical conditions (Berg & Akrich, 2004, p. 3). As Berg and Akrich (2004) argue, an STS perspective is particularly useful for doing so as it "does not privilege any 'kind' of body over the others, the body as represented in scientific discourse, the body as experienced by the patient, the body as locus of medical practices, the body as inscribed in medical records, etc." (p. 3). Akrich and Pasveer (2004), for instance, study the topic of childbirth by following women's narratives and their experiences of giving birth. Interestingly, they challenge the common distinction between "the woman's experienced body [and] the body set up by medical knowledge" (p. 81), arguing that these two bodies are intertwined through the tools and medical practices used to facilitate childbirth as well as the knowledges women acquire before and through childbirth. Even though a distinction between people's experience and scientific or medical expertise can be a useful analytical tool, it is also important to acknowledge how experiential and scientific knowledges overlap and co-produce each other.

While patients have expertise about their experiences and bodies, they sometimes also educate themselves about their disease to an extent that they can join and, in some cases, shape scientific debates. Epstein's (1995, 1998) seminal research on the ACT UP AIDS movement and its tactics to gain credibility among scientists is a good example of how patient activism is blurring the boundary between laypeople and medical experts. Epstein is particularly interested in the construction of the so-called "lay experts", which are patients that acquire such a level of knowledge that they can partake in scientific discussions about their disease. They are a layperson and an expert at the same time. The case of AIDS activism is particularly remarkable as the activists were successful in challenging the conventional structures of medical research by engaging in expert and policy meetings while also boycotting clinical trials. Another interesting account of how patients' knowledge can influence how diseases are researched and treated is provided by Rabeharisoa and Callon (2004). Based on the case of the French Muscular Dystrophy Association, they describe how patients and their families participated in shaping the direction of clinical research by gathering funding and mobilizing research communities. The patients and their families were further actively involved in the production of scientific knowledge by providing personal documents to the researchers but also by educating themselves about the medical literature so that they could engage in "intermediary discourse" with the scientists (Rabeharisoa & Callon, 2004, p. 151). Epstein and Rabeharisoa and Callon thus show that the line between laypeople and experts is blurry and porous up to the point where patients do not only know about the science behind their condition but contribute to and shape it.

Another group of people that has gained interest among STS scholars are the so-called 'users'. While research on patients and health movements is closer to the study of science, the literature on users is grounded in the tradition of technology studies. Even though the manufacturers of an object usually have specific applications in mind, several STS scholars have shown that users may choose to digress from these, use the tool in other ways, not at all (Oudshoorn & Pinch, 2008), or do their own research on them in "unwanted" ways (Söderberg, 2016). As Oudshoorn and Pinch (2003) note "[t]here is no one correct use for a technology" (p. 1). One way to make sense of how users interact with technologies is Akrich's (1992) concept of scripting and de-scripting. Investigating the relations between objects and people based on her research on the uses of photoelectric lighting kits and electricity networks, she argues that the technical and the social are intricately linked as users and technologies shape and co-constitute each other. While technologies come with 'scripts' as they are made to be used in specific ways, users can also choose to 'de-script' objects by adapting or modifying their function. One technology-user relationship, that is particularly relevant for my study, is the one between pharmaceuticals and those who (do not) take them. Pharmaceuticals are technologies designed for altering users' bodies and are thus closely related to medical practices, physical norms, and people's

self-conception. Examining the use of sex hormones in Brazil, Sanabria (2016) offers an interesting case study about how people use reproductive technologies to fulfill purposes other than contraception, such as losing weight, suppressing their period, or reducing menstrual pain. In that, they descript the function of the technology by making its side effects the reason for using it. User studies thus offer an interesting take on technologies and the multiple ways in which their uses can be modified and subverted by highlighting that technologies are always embedded in specific socio-technical networks. Even though classificatory systems provide a pervasive and durable structure through which we understand and interact with the world, reality remains messy and contested as people choose to resist or alter the intended purposes, uses, and meaning of objects.

2.3.2 Expertise and experiences of drug users

Although drug users consume psychoactive substances that affect the body and which are often also prescribed as medications to patients, I prefer speaking of them as users (instead of patients) since they are not afflicted by an illness but actively choose to use drugs for non-medical purposes. Both strands of literature are useful for my research, however, as they focus on the experiences and practices of 'ordinary' people that are shaped by but not limited to how the world is imagined and classified by law, politics, and science. Within the drug studies, there are many interesting works that approach the topic of drugs from the perspective of those using them, for instance by investigating how people understand their own identity as drug users. Rødner (2005) studies the construction of identity among "socially integrated drug users" (p. 333) in Sweden and how these are linked to the dominant discourses in their country. She finds that drug users try to construct a positive self-presentation by distancing themselves from what they consider drug abusers, thereby framing their own identity as "normal and strong" (p. 343) users that are in control while defining the Other as "deviant and weak" (ibid.). In doing so, Rødner argues, the drug users draw on the dominant Swedish discourse that defines illicit drugs "as social evils which lead the helpless victims into a life in addiction and abuse" (p. 333) while also actively distancing themselves from it. Her study thus shows the difficulty of people to make sense of their identity as drug users in a society that lacks a narrative about normal and non-problematic use, "leav[ing] few options for the [users] to put forward a self-presentation that they feel comfortable with" (p. 334). Rødner's findings are relevant for my case study as they show how dominant discourses on drugs influence users' identity constructions "in a society that does not accept that such a thing [normalized drug use] is possible" (p. 333). While Rødner focuses on Sweden, in this thesis I will take a close look at how users experience and deal with the dominant discourses on drugs in Austria, and how these affect their experiences and self-understanding.

Constructing an identity as a drug user is not only a matter of discourse but also involves practices and knowledge. Ravn's (2012) study of Danish recreational drug users and club-goers finds, for instance, that there are different norms that define whether someone is perceived as a responsible

drug user in their community. These norms include having sufficient general and context-related knowledge about drugs as well as consuming drugs in specific ways, i.e., following a particular "drug practice" (p. 513). Interestingly, the participants in Ravn's focus group study explicitly mention the checking of drugs as part of a responsible drug practice, indicating that drug checking itself is entangled with the construction of user identities. While Ravn identified some more general attributes of what is considered a responsible drug user, she also notes that this "identity is defined by those on the inside of this recreational drug culture [and that] one has to learn the distinctions, hierarchies and practices and become familiar with this culture" (p. 524). What exactly is considered responsible or good drug use thus varies depending on the social circle one interacts or consumes with, which provides the benchmark for how one's drug use is evaluated. Although Ravn argues that the construction of a good drug user identity is thus a relational and contextual "accomplishment" and not a "pre-discursive or ontological given" (p. 523), she notes that drug user communities are a part of society, in this case the Danish one, and are thus also affected by the wider prevailing discourses and norms. Ravn's study thus shows that being a responsible drug user is a performance or practice that is constructed and evaluated in relation to the values and habits of one's community and society.

The practice and understanding of drugs among users is thus at the same time shaped by and separate from societal discourse. In the drug studies, there are several authors that explore this tension between the representation of drugs in mainstream narratives and how users themselves understand and experience their use. Dwyer and Moore's (2013) article Enacting multiple methamphetamines offers an interesting case study on how drug users' experience and consumption of drugs can differ from how they are described in official resources. Comparing the enactment of methamphetamines in Australian public discourse with how consumers themselves conceptualize the drugs, they argue that the "conventional ontological understandings of methamphetamine as anterior, singular" (p. 203) is not the only way in which the substance and its use can be understood. Dwyer and Moore (2013) show that while the purposes and modes of action of methamphetamine are "stabilized" through biomedical discourse, "the drug and its effects are destabilised or rendered 'messy' in consumers' enactments of methamphetamine" (p. 213) that do not follow the conventional script. To make sense of this multiplicity of drug experiences, the authors rely on Mol's concept of ontological politics which shows how useful this conceptual framework is for investigating people's use of and experience with illicit drugs. Dwyer and Moore further show that different enactments of the drug are entangled with different imaginations of user identities. For instance, they find that the frequent linking of methamphetamine to psychosis and pathological behavior enacts users as "out-of-control, dangerous and threatening 'monsters" (p. 209), while they usually do not see themselves in this way. This, again, points to the close relationship between the conceptualization of drugs and that of users. Dwyer and Moore's study thus shows that the personal experience and use of a drug like methamphetamine, and the identities that users associate with it, can differ significantly from how they are conventionally described in public discourse.

Another article on the 'descripting' of technologies in the context of drug use, which also relies on the concept of ontological politics, is Campbell's (2021) research on the use of fentanyl strips for overdose prevention. In this case, the technology is not the drug itself but a tool to test the drug for harmful ingredients like fentanyl. Campbell outlines how fentanyl test strips, which were originally developed to test and monitor users suspected of using drugs, have become an integral part of the harm reduction movement to prevent overdose as users repurpose them to test their own drugs. She argues that this

neatly illustrate antagonism between corporate Big Pharma's convergence with law enforcement's evolution of tools to discipline and punish violators of drug laws, and the resistant infrastructures and solidarities of self-defined drug-user unions and harm-reduction organizations trying to gain for PWUDs some measure of personal control over social circumstances. (p. 316)

Campbell's study offers a good example of how drug users can subvert the very tools intended to monitor them. It further makes visible the multiplicity of drug uses and experiences, the agency of users to resist conventional narratives about drugs, as well as the interesting and often ambivalent role of testing technologies in governing or empowering users. As the literature on users' perspectives on drugs shows, people can find ways to re-interpret or modify the meaning and intended use of drugs and drug-related technologies, thereby resisting mainstream classifications and valuations and reclaiming partial agency over their practices and identities. In my thesis, I will build upon this work to explore further the complex and multiple relationship between the societal structures that govern drug use and users' experiences and knowledges.

2.4 Knowing spaces

2.4.1 Laboratory studies and science communication

As the prior sections have shown, there are many ways in which we can understand and know reality and the objects inhabiting it. Adopting the framework of ontological politics helps to make sense of how the world is at the same time seemingly stable and singular, as represented by classifications and law, while also being multiple and messy, as experienced and practiced by patients and users. In this thesis, I will draw on and hope to contribute to these discourses by focusing on the practices of sense-making in a particular space, the drug checking facility Z6 in Innsbruck. One body of STS literature that is thus relevant for my case is one that conceptualizes knowledge practices as shaped by the socio-material structure of situations and locations, which Law (2016) refers to as "knowing spaces" (p. 74). The notion of knowing space, which I will elaborate on in Chapter 5, understands each instance of knowing as taking place in a material setting that is constituted by an assemblage of objects, ideas, and people. These spaces both enable and limit how one can know and make sense of the world. One knowing space that has attracted significant attention among STS scholars is science itself and the webs of discourses, norms, tools, and subjects that constitute it. Following scientists around in their workplaces and

ethnographically studying how they produce facts, researchers like Latour (1987) and Knorr-Cetina (1983, 1999) have shown that scientific knowledge production is a culture in itself, with its distinct conventions and practices (Law, 2008). As noted before, feminist scholars have further emphasized that the production of knowledge is always situated, thus taking place in a particular socio-material setting, and that the idea of objective, God-like facts is an illusion upheld by those benefitting from it (Haraway, 1988; Harding, 2008). Attending to spaces within which scientific knowledge is produced is thus important, as these shape how we know and value the things and people we live with.

One central space of scientific knowledge production is the laboratory and there is a distinct strand in STS, the so-called lab studies, that focuses on the processes that take place within these sociomaterial spaces of research. Knorr-Cetina (1983) argues, for instance, that one of the main functions of the laboratory is to keep reality out in order to, somewhat paradoxically, produce knowledge about it. She writes that "the laboratory displays itself as a site of action from which 'nature' is as much as possible excluded rather than included" (p. 119), which makes scientific activity a practice of "world making" (ibid.). In their book Laboratory Life, Latour and Woolgar (1979) describe the function of the laboratory in a similar way, arguing that it turns the disorder of the world into the order of scientific representation. Scientists do so by performing sophisticated tasks with large and advanced technological tools that turn material objects into abstract literary or visual representations. Given their ability to turn messy material into something that can be written down, Latour and Woolgar describe the tools used in a laboratory as "inscription devices", a notion I will draw on as a sensitizing concept and will discuss in more detail in Chapter 5. One major benefit of the knowledge produced in the laboratory is that once it is 'inscribed', it is in a format that can be easily stored, distributed, and understood in different contexts. Latour (1987) further argues that this format of written text or representation turns scientific knowledge and other pieces of knowledge into "immutable mobiles" (p. 227). While it may be difficult to transport a chemical substance across the globe, its inscribed version comes in a standardized language that is immutable, mobile, and has explanatory force. The laboratory thus constitutes a knowing space that allows for the production of a particular version of reality that is standardized, literary, and travel easily.

This traveling of facts between the scientific space of the laboratory and the 'real world', however, is often not as easy and smooth as it seems. The field of science communication describes well that transporting facts from one space to another, i.e., from one network of people, things, and beliefs into another, can be difficult as the seemingly universal knowledge of science does not easily hold within some spaces outside of it (Felt & Davies, 2020). As Wynne's (1996) seminal research on the understanding of science of Cumbrian sheep farmers shows, there are cases in which scientific knowledge is not well received or even challenged by other forms of expertise. Investigating how scientists tried to educate the farmers about the risks and consequences of radioactive fallout, he found that they questioned the performance of science, its authority, and the information that was propagated in this context. Their distrust in scientific knowledge was not grounded in a lack of knowledge, as is argued within the 'deficit model' of public understanding of science (Felt & Davies, 2020), but due to a

mismatch between the scientific knowledge and the social and cultural contexts of the sheep farmers and their local expertise. The communication of science is not a one-directional process that transports facts from the realm of science to the public but a much more complex and situated endeavor, as Felt and Davies (2020) point out. They argue that "[s]cience communication does not simply show the world as it already is, but participates in enacting or performing it in specific ways" (p. 17). Communicating scientific knowledge is thus a generative practice that involves the co-production of realities.

To conceptualize science communication as situated and generative, Felt and Davies (2020) draw and expand on Law's (2016) notion of knowing spaces. Describing how science is usually presented to the public, they note that "[s]cientific findings, often called 'facts', are (often quite radically) decontextualised, i.e. stripped of the situatedness of their production and validation and then recontextualised in new spaces" (p. 22). The work that goes into the production and stabilization of facts beforehand is thus made invisible to the public, which contributes to the image of science as objective and separate from the social sphere. As the case of the sheep farmers has shown, however, non-scientists do not passively take up any scientific knowledge they receive but critically evaluate it based on their own expertise and experience. Science communication is thus a complex, messy, and heterogenous process, that involves a variety of objects, experts and non-experts, beliefs, and narratives, and whose outcome is never fixed or pre-determined. As people engage with scientific knowledge in specific spaces, such as at museums or health education events, they interact with, question, or modify it, and generate new knowledges and perspectives on the object in question. Communicating scientific information is thus productive as publics make sense of knowledge in new ways and thereby influence the information itself. One important takeaway from this literature is that knowing takes place within socio-material settings and that communicating facts from one space to another is not a smooth process but may result in resistance, skepticism, and the production of new knowledges and realities.

2.4.2 Drug education and peer support

The communication of knowledge is also relevant in the context of drugs and drug use, as informing people about drugs and their harm is a common approach to convince users not to consume drugs. As scholars have pointed out, many health programs focusing on drug-related harm are still grounded in the idea that people will not use drugs if they know enough about their risks and that deterrent drug education campaigns will thus solve the 'drug problem'. In doing so, they assume that people will change their drug habits if they know more, specifically about how dangerous drugs are, and thereby rely on the deficit model of public understanding of science (Farrugia & Fraser, 2017). Most of the research within the field of critical drug studies views conventional drug education programs problematic and argues that they fail to take into account the experiences and concerns of those addressed, mostly teenagers and young adults, while also reproducing stereotypes. Nicholson et al. (2013), for instance, criticize that most programs do not distinguish between drug use and drug abuse

and instead portray all sorts of use as intrinsically harmful. In that, they argue, drug education ignores or conflicts with the realities of users who "soon recognize the inaccuracies and exaggerations, [which] undermines the credibility of drug education and limits its effectiveness" (p. 431). If information about drugs is not in line with the experience and understanding of those receiving it, for instance as it misrepresents the effects of a drug, people will reject it and distrust the institutions providing it. In this case, the communication of knowledge from one knowing space to another is unsuccessful.

Another common criticism of drug education programs is that they reinforce certain normative ideas about social roles and good behavior, which may increase drug-related harm instead of preventing it. Farrugia (2017) writes, for instance, that Australian drug education invokes conventional gender stereotypes about young women by portraying their "consumption practices as intrinsically more problematic than those of young men"(p. 281) while at the same time framing them as responsible for the harms they may experience while intoxicated. Drawing on Mol's notion of ontological politics, he notes that drug education thereby enacts particular versions of women and drugs that are likely to exacerbate rather than reduce drug-related harm and stigma. In a similar study, Farrugia and Fraser (2017) investigate the depiction of addiction and youth in Australian drug education. They find that the narrative of addiction as a brain disease and the neuro-scientific conceptualization of youth as a chaotic stage in the brain development are co-produced in drug education as both represent brains that are supposedly deviant from a normal, rational person. They criticize not only the dominance of neuroscience in explaining drug effects, which tends to neglect social and personal factors, but also the implicit assumption that young people's "drug consumption stems from their lack of knowledge and skills" (p. 591). Both of these studies show that drug education programs are often entangled with social and scientific ideas about the body, gender, and adequate behavior and thereby co-produce imaginations of drugs, identities, and deviance.

Drug education is not the only knowing space in which knowledge about drugs gets exchanged and produced. Similar to the works on drug users' resistance to official narratives discussed in the previous section, there is also literature on how users share experiences and information among themselves. One important space of knowledge exchange for drug users is the internet. Bancroft's (2017) research on users' interaction in the forum of an online crypto market is an interesting example of how users discuss the effects and risks of drugs and share information on how to minimize them. Interestingly, Bancroft finds that the notion of harm reduction discussed by the users is different from the one conventionally practiced in drug education. Rather than invoking a discourse of individual responsibility and guilt, they focused on the management of harm when using drugs instead of trying to stop their use entirely and further embraced a culture of collective knowledge and self-care. In line with research on lay expertise, Bancroft further notes that within this specific knowing space, "[u]sers are producers of knowledge about harm reduction that can augment, run ahead of, and challenge that of experts" (p. 345). He concludes that "cryptomarkets become the location for shared knowledge production formed around potential drug risks" and thereby constitute what he calls a "risk

infrastructure" (p. 346). Bancroft's article is useful as it combines insights into users' knowledge and practices with the notion of space and infrastructure. While the studies on drug education introduced above have shown that the narratives in conventional programs often do not meet users' expectations and needs, Bancroft's research gives insight into the spaces where users can become experts themselves and exchange their knowledge and experience with like-minded peers.

2.5 Harm reduction and drug checking

Another body of literature that is relevant for my research are works on harm reduction in general and drug checking specifically. Harm reduction is an approach to drug policy that has gained prominence throughout the past decades. In contrast to drug prohibition, which criminalizes drug use, harm reduction adopts an accepting approach toward drug use and focuses on the minimization of associated harms rather than the punishment of users. As Rhodes and Hedrich (2010) write in a monograph issued by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), "[h]arm reduction encompasses interventions, programmes and policies that seek to reduce the health, social and economic harms of drug use to individuals, communities and societies" (p. 19). The harm reduction movement gained ground on a larger scale in the 1980s with the rise of HIV/AIDS and an increasing awareness of drug-related harms and is thus interwoven with other medical developments and political concerns and part of a more general rise in social movements and patient activism.

One discourse that is intertwined with that of harm reduction is the one on the 'set' and 'setting' of drug use, which conceptualization drug experiences as shaped by the mindset of the user and the environment within which she consumes. This discourse gained prominence in the 1960s with the rise of the psychedelic culture and is still prominent today (Hartogsohn, 2017). In the 1980s, Zinberg (1984) published his book Drug, Set and Setting: The Basis for Controlled Intoxicant Use, arguing that, as the title indicates, taking into account contextual factors enables users to consume in a "controlled" and safer manner. The idea of set and setting lays the grounds for rejecting the understanding of drugs as inherently addictive by showing that drug experiences can be partially controlled by the user. While the concept of set and setting was originally confined to the immediate situation of use, authors like Hartogsohn (2017) argue that the societal context should also be considered as a contextual factor that shapes how users experience a drug. Criminalizing and stigmatizing drug policies, he writes, are likely to negatively impact drug effects and are thus part of the problem they seek to address. While the concept of set and setting began as a way to make sense of the variation among drug experiences, it has become an increasingly established idea within political discourses. As Hartogsohn (2017) notes "[o]ver the last decades, principles of set and setting have been employed both as drug policy measures as well as by local and community initiatives in order to reduce the drug harms" (p. 13). In that, the history of set and setting runs parallel to and overlaps with the one of harm reduction, as both have their roots within the drug community and seek to challenge the understanding of drugs in the prohibitionist discourse.

Harm reduction is thus a way of conceptualizing drug use that has grown into a social movement and is increasingly shaping drug policies in Europe and beyond. While most harm reduction initiatives were initially organized on the level of local communities, Hedrich and Pirona (2017) find that "[o]ver the 1990s and first half of the 2000s, harm reduction steadily grew from a controversial and localised phenomenon into one of the key pillars of mainstream drug policies across the EU" (p. 258). As Brunt (2017) argues, the story of harm reduction is usually considered a success as it managed to challenge the criminalization and stigmatization of drug use by offering a human rights-centered, evidence-based, and community-based alternative to conventional drug policy. In a similar vein, Walmsley (2012) holds that harm reduction policies like needle exchange programs have helped reframe injecting drug users from "irresponsible patient[s]" to "responsible citizens[s]" (p. 103) by allowing them to partially manage their drug use themselves. However, there are also critical voices that challenge the idea that harm reduction is significantly different from other drug policies as it mostly focuses on the individual user and not the context of drug use. It is usually adopted next to the criminalization and stigmatization of drug use, which limits its actual positive effects. Rhodes and Hedrich (2010) thus argue that an actual reduction of harm also requires legal and social change, since many drug-related risks stem from structural factors like the effects of law enforcement and stigmatization.

Although most harm reduction initiatives focus on injecting drug use and the prevention of commutable diseases, the last decade has been marked by a diversification of issues and interventions. As Hedrich & Pirona (2017) point out, there are new developments in who is consuming drugs, what kinds of substances are used, and how knowledge and goods are exchanged. Due to these changes in use behavior, they find, there are "trends related to lifestyle choices among population groups not covered by traditional harm-reduction interventions" which encompass "new and non-marginalised user groups, new synthetic drugs, [and] changing risk behaviours" (p. 264). One harm reduction intervention that seeks to address such "new and non-marginalized user groups" is drug checking, as it is directed at people who recreationally use synthetic drugs. Drug checking is further understood as a response to the rise of so-called new psychoactive substances, which are "new chemical variations [of existing drugs that] are continually appearing on the market" (Hedrich & Pirona, 2017, p. 266), so that there is usually only little knowledge about their effects and risks. Offering a drug testing service that can identify the composition of drugs allows the detection of potentially harmful chemical variations while also addressing user groups that are not reached by conventional programs. Hedrich and Pirona (2017) explicitly mention the potential of "[n]ew pharmacological and technological developments (e.g. [...] advanced onsite and offsite drug checking technologies [...]) and other advances in knowledge" (p. 260) to adapt harm reduction programs to new kinds of substances, uses, and users. This aspect is, again, useful to keep in mind as it hints at the fact that drug checking is only possible due to the scientific and technological advancements that enable a relatively fast, high-precision testing of drugs. This body of work helps situate drug checking as a harm reduction initiative within the movement and in relation to other projects and policies.

As drug checking is becoming an increasingly important part of harm reduction, there is also a growing body of research on it (Measham, 2019, 2020; Valente et al., 2019). In 2017, the EMCDDA issued a special report that assessed the potential of drug checking and concluded that "drug checking can serve as an extension of prevention and harm reduction interventions, potentially saving lives" (Brunt, 2017, p. 17). Moreover, the UN, the EU, and numerous national governments issue yearly drug reports that touch upon drug checking services or use them as a source of data (EMCDDA, 2019; Horvath et al., 2019). Academic research on drug checking usually focuses on the evaluation of the effectiveness of such services in reducing drug-related harm and deaths. Most publications are from the UK, often in relation to the drug checking project *The Loop* (Measham, 2019, 2020), Australia, Canada, and the rest of Europe. The majority of papers considers drug checking a promising and effective measure to mitigate drug-related harm, publish substance warnings, and monitor the drug market (Benschop et al., 2002; Brunt, 2017; Brunt et al., 2017; Hungerbuehler et al., 2011; McCrae et al., 2019; Measham, 2019, 2020; Valente et al., 2019). Mema et al. (2018) argue, for instance, that drug checking is an "innovative harm reduction service [that] allows for a personalized risk discussion, potentially reaching others via word-of-mouth and early warning systems" (p. 740). In that, they mention the two positive features of drug checking that are usually highlighted, namely that it offers personalized counseling to users who would otherwise not use such services while also constituting a way to monitor the drug market and issue warnings about harmful substances.

Even though the majority of articles on drug checking comes to the conclusion that it is a useful addition to the existing repertoire of harm reduction measures, there are also very few publications that are less enthusiastic about its effects and demand further research. Scott and Scott (2020), for instance, describe the current body of literature on drug checking as constituting only "a small number of poor quality observational studies of a very small number of events" (p. 400) and argue that more "robust evidence of efficacy" (ibid.) is needed before the Australian state should adopt it as an official harm reduction measure. Most of the publications on drug checking focus on whether the service is successful in reducing drug-related harm, usually by following a quantitative or quantitative-qualitative approach. In many studies, a measure for the effectiveness of drug checking is the percentage of people who decide to dispose of or not take a substance if it turns out to be different from what was assumed (Measham, 2020; Valente et al., 2019). While such research is useful to get a first impression of how people respond to the test result they receive, it does not allow for an in-depth investigation into how people make sense of drugs or how partaking in drug checking may alter their use practices long-term. Another important feature of studies on drug checking is that they almost exclusively focus on mobile drug checking as offered at festivals and parties, where people usually receive their test result within one or two hours. The kind of drug checking discussed in much of the literature is thus different from the one I will study in this thesis, which is a stationary service, indicating that the term drug checking itself is only loosely defined and can mean different things. It is thus important to outline in detail what kind of drug checking one is studying, especially when conceptualizing knowledge and practices as shaped by the sociomaterial networks they are part of.

2.6 Situating my research

STS thus provides a large body of literature that I can draw on when investigating the multiplicity of drugs, which will help me understand the interrelation between classifications, knowledge, and social order; the experience, and expertise of users; and the socio-materiality of drug checking, and the knowing that takes place therein. Situating my research within these discourses allows me to study drug checking with a sensitivity towards the messiness of reality and the different factors that shape how people understand, experience, and practice objects like drugs. Even though the topic of drug use lends itself well to an STS analysis as it is situated at the intersection of social, scientific, and political concerns, there are only few STS studies on that topic. Likewise, within the field of drug studies, which occasionally draws on and overlaps with STS, the topic of drug checking has, to my knowledge, not yet been studied with an in-depth qualitative approach.

In this thesis, I will approach drug checking from an STS perspective and hope to thereby contribute to both disciplines and strands of research. Drawing on insights from both STS and drug studies, I will explore the value of ontological politics for studying how people understand and use drugs in our society and the impact that interventions like drug checking can have on users' safety. While broader societal structures constitute the backdrop for my research as they influence people's conceptualizations of drugs, my focus lies on the ways in which users make sense of and experience drugs, how they navigate, adopt, or challenge dominant classifications and narratives, and how both ways of knowing and doing drugs, the 'official' and the 'personal', so to say, hang together. I will also draw on and hope to contribute to the field of science communication by investigating how the checkers at the drug checking facility explain scientific information like the test result and contextualize it in light of users' own understanding of and experiences with drugs. From the perspective of drug studies, this case study will offer interesting insights into the processes and practices of a drug checking facility and investigate whether and how this harm reduction measure supports users to consume more safely. Taken together, I will thus explore how material, social, and discursive forces on a societal, scientific, and individual level shape how people know drugs, and investigate how creating alternative knowing spaces like drug checking may enable users to understand and practice drugs differently and in a potentially safer way. In that, I hope that the findings of my thesis will be valuable from a conceptual perspective as well as for practical considerations on harm reduction and drug policy.

3. Case Site

In Austria, there are only two drug checking facilities, one of which – the drug checking service at the Z6 in Innsbruck, Tyrol - constitutes the case site for my research. Before introducing this facility, I will give some background information on drug checking more generally, which will allow the reader to situate the approach and setup of the service at the Z6 within the broader drug checking landscape. As outlined above, drug checking is a harm reduction measure that allows users to get their drugs, usually only synthetic ones, tested and to receive information about their quality and strength. Drug checking gained ground in the 1990s with the rise of the club scene and as a response to the adulteration and mislabeling of so-called party drugs. Allowing users to test their drugs was and is a means to prevent drug-related harms like overdoses or the ingestion of adulterants through the provision of information. While drug checking is historically connected to the club culture and directed at so-called recreational drug users, with the rise of synthetic opiates like fentanyl it is increasingly recognized as a useful tool for (injecting) users of opiates, too. As I have touched upon in the previous chapter, the term drug checking is only loosely defined and there is great variability in how the service is performed locally. Apart from user-based tools like home drug tests, there are two kinds of drug checking as a harm reduction measure, one is performed in a stationary facility while the other one is offered as a mobile service that is set up at festivals or in clubs. The latter kind is more common and the one that research on drug checking usually focuses on.

The drug checking service at the Z6 in Innsbruck is a stationary one, which is thus the type that I will investigate in this thesis. In contrast to the mobile service, which allows users to receive the test result within hours, stationary services usually take about a week to analyze the samples. Usually, they have access to advanced laboratories and are thus able to identify more substances and adulterants and can specify their quantity in more detail. Even among stationary drug checking services, there can be differences in what scientific methods are used and how long the analysis takes. Since drug checking operates in a legal grey zone, the specificities of a stationary drug checking facility are also shaped by national drug policy and the attitude of the local police. Moreover, each facility has its own way of receiving the substances and communicating the test result. The term drug checking thus does not describe one specific harm reduction measure, that looks the same in every context, but a range of different testing practices that vary depending on the national and local setting in which they are performed.

The facility that constitutes the case site for my research is the drug checking service offered at the Zentrum für Jugendarbeit Z6 (center for youth work Z6) in Innsbruck, Austria. The Z6 specializes in services directed at teenagers, young adults, and their contact persons like parents and teachers. Among other services, it offers drug and addiction counseling, conducts street work activities, and provides drug education in clubs and other spaces that are frequented by young adults. The part of the center that specializes in drug-related youth work is called "Drogenarbeit Z6". Since 2014, they also run

a drug checking service that offers the testing of synthetic drugs to users of all ages. On their website (https://www.drogenarbeitz6.at), the Z6 writes that they understand drug use as a complex psycho-social phenomenon and that they refrain from any moral judgment. Empathy and objectivity are described as two central pillars of their drug checking service, which is conducted in an anonymous and confidential manner and free of charge. The Z6 explicitly states that it considers its service as part of the risk and harm reduction approach. Moreover, they note that the service of drug checking is only one part of the broad and holistic social work structure offered by the Drogenarbeit Z6, and clients are encouraged to take part in other programs as well. The people who work at the drug checking facility and who I will refer to as the 'checkers' are mostly trained as social workers, some of which also do in-depth drug counseling or 'party work' aside from the testing.

If drug users want to get their substances tested, they have to bring them to the facility on Monday afternoons. People who are using drug checking for the first time will fill out a questionnaire with the checkers about their drug experience and motivations, which serves as a basis for the following interactions. When handing in their drugs, the users always engage in a confidential conversation with the checkers, in which basic information about drugs, their effects, and how to reduce risks is communicated. The checkers further perform a psycho-social anamnesis to understand the situation of their clients and support them in reflecting on their consumption and how to change it, if the client wants to do that. The substances are then weighed and photographed - on the website, one can find images of this procedure - and a small part is sent to the laboratory at the Institute of Legal Medicine in Innsbruck for the chemical test. In the lab, the substances are analyzed using gas chromatography and/ or liquid chromatography as well as other detectors, a technique that is in accordance with current international standards. The result of the analysis is usually communicated to the clients on the following Friday in person or digitally. The drug checking service at the Z6 is in line with Austrian law and financially supported by official bodies like the province of Tyrol. Apart from contributing to the reduction of drugrelated harm, the drug checking at the Z6 also allows for the detection of harmful and unexpected substances or particularly high doses, which are communicated to a wider audience through public warnings. The information gathered by the drug checking service is further sent to the EMCDDA and other networks that collect data to monitor the drug market and perform research on drug trends and consumer behavior. The central focus of the drug checking facility Z6, however, is the testing of drugs for and the interaction with users, which is also the aspect of the service that I focus on in this thesis.

4. Research Questions

So far, I have discussed the different strands of literature that inform my research and introduced the case site of my thesis, the drug checking facility Z6. In this section, I will outline my research aim in more detail and present the questions and sub-questions that will guide and structure my investigation of drug checking. At its core, the goal of my research is to investigate the ways in which drugs are understood and practiced in mainstream society, how users make sense of and use drugs in this setting, and whether the drug checking facility constitutes a space for knowing and doing drugs differently. I want to study the multiple meanings that drugs have as they are practiced in different socio-material contexts, as well as how offering a service like drug checking can influence the way that people view and use drugs. Drawing on Mol's concept of ontological politics, I will explore the relationship between the ontology of drugs and people's practices, knowledges, and values. Moreover, I will frame drug checking and other settings as knowing spaces and investigate the socio-material networks within which drugs are enacted, thereby attending to the role of materiality and space in shaping how we know and live in the world. The goal of my research is thus to understand how drug checking as a space and practice differs from conventional approaches to drugs, and whether participating in this service enables users to consume drugs more safely.

I have tried to capture these different aspects of my research interest in one question, which reads as follows:

RQ: How do people practice and understand drugs at and through drug checking, how do the versions they enact in this space compare to the mainstream approach to drugs, and how does participating in the service shape how users (can) understand and use drugs?

While my focus lies on users' practices of drugs, I am also interested in the enactments of other actors involved in drug checking, such as the checkers, which is why I chose to use the word 'people' in the first part of the question. I have divided my research question into three sub-questions, each of which addresses a different aspect of my research interest. The first one focuses on the mainstream enactment of drugs, the second one on the socio-material network of drug checking, and the third one on the ways that people, including the users and the checkers, practice and know drugs at the drug checking facility.

SQ1: How do users experience and deal with the mainstream approach(es) to drugs in Austria and how does this affect their knowledge and use of drugs?

With this first sub-question, I seek to study how drugs are conventionally understood, valued, and treated in Austrian society. I am interested in what the dominant versions of drugs are, how users experience them, and what strategies they rely on to practice and make sense of drugs under these conditions. In

that, I aim to understand the societal context within which drug use takes place, which will then enable me to analyze how drug checking's approach to drugs is different from the mainstream one. I am interested in how users describe society's take on drugs but also in how this setting influences how they themselves know and use drugs, and make sense of their own identities as users. Conceptualizing the dominant spheres of society that govern people's view on and use of drugs as knowing spaces will allow me to disentangle the different aspects that shape how drugs are enacted in Austrian society. The first question thus aims at studying how drug users deal with the mainstream approach to drugs and whether or how they find ways to circumvent or challenge it. While this constitutes a research endeavor in its own right, it also sets the stage for the two following questions that focus on the role of drug checking within this societal context.

SQ2: What are the parts and processes that constitute drug checking, how do they contribute to the provision of the service, and how do they relate to each other and the wider societal context?

The second sub-question focuses on the setup and practice of drug checking as offered by the Z6 and the different parts and processes that constitute it. I want to understand what is needed to provide a service like this and what the material, social, and discursive components are that make drug checking possible. I will explore the complexity of the service itself as well as how it is situated within and relates to the societal context that I address with the first sub-question. This also includes understanding the work that goes into establishing a drug checking facility within a society that outlaws drug use. Since I conceptualize drug checking as a knowing space, this sub-question allows me to analyze the "space" or "spaces" that constitute the service, and the different tools, people, and discourses therein. Describing in detail the different parts and purposes of drug checking will also provide the background for the third sub-question, which focuses on how drugs are known and practiced within and through the sociomaterial network of drug checking.

SQ3: How do the people involved in the socio-material network of drug checking conceptualize and practice drugs and (how) does participating in the service shape how clients (can) understand and use drugs?

Having addressed the societal take on drugs, its impact on users as well as the setup and processes of drug checking, this last sub-question focuses on the (knowing) practices that take place through and at the drug checking facility. I will study how the people involved in drug checking understand, value, and enact drugs, thereby focusing especially on the users. In doing so, I will build upon the previous sub-question by considering the socio-material network of drug checking and how its different parts shape which drug versions are enacted. Even though I am ultimately interested in whether and how partaking in drug checking influences users' understanding of drugs, this also includes investigating the practices

of other actors within the drug checking network, since these are part of the service and thus shape users' experience. Another aspect of drug checking that I am interested in is the role of science, for example the chemical analysis performed in the lab, in contributing to how drugs can be understood and practiced through drug checking. I further want to understand how the checkers and users make sense of the scientific test result and what versions of drugs they practice as the scientific information is communicated and made sense of. Lastly, I also want to learn about how drug users are imagined and interacted with at the drug checking facility, especially in relation to society's understanding of users, and how partaking in drug checking may influence how the clients see themselves. Overall, I am interested in how using drug checking shapes users' understanding of and approach to drugs and whether this enables them to consume more safely.

These three sub-questions thus build up on each other and allow me to explore the mainstream enactments of drugs in Austrian society; the socio-material network that constitutes and enables drug checking; how drugs are known, valued, and practiced in this space; and whether and how drug checking encourages safer use and thereby contributes to the reduction of drug-related harm.

5. Conceptual Framework

The conceptual framework for this research primarily draws on Annemarie Mol's (1999, 2002) concept of ontological politics. I will follow Mol's argument that the objects that inhabit our world are not predefined but made as we practice or, as she puts it, enact them. Since one thing can be enacted in different ways, there are multiple versions of it, which come with different political implications. Drawing on ontological politics allows me to conceptualize drugs as multiple and to investigate the various ways in which people think about, discuss, and use drugs without assuming any of these enactments to be prior or more real. Since my research is situated at the drug checking facility, I am particularly interested in how drugs are enacted there, i.e., the versions of drugs that are practiced through the process of drug checking. To better understand the role of the test in enacting a particular version of a drug, namely the test result, I will also draw on Latour and Woolgar's (1979) concept of inscription, which, I will argue, can be nicely combined with what Mol describes as translation. Another aspect of ontological politics that I consider useful for my research is its interest in the normative dimension of practices, e.g., how valuing an object is entangled with knowing and practicing it (Heuts & Mol, 2013). Mol further emphasizes that the ontology and value of one object is connected with that of many others, which she refers to as interferences. After outlining ontological politics and the aspects I consider particularly useful for my research, I will briefly introduce Law's (2016) concept of knowing space, which I have touched up already in Chapter 1, which I will integrate into my conceptual framework to capture the role of objects and spaces in shaping how people know, practice, and value drugs.

5.1 Ontological politics

While the term ontological politics has been initially coined by John Law (cf. Law & Benschop, 1998), it was Annemarie Mol in her 1999 paper who further developed and made popular this concept. As the etymology of the term indicates, ontological politics explores the entanglement of what we conceive of as real, as existing in the world (ontology), and how we choose to organize our societies and lives (politics). Mol (1999) describes the concept herself as follows:

"Ontological politics is a composite term. It talks of ontology – which in standard philosophical parlance defines what belongs to the real, the conditions of possibility we live with. If the term 'ontology' is combined with that of 'politics' then this suggests that the conditions of possibility are not given. The reality does not precede the mundane practices in which we interact with it, but is rather shaped within these practices. So the term *politics* works to underline this active mode, this process of shaping, and the fact that its character is both open and contested." (p. 74-75)

Within ontological politics, reality is not conceptualized as a stable, pre-given entity that can be discovered and interacted with, but as something that is made through the ways in which people practice it. In other words, the objects that inhabit our world are not fixed but continuously in the making as we

enact them. Mol (1999) thus rejects the idea of a single, predefined reality and instead conceptualizes it as something that is "done" and "historically, culturally and materially located" (p. 75). The ways we practice things and know the world are thus deeply connected with what we consider to be real. Since there are many ways in which objects can be 'done', there are also different versions of reality or, as Mol describes it, a multiplicity of reality. Importantly, this multiplicity does not mean that actors are looking at an object from different angles, yielding a variety of perspectives, but that things themselves are multiple as they are practiced in different ways. Rather than only focusing on how things are known, ontological politics is thus interested in how they are done, since it is grounded in the idea that reality is made through people's performances and not discovered. Within this framework, studying the matter of our world means studying how people practice it.

While Mol's focus on multiplicity may seem abstract, almost metaphysical, ontological politics is actually a very concrete concept that can help make sense of mundane practices and things that we often take for granted. For instance, Mol (1999) shows that the seemingly straightforward disease anemia, which is a condition where people do not have enough red blood cells, is multiple, meaning that depending on how it is practiced, it can be different things. This is one of the first examples she gives of how objects like diseases, which are usually considered stable and singular, are more than one thing when conceptualized as constituted and defined by how they are practiced. Mol builds upon this work in her 2002 book The Body Multiple, in which she focuses on the ontology of another disease, atherosclerosis. She conducted her fieldwork for this book in different wards of a hospital and ethnographically investigated how people understand and enact atherosclerosis in different settings. Mol aptly shows that the illness can be practiced in multiple ways, each of which constitutes a particular version of it. She further explores how actors, in this case mostly patients, doctors, and researchers, engage with and navigate these multiple versions. Focusing on how people practice things, Mol takes into account the socio-materiality of objects, which can be touched, cut open, looked at, valued, or talked about. In fact, it is only through people's engagement with, or enactment of, objects that they come to exist. Her approach thus sensitizes the researcher to look out for what people do and the socio-material networks of actors, tools, and discourses that are involved in these practices. Mol even came up with a term for her research approach, a "praxiography" noting that "as long as the practicalities of doing disease are part of the story, it is a story about practices" (p. 31). Mol's main argument is thus that the objects we live with are done through the ways in which we practice and know them and that there are thus multiple versions of every object, an ontological multiplicity.

Despite this multiplicity, Mol acknowledges that for the most part, we experience reality as rather singular and stable. This is the case since people usually aptly coordinate the different versions of a thing to uphold the idea of it as a single object. In some cases, versions of an object easily align and not much work needs to be done to combine them into a coherent idea, they *coincide*. As an example of this, Mol (2002) refers to the pathological and the clinical version of atherosclerosis, which coincide in that they both define the disease based on the thickness of the vessel. In most cases, however, different

versions of a thing are not so similar and people need to coordinate them in order to maintain the idea of a coherent and stable thing. Mol describes people's attempts to manage and bring together different versions as coordination strategies. One such strategy is to *add up* the multiple versions of an object into one composite whole, for instance by combining the results of different measuring techniques. In the case of atherosclerosis, Mol describes how the disease as experienced by patients, which is usually expressed through the distance they can walk without pain, is aligned with the disease as clinically diagnosed through measuring the blood pressure in the limb. Though these different enactments of atherosclerosis are not the same, if they do not contradict each other, they can be added into one object. As Mol notes, this form of addition works as it "projects a common object behind the various test outcomes: ,the disease'" (p. 84). The process of generating test outcomes is in itself an interesting one, which is particularly relevant to my research on drug checking, in which the test result plays a central role. Mol describes tests that are performed with scientific methods and tools as transforming an object from one version into another one. She calls this process a *translation*. Since the translation of objects through testing is a central aspect of drug checking and thus relevant for my research, I will elaborate on it in more detail below, combining it with the concept of inscription devices.

While addition is a coordination strategy that allows people to make sense of versions that are different but can be easily put together to form one patchwork object, there are also cases in which this does not work. For instance, when the version of atherosclerosis as felt by the patient and the one as measured by the clinician are in conflict. Mol describes this situation as a *clash* between different enactments of a thing, which may be strong in theory but are often resolved in practice, as people successfully coordinate them. One way to do so is by *distributing* different versions across space. As Mol (2002) argues, "[t]he possible tensions between different variants of a disease disappear into the background when these variants are distributed over different sites" (p. 115), in this case over different sections in a hospital. While Mol also mentions the distribution over time or different populations, it is the spatial distribution that I consider most relevant for my thesis. Another strategy to cope with tensions between enactments is to consider one of the versions as primary and to *privilege* it over the others, thereby establishing a hierarchy among them. In the context of medicine, this happens when a patient's leg pain is not backed up by the results of a pressure measurement. In this case, the scientific test result usually wins over the version enacted by the patient to maintain the coherent idea of the disease and it is concluded that the patient may have another disease but not atherosclerosis.

Though most of the time people successfully coordinate or reconcile different enactments of an object, sometimes this does not work and they are left with an outright clash. While such instances are rare, they do happen, and usually leave the involved parties with the sense that one of the versions must be wrong and does not adequately embody the object in question. Within medicine or science, such incoherence leads to controversies, which, Mol argues, are usually of local nature. Sometimes, the involved parties choose to live with clashes as "[t]ensions may also persist in a pacified form" (p. 88). In other cases, opposing parties may seek to prove the others' versions wrong, for instance by trying to

show that their way of measuring and defining the disease is faulty. The coordination strategies outlined by Mol, which encompass the addition, translation, distribution, and privileging of the different versions of an object, enable us to inhabit a world of multiplicity while perceiving it as coherent and stable. Most of the time we successfully navigate the multiple versions of reality without even realizing that we are doing so. In this thesis, I will draw on Mol's conceptual framework to explore the multiple versions of drugs that people enact at and beyond the drug checking facility, how they coordinate this multiplicity, and how their enactments are influenced by material and discursive structures.

5.2 Translation and inscription

As Mol argues, objects are not singular but can be practiced in multiple ways, so that there are different versions of one thing. Depending on the version enacted, particular aspects of an object become visible or can be measured, which is why people may actively choose to practice an object in another version. For instance, when patients go to the doctor to get their diseases tested, i.e., enacted in a medical way. Mol (2002) describes these processes by which an object is enacted in a way that changes its meaning and ontology as translations. In the context of medical and scientific practice, translations are usually performed with the help of diagnostic tools or analytical methods that enable defining or understanding an object in a specific way. Mol gives some examples of diagnostic techniques that intend to determine the severity of a patient's stenosis, a narrowed blood vessel, albeit in different ways. One of these, for instance, is to measure the blood pressure in the patient's lower limb in a vascular laboratory. What these techniques have in common, is that they allow the medical experts to measure and translate the condition of the fleshy, physical body into visual or numerical representations that can be quantified and compared to other values. Thereby, the patient's stenosis is translated into a version or format that can be printed, stored, and shared, and on the basis of which decisions can be made. A translation from one version into another is thus a process by which the object of interest is practiced and known in a different way that changes its format, definition, and ontology.

While translation seems like an active and deliberative act, it usually comes as a 'side effect' of someone practicing an object in a particular way. For example, a doctor that examines a condition would not say that he is transforming the disease in question but rather that she makes visible certain characteristics of it. The same holds for the laboratory test, where scientists run analyses to understand a sample better by practicing a different version of it. While such scientific methods are usually discussed in relation to epistemology in that they allow us to know the world differently, in Mol's framework they have ontological implications as they change the object that is tested. One concept that is similar to Mol's translation is Latour and Woolgar's notion of *inscription*, which they introduce in their 1979 book *Laboratory Life*. Studying the construction of scientific facts by investigating what takes place in a laboratory, Latour and Woolgar (1979) argue that one central aspect of scientific fact-making are practices through which scientists "transform pieces of matter into written documents" (p. 51), which

they refer to as inscription. This process enables the transformation of physical matter into a literary or visual format that can then be published in an article or stored in an archive. To do so, one usually requires advanced technologies like those used by scientists in the lab. As Latour and Woolgar note, "[t]he whole series of transformations, between the rats from which samples are initially extracted and the curve which finally appears in publications, involves an enormous quantity of sophisticated apparatus" (p. 50). They call the different tools and people that constitute these apparatuses inscription devices. More specifically, they write that "an inscription device is any item of apparatus or particular configuration of such items which can transform a material substance into a figure or diagram which is directly usable by one of the members of the office space" (p. 51). In that, Woolgar and Latour's inscription devices translate matter into numerical or written format and thereby enact a particular version of the object of study, which can be read, sent, and printed more easily than the initial material version.

Since the scientific test is central for drug checking, I want to take a closer look at it and understand what exactly the chemical analysis is doing and how it influences the enactment of drugs. To do so, I will combine Mol's notion of translation with Latour and Woolgar's concept of the inscription device when analyzing the test through which users obtain scientific information about their drugs. This allows me to study the chemical analysis of the drug, the transformations it entails, and its impact on how people understand and do drugs.

5.3 Valuation and interference

Valuation

I have so far focused on the 'ontological' in ontological politics. However, I find that much of the value of Mol's framework lies in its attentiveness to the political implications of how we do things. As Mol (1999, 2002) argues, the enactment of an object is not only a matter of ontology but also involves the valuation of that object. This idea that our understanding and performance of reality is intricately linked to questions about the good and the bad, i.e., normative questions, is well established within STS. Jasanoff (2004) aptly captures this sentiment in her work on the co-production of science and society, in which she explores "the constant intertwining of the cognitive, the material, the social and the normative" (p. 6) in how we know and live in the world. This sentiment is shared by Mol (2002), noting that "what to do has always been an important question, indeed recognized as having a normative dimension" (p. 172). One way in which our enactments of reality matter is that they entail evaluations of whether something is considered good or bad, normal, or deviant. Depending on how an object, in this case drugs, is practiced, it is valued differently.

While valuation studies is an independent field of research, some of its insights are closely related to the concept of ontological politics. Mol herself has published on the topic. In a 2013 article, which she co-wrote with Heuts, the authors ask, "what is a good tomato?" as a starting point to

investigate how people value things and how this is related to their practices, expertise, and experiences. They propose different registers of valuing, which their interviewees rely on when defining if a tomato is good. These include its price, taste and look, or naturalness. When people value tomatoes, Heuts and Mol (2013) argue, they usually do not only follow one register but combine and coordinate different ones, for instance when trying to find a tasty tomato for a cheap price. Similar to how different versions of one object may add up or clash, different registers of valuation can come into conflict. Heuts and Mol emphasize that valuing something goes hand in hand with enacting it and involves material practices like cutting, chewing, or measuring rather than only being an intellectual or discursive activity. In that, ontological politics provides a suitable framework for understanding how the value of objects like drugs is tied to how we do them or, put differently, how normative and ontological judgments hang together. Since the central interest of drug checking is whether a substance is good and less risky to use, I will pay particular attention to the valuations that come with different ways of practicing drugs throughout my analysis.

Interference

How people practice and thereby value something does not only shape the object in question but is also connected to the ontology of other things. Mol (1999) describes this entanglement of enactments as *interferences*, arguing that "objects that are performed do not come alone: they carry modes and modulations of other objects with them" (p. 81). Thus, also the enactment of seemingly uncontested things can be highly political in that they are related to other, more controversial entities. In her text on anemia, Mol (1999) describes interference by giving the example of "the linkage between two ways of performing anaemia and the performance of a phenomenon that is far more extensively politicised: that of sex difference" (p. 81). She shows how the framing of what it means to be a woman is entangled with the different versions of anemia, for instance as the statistical approach to the disease opted for by epidemiologists relies on the differentiation of populations – children, women, men, and pregnant women – to define a normal level of hemoglobin. Attending to the interferences of an object with other things is thus useful when investigating its more general political relevance. In my case, I am particularly interested in how the practice and valuation of drugs interferes with how people perceive users and how they see themselves.

Another way in which ontological politics emphasizes the political implications of practices is by making visible that things are not set in stone but made through practice and thus, as Law (2016) put it, "might be done otherwise" (p. 42). Understanding reality as constituted by people's enactments opens up room for questioning and changing the status quo as it shows that how we do things matters. When investigating the multiple versions of an object, Mol (2013) therefore invites us to think about how practicing these affect different groups of people, asking: "Which version might be better to live with? Which worse? How, and for whom?" (p. 381) She thus points out that different enactments of an object are not only ontologically different but also carry political implications and thus have consequences for

how we organize our societies. As Mol emphasizes, however, choosing how to enact an object is not as simple as it sounds since its different versions are entangled with each other, with ourselves, and with other objects. While Mol's work on the 'politics' in ontological politics shows that the way we do things has implications for how we organize our societies and lives, this insight does not give clear answers on what to do but instead opens up new questions like the ones cited above. In my research on drug checking, I will pay attention to the valuations and interferences that are implicated in people's practices to explore the political implications of how we know and do drugs.

5.4 Knowing spaces

Another concept that serves as a useful addition to ontological politics is Law's (2016) concept of knowing spaces. While Mol's ontological politics focuses on the role of practices in making the realities we live in, Law's concept of knowing spaces further highlights the role of material and discursive spaces in enabling and shaping such practices. Arguing that knowledge production and its methods "are materially complex and performative webs of practice that imply particular arrays of subjects, objects, expressions or representations, imaginaries, metaphysical assumptions, normativities, and institutions" (p. 47), Law (2016) highlights the importance of investigating knowing practices within their material contexts and social relations. Attending to knowing spaces is important as they "set more or less permeable boundaries to the possible and the accessible; they are defined by patterns of relations which enact those gradients of possibility and accessibility; and they intersect with and are implicated in the generation of alternative knowing spaces that cannot be included" (p. 47). In that, they constitute a powerful and stable infrastructure, which allows for specific ways of knowing and practicing things while limiting the enactment of other versions. As Law notes, knowing spaces are constituted by sociomaterial networks of various objects, people, ideas, institutions, and values that are all entangled and shaping each other. Conceptualizing programs like drug checking as knowing spaces allows for studying their different parts and how they relate to each other as well as the interplay of human and non-human, natural and social, and material and discursive factors.

Law (2016) uses the example of academia to illustrate the concept of knowing spaces and their "power and obduracy" (p. 48) in shaping how people understand and practice reality. Some aspects of the academic knowing space are, for instance, "the literary conventions, procedures, competences, topics, and theoretical frameworks" (ibid.) that people need to comply with to be accepted and successful. As touched upon in Chapter 2, Felt and Davies (2020) use the concept in their work on science communication and aptly prove its usefulness to conceptualize specific events as knowing spaces in their own right. They further underline that people are part of different knowing spaces at the same time, which may come into contact with each other or overlap, indicating that they are permeable and relational. Science communication is a good example of how an institution or event can constitute a knowing space while also integrating aspects from other knowing spaces or "opening [them] up" (Felt

& Davies, 2020, p. 23) by bringing together actors, objects, and knowledges in new ways. Felt and Davies combine the notion of knowing spaces with a sensitivity to practices and ontological multiplicity, thereby aptly integrating the two conceptual lenses similar to how I want to use these concepts. While Law points to the power of knowing spaces in shaping and limiting how people know, Felt and Davies' take on the concept highlights that people can also actively construct, connect, or transform them to allow for ways of knowing that are, for instance, more inclusive or democratic. The concept of knowing spaces is thus useful to understand the structures that shape our practices as well as how to change, open up, or integrate them.

Conceptually, I will thus rely on Mol's ontological politics and combine it with Latour's notion of inscription, and Law's concept of knowing spaces to investigate the multiplicity of drugs as they are enacted in Austrian society, and the influence of spaces like drug checking on how users can know and practice drugs. While ontological politics provides me with the conceptual tools to understand the multiple versions of drugs that people practice and the valuations and interferences they entail, the concept of knowing spaces allows me to disentangle the material, social, and discursive webs in which such practices take place. The notion of inscription is further useful to make sense of the transformative processes that take place in the laboratory as the drugs are tested and translated into the format of the test result. Taken together, this conceptual framework enables me to investigate the multiplicity of drugs as practiced in society more generally and at the drug checking facility Z6 specifically.

6. Methodological Approach

Having outlined my research interest and the conceptual framework of my study, in this chapter, I will describe and reflect on the methodological approach of my research. I have conducted my fieldwork at the drug checking facility Z6, where I did an ethnographic observation and conducted eight semi-structured qualitative interviews with six clients of the service, two of the checkers, and the chemist who is in charge of the drug testing. My approach conforms to what Delamont (2003) refers to as participant observation in that it constitutes "a mixture of observation and interviewing" (p. 206). I coded and analyzed the data following a grounded theory approach (Charmaz, 2014). In the following paragraphs, I will give some insights into the process of preparing and conducting my research, outline the methods and methodology of my approach, and reflect on its limitations and ethical considerations.

6.1 Data collection

My methodology is inspired by Mol's (2002) approach to studying the practice of atherosclerosis, where she combined ethnographic observation with qualitative interviews to learn about the multiple ways that people enact the disease. While the ethnographic approach allows her to observe what people do in practice, the tools they use, and the spaces within which they act, she also conducts interviews to take into account what the participants did before they entered the clinic, how they experienced a situation, or what they plan to do afterward. Mol does not consider ethnography as the only valid way to study practices but argues that listening to how people recall their actions and describe events also gives insight into their lived experiences. Since my research endeavor is roughly modeled after Mol's research on atherosclerosis, I tried to design my methodological approach as similar to the one she used. Combining ethnography and interviews allows me to observe the practices of the participant at the drug checking facility and the socio-material context of their actions, while the qualitative interviews give me the chance to learn about their past, their motivations to use or provide drug checking, their prior understanding of or experiences with drugs, and - depending on who I speak to - how they usually provide the service, perform the drug test, or consume drugs. This last point, the use habits of people, constitutes a relevant aspect of my research that I am unable to observe in person and which I am particularly interested in when conducting the interviews with users. In the interviews with the checkers and the scientist, I can learn about the processes taking place behind the scenes, about common or uncommon experiences with drug checking as well as the history of the service. Taken together, this gives me a good overview of the processes and practices at the facility while also allowing me to learn about the enactments of drugs that take place outside drug checking or my fieldwork.

6.1.1 Field access and preparation

Since there are only two drug checking facilities in Austria - the facility at the Drogenarbeit Z6 in Innsbruck and Checkit! in Vienna - I did not have many options for where I could conduct my research.

I contacted both facilities via email, introduced myself, and outlined my research interest. While Checkit! in Vienna replied that they did not have the time and resources to participate in such a project, the facility in Innsbruck was interested. Considering that there are only two facilities in Austria, I was very lucky that the Z6 was open and interested in a cooperation. This is even more so the case since I was told later that they receive many requests from people that want to write their Bachelor's or Master's thesis with them and that they only accept a few of them, since they do not want to have too many external people at their facility.

In the weeks following the initial contact via email, I had a few in-depth phone calls with Manuel Hochenegger, who organizes the drug checking at the Z6. I described my ideas and research questions and Manuel gave me some insights into how their service is structured, what exactly they offer, and how they organize the reception of the drugs and the announcements of the results on a practical level. Moreover, Manuel told me about the common types of clients using the service and forwarded me some publications of the Z6, which include statistics on users and the substances tested. While these phone calls do not constitute interviews in the strict sense, I still consider them a first source of data, which also shaped my research questions and methodology. For instance, I was unsure whether it would be possible for me to speak to clients since drug use is a very sensitive topic in Austria, or how I could sample the participants, which are questions that Manuel helped me resolve. Overall, my access to the field was thus relatively easy and took place at an early stage of my research. This allowed me to be in close contact with the Z6 from the very beginning and to make sure that my endeavor makes sense to them, is in line with their values, and that my methodological approach conforms to the processes of the facility.

6.1.2 Ethnographic observation

Since I am conceptualizing drugs as made through practices that take place in a particular socio-material context, I knew from the beginning that I wanted to do some form of ethnographic observation. As the facility is located in Innsbruck and I was living in Vienna at that time, I had to travel to and stay in Innsbruck for two weeks. The clients come to the facility on Mondays and Fridays to hand in their drugs or receive their results, respectively, so I was only able to conduct my observations on these days. In total, I was at the facility three times: two times on a Monday for the reception of drugs and once on a Friday for the announcement. Before arriving at the facility, I was unsure, however, to what extent I could observe the actual processes and conversations, since, I thought, the clients may not want an external person to sit in the same room when they show and discuss their drugs. I did not know what exactly I would be able to see and do during my fieldwork before I came to the Z6 and discussed the concrete steps of my study with the checkers. Luckily, they were very open and allowed me to look at all the rooms and attend the reception and announcement sessions if the clients were okay with that. To my surprise, almost all of the clients I asked agreed that I could be in the room when they handed in

their drugs, talked about their use, or received their results. I was further able to record all of the conversations I attended.

While I had been worried that clients would feel uneasy with me being there and that it would be difficult to observe any handling of drugs in practice, I did not encounter any obstacles during my fieldwork and gathered more data than I had hoped for. Apart from observing the interactions and processes at the Z6, I also took some time to explore the location of the building, in which drug checking is located, the interior of the rooms as well the overall atmosphere of the facility. While I was waiting for clients, who would be potential participants for my research, to come and hand in their substances, I had the chance to read through some of the info material that was displayed at the facility and which the clients could read if they had to wait, too. Once a user entered the facility, the checkers would briefly introduce me, describe my research interest and then ask whether I could attend the following consultation, which almost all of the clients were fine with. During and directly after these sessions, I took notes and wrote down all my impressions and questions that I could address in the interviews. Since I was able to record the sessions where people handed in their drugs or received their results, I could focus on the atmosphere and the practices of people as I knew that I could come back to their conversation at any time.

As I was only three times at the facility, I consider my ethnographic approach what Pink and Morgan (2013) call a "short-term ethnography" (p. 351). Instead of spending several weeks or months with the participants and immersing myself into their living contexts, as is the classical approach in anthropology, I only spent a short time with them. I played an active role in the situations I observed, asking people to show me how they would do practices that would only take place when I was not there, or to tell me about prior events or processes. My ethnography thus included "collaborations with participants" (Pink & Morgan, 2013, p. 356) that allowed me to understand their embodied experience and a variety of practices despite the limited time frame of my research. Nevertheless, the usual sensitivities that should be followed when conducting ethnographies also hold for my case. These include, for instance, the use of "all [my] senses" (Delamont, 2003, p. 205) to acknowledge the environment, atmosphere, and practices in all their facets. On a conceptual level, I am further aware of my own role within the field site and that my presence influences the setting that I aim to study. It is likely that my participants behaved differently than they would do without me being there, since "informants [...] want to help researchers, by showing and telling what they think investigators want to see and hear" (Delamont, 2003, p. 212). I thus do not understand my findings as an objective representation of a 'drug checking truth', which does not exist anyways, but as co-constituted through my interaction with the field site. While this does not constitute a limitation to my research, as any research is situated and co-produced, this is still an aspect that I have to consider when analyzing the material.

6.1.3 Qualitative interviews

While the ethnographic approach allows me to observe people's practices and the contexts in which they take place, the main part of my methodology are the eight semi-structured qualitative interviews that I conducted with six clients of the service, two checkers, and one of the scientists analyzing the substances. One interview was conducted with two users, which is why the numbers do not add up.

6.1.3.1 Sampling

Since I wanted to get a comprehensive picture of the different actors involved in drug checking, I decided to conduct interviews with people from three groups that take part in drug checking in different ways, namely the clients of the service, the checkers, and the scientists. The interviews with the checkers were scheduled in advance of my stay in Innsbruck and my interview partners were chosen by the Z6 based on who of them is most involved in and knowledgeable about the drug checking service. The checkers I interviewed are Manuel Hochenegger, who is in charge of the drug checking service and was part of the team establishing it, and Maria Gstrein, who primarily worked in the party work project of the Z6 and has begun working in the drug checking branch only after it was already running. Manuel has studied law and political sciences and Maria is trained as a social worker, which also gave me the opportunity to get insight into drug checking from two slightly different perspectives.

While the interviews with the checkers were organized before I arrived at the facility, I had to use a different strategy to recruit interview partners among the users. Since the service of drug checking is anonymous, the facility Z6 does not have any names or contacts of their clients, apart from pseudonyms of those that wish to receive their result digitally. Thus, it was suggested to me that I could sample my interview partners while I was at the facility and directly approach the people that come to hand in their drugs on that day and ask if I could conduct an interview with them. This is also what I ended up doing. I thus had no control over who I would be interviewing and was not able to sample in a strategic manner, for instance by considering people's age, gender, or other variables. Moreover, I was dependent on the cooperation of the clients that came to the facility on the three days that I was there. Similar to my ethnographic experience, I was a bit nervous that no one would be willing to do an interview with me since people may not have time or may not want to share their personal view on drugs. Eventually, however, more people than I had expected agreed to do an interview. I recruited five of the users I interviewed directly at the facility and one was a friend of a participant who, I was told, would also be a valuable informant. This person then came the next day I was at the facility.

Contrary to my expectation that people would be reluctant to speak to me due to the sensitivity of the topic, the clients seemed happy and eager to share their experiences and thoughts. While I was not able to control for age or gender, the sample of users that I recruited turned out to be relatively diverse with people aged between 20 and 31 years (average: 23,5) and two women and four men. Most of my interview partners were pursuing a higher education, which is in line with the expected target

group of the service. In total, I conducted four user interviews with one participant, and one interview with a couple. About two weeks after my fieldwork in Innsbruck, I had the chance to conduct an interview with Herbert Oberacher, who is the leader of the Bioanalytical Mass Spectrometry Group at the Institute of Legal Medicine in Innsbruck and in charge of organizing and performing the analyses of the drugs. I had received the contact of Oberacher from Manuel, one of the checkers, who told me that this would be the right person to speak to if I also wanted to learn about the scientific perspective. After contacting Oberacher via email, he agreed to do an interview via Zoom.

6.1.3.2 Conceptualizing and conducting the interviews

All the interviews took place in person in the rooms of the drug checking facility, except the one with Oberacher, which was conducted digitally via Zoom. Since I did my fieldwork during the Covid-19 pandemic, the participants and I were wearing face masks the entire time. The interviews were all conducted in German and lasted between 30 and 90 minutes. I conducted the interviews in a semi-structured manner, meaning that I had prepared guidelines for the interviews with themes I wanted to touch on but also remained open to points that the participants raised. Since I was investigating a local facility that I had little insight into, I actively encouraged my interview partners to mention aspects that they considered relevant but which I may not have thought of. Before each interview, I explained my research interest and academic background, went through the informed consent with the participants, and informed them about their rights. I also invited them to ask questions before or at any moment throughout the interview. The checkers and the scientist signed the informed consent and the users gave oral consent, meaning that they read out the informed consent while I was recording. Overall, I had the impression that all my interview partners, especially the users, were happy to talk about the topic and their experiences.

I was integrating aspects of narrative analysis (cf. Riessman, 1993) into all the interviews I conducted, for instance by asking the checkers to recall the process of establishing the service. The focus on narratives was particularly important in the user interviews, where I asked the participants to tell me their own 'drug history' as the first question, which allowed me to get a general idea of their experience with and approach to drugs and to formulate the follow-up questions accordingly. Moreover, this approach gave the users room to elaborate on their own experiences and viewpoints without being restricted by my questions, and to reflect on how their understanding of drugs may have changed over time, especially since they began using drug checking. Since my conceptual framework relies on ontological politics and focuses on what people do, I paid particular attention to the practices and actions that my interview partners described. In doing so, I understand the value of interviews for my research in line with Mol's (2002) argument that "[w]hat people say in an interview doesn't only reveal their perspective, but also tells about events they have lived through." (p. 15). Conducting interviews in

addition to the ethnographic observation thus allowed me to gain insight into the meaning-making process and lived experiences of people beyond the time and place of my fieldwork.

While interviews allow the researcher to learn about people's views and experiences, it is important to keep in mind that interviews are social situations and that the information shared is always shaped by the specific interview context and the relationship between the interviewer and the interviewee. Based on Rapley (2003), I thus understand "the 'interview data' that emerges from this, [as] the product of the local interaction of the speakers" (p. 16). I am aware of my own role within the interview setting and that the participants are likely to present their answers in a way that they assume makes sense to me. Thus, the scientist probably talked about his research on drugs differently when speaking to me than when speaking to a fellow researcher. The interview situation is further influenced by contingent factors, such as the most recent drug experience that may significantly shape a user's story, the specific substance they had just handed in, received, or analyzed, or their mindset and mood on that day. There was one client, for instance, who I interviewed on the first Monday and who came again the following week because there were some more ideas that he wanted to add to what he had already told me. Although I was not able to interview him again due to time constraints, this incident illustrates well that one cannot capture all the thoughts of a participant in an interview, if only due to time constraints, and that even the same participant may share a different perspective on a topic or experience depending on the specific interview situation. These are important conceptual and methodological considerations that I took into account when designing and conducting my research, and when analyzing the collected data.

6.1.4 Ethical considerations

Since the focus of my thesis is people's understanding and use of illicit drugs, the ownership of which constitutes a criminal offense, I made sure from the very beginning of the project that my research conforms to ethical standards and protects the users participating in this study. This includes, for instance, ensuring responsible and transparent communication about the aim and use of the gathered material with all participants of the interviews and observations and an empathetic and circumspect behavior in the research setting. To protect the participants' data and privacy rights, I obtained informed consent from every participant, stored the data in a confidential manner, and communicated clearly that participants may drop out at any point of the research if they wish to do so. It is of utmost importance to me, to protect the users participating in this project, especially since owning drugs constitutes a crime in Austria and is something that people are stigmatized for. I thus tried to keep the identity of the users I interviewed as anonymous as possible and asked them explicitly to not tell me their names. Since this also meant that they could not sign the informed consent, I decided that the users would do so orally, without having to write anything down. This approach worked well since the drug checking facility works with a similar system of identity protection, in which users do not share their name but instead

come up with a code word. This allows the checkers to keep track of recurring users without having to know their names. In the empirical chapter, I assigned a pseudonym to each of the clients I spoke to, which makes it easier for readers to understand each user's history and perspective. Apart from ensuring the well-being of the research participants, I also reflected on my own role and vulnerabilities as a researcher in this situation and made sure to acknowledge my situatedness and personal boundaries throughout the research process.

6.2 Transcription, coding, and analysis

I began reading through my fieldwork notes right after I got home from my first day at the facility and began looking for themes that I may want to touch upon or look closer into in the following days. Since I had a few days off between the Mondays and Fridays at the facility, I could reflect on my findings and directly adapt my approach and questions. In that, I was continuously analyzing my data and molding my research process based on my first insights, a strategy that is also referred to as the zigzag approach (Rivas, 2018). These first preliminary analyses between my fieldwork days were still unstructured, however, and primarily served as a way to make sure that my questions were in line with what I had already learned. I also began transcribing the interviews on the very day that I had conducted them when I still had a good memory of the entire situation and atmosphere. Since transcribing the interviews enabled me to relive and reflect on the situations of that day, I consider them a first interpretative step (cf. Riessman, 1993). I decided to transcribe the interviews in a verbatim manner as this allows me to take into account moments where people paused or were repeating words, which often represents a specific feeling or thought process that is otherwise rendered invisible. Since I had gathered more material than I had anticipated, I only transcribed the interviews and not the recordings of the reception and announcement sessions, which would have exceeded my time resources.

I coded and analyzed the interview data and field notes following a grounded theory approach, meaning that I tried to stay as open as possible when interpreting the data while still maintaining some structure throughout my research process (Charmaz, 2014). I did a thematic content analysis to find recurring patterns and unforeseen points of interest, which I was then able to investigate further through the lens of my conceptual framework (Rivas, 2018). Before beginning the more structured coding process, I read through all of my interviews several times and wrote down some more general themes that came up repeatedly, an approach that is also referred to as an "immersion in data" (Rivas, 2018, p. 878). In doing so, I could get a first overview of my material and produce some memos before diving into the details of each interview. I then began coding every single interview in detail. During the first round of coding, I performed open coding (cf. Rivas, 2018), meaning that I stayed relatively close to the transcription and tried to capture the meaning of the respective chunk of text. After that, I revised my codes in light of my conceptual framework and began paying particular attention to the actions and practices described as well as the space and materiality of the respective situations. I was often going

back and forth between different interviews, thereby adapting, summarizing, and specifying my codes. I eventually came up with a system of categorization that allows me to grasp the variety of situations, sense-making processes, actions, social constellations, and feelings that my interview partners had shared with me. Based on that, I continuously refined my approach until I felt that I had reached a point of saturation and my findings well reflected the empirical material.

6.3 Limitations and potential drawbacks

As I have touched upon throughout this chapter, researching an illegal good like drugs can be challenging as access to the field site can be difficult and informants might be reluctant to share their views. In my case, I was lucky and both of these concerns did not materialize. I believe that one reason for why I was successful in getting access to the field and recruiting participants is that the drug checking facility where I conducted my research is an official, state-funded service. Getting in touch with the team was easy as I could simply contact the email address I found on the internet. The checkers working at the facility are not involved in something illegal and thus have no reason to hide or prefer remaining unrecognized. On the contrary, as I learned throughout my fieldwork, the Z6 is eager to evaluate and improve the service and was thus interested in working with me. I believe that cooperating with a drug checking facility also made it easier for me to recruit users for the interviews. One reason for that is that the users that participate in drug checking feel safe at the facility, know that their privacy is respected and protected, and thus do not fear that what they share in this space could be used against them. This overall atmosphere made it easier for me to establish contact and to gain their trust. Most likely, I also benefitted from the fact that the clients at the Z6 are used to sharing their experiences with the checkers, so that engaging in an interview with me may not have seemed uncommon or special. Conducting my research at the drug checking facility, which I initially chose due to my interest in the service, turned out to also be helpful from a methodological and practical perspective as it allowed me to gain insight into people's views on drugs and their use that may have been more difficult to access in a different setting.

While this methodological approach thus has several advantages, it also has its limitations. One limitation, which is at the same time a strength, is its focus on the processes and people involved in only one particular drug checking service. Even though I seek to investigate 'the ontological politics of drug checking', I do so based on my fieldwork at this one facility. My findings may thus not apply to other instances of drug checking and do not represent 'drug checking as such', which, as I noted before, does not exist. Moreover, throughout the two weeks of fieldwork at the Z6, I only spoke to a couple of users and was not able to sample them strategically. The views that my interview partners shared with me thus do not hold for all users that participate in drug checking and it is likely that my findings would look differently had I talked to other clients. Nevertheless, I am confident that my material allows for sufficient overlap and consistency to describe the more general user experience at the drug checking

facility Z6 and as a recreational drug user in Austrian society. Another related limitation of my methodology is that my insights into how mainstream society enacts drugs are based on the interviews with the users and checkers and not on a systematic evaluation of media depictions or public discourses. For the purpose and scope of my research, I do not consider this a problem, since it is the users' perspective on and experience with the dominant approaches to drugs in Austria that I am interested in. While my research is thus limited as it only focuses on one drug checking facility and the few users, checkers, and one scientist I interviewed, this in-depth approach is also a strength that allows me to explore in great detail the processes at the Z6 and how people in this space know and practice drugs.

7. Empirical Part

In this chapter, I will present and analyze the empirical findings of my research at the Z6. I will do so in two parts, which roughly follow my research questions, to present my findings in a more coherent and structured manner. In the first part, I explore the dominant enactments of drugs in Austrian society and discuss their impact on how people understand and consume drugs and make sense of their user identity. For that, I primarily rely on the interviews with users, in which they described how they experience the mainstream approach to drugs in Austria and how drugs are conceptualized and dealt with in their more immediate social circles. The second part focuses on drug checking and the processes and practices taking place at the facility Z6. In this section, I analyze the socio-material setup that constitutes drug checking and the knowledge practices taking place therein, and how this shapes the ontology of drugs enacted in this space.

Throughout this analysis, I will conceptualize as a knowing space the different realms in which drugs are practiced and understood and attend to the material and discursive assemblages that constitute these spaces. This will allow me to explore how these knowing spaces shape how drugs are practiced and how this, in turn, influences whether or how people consume drugs. When analyzing the different processes and parts of drug checking, I will focus on three aspects of it that I identified as the most important features of the service, namely the safe and welcoming atmosphere at the facility, its ability to test users' substances, and the learning that takes places as users and checkers discuss and contextualize the test results. I will conceptualize each of these aspects of drug checking as a knowing space in its own right and explore how drugs are known and practiced therein. Eventually, I will assess whether participating in the service and moving through its socio-material space has a positive impact on how users understand and consume drugs.

I have assigned a pseudonym to each of the clients I spoke to, which makes it easier for readers to follow each user's story and perspective. When referring to my interview partners or the users that use drug checking, I will use the term 'clients' and 'users' interchangeably. When referring to people that consume drugs, disregarding whether I spoke to them or whether they participate in drug checking, I will refer to them as 'users' only.

7.1 Part 1 - Society as a knowing space: Knowing and enacting drugs

7.1.1 The dominant enactments of drugs in Austrian society

7.1.1.1 Drugs as enacted through law

In Austria, as in most other countries, the sale, purchase, and ownership of illicit drugs is, as the term 'illicit' indicates, illegal³. This illegal status of drugs is enshrined in the Austrian law and enforced by the police, in courtrooms, or through other practices like mandatory drug tests. The conceptualization of drugs as illegal is one of the most dominant versions of drugs practiced in Austrian society. Every person living in Austria most likely knows this version of drugs since it significantly shapes where and how drugs can be manufactured, sold, and used, and how users are treated. In the following, I will refer to this version of drugs as the *illegal* version, which I understand as constituted by things, discourses, and practices that rest on and enforce the idea that drugs are and should be outlawed. The illegal version of drugs is something that all my interview partners mentioned and it was usually present in their stories as the backdrop for any drug-related experience. Some of the users I spoke to have had contact with the police because of drugs, which were situations that they experienced as very uncomfortable and unnecessary. Julian, for instance, recalled that the police had caught him and his friends a few times when they were smoking cannabis, and started to "make a scene" for something as little as half a joint, a behavior that he finds "ridiculous". The understanding of drugs as illegal is thus not only discursively enshrined in Austrian drug law, but also materially and forcefully enacted by policemen who monitor the behavior of citizens in public and sometimes private places. Looking out for and sanctioning people who use illicit substances is a behavior through which drugs are materially practiced as an illicit object, the ownership and use of which has to be punished. For Julian, this version of drugs does not make sense, at least not when it comes to cannabis, which is why he finds such police interventions "laughable". The enactment of drugs and drug use as a criminal offense thus clashes with Julian's understanding of smoking joints, which for him constitutes a normal social activity that should not be outlawed. This sentiment that the current criminalization is unreasonable and disproportionate to what most drugs are and do was shared among all the clients I spoke to.

Another encounter with the police was recalled by Max, who was seen smoking with a friend when he was still underage. The policemen who spotted them brought him and his friend to the police station, where his friend had to perform a drug test that showed positive for cannabis. Max's parents

³ In Austrian drug law (Suchtmittelgesetz (SMG)), drug *use* is not illegal, strictly speaking, but all practices surrounding it, including the production, processing, distribution, purchase, and possession of drugs. As it is almost impossible to use drugs without being involved in a criminal activity, I will occasionally use formulations like "people are sanctioned for their use", while users are actually sanctioned for the possession of the substance. I am aware that such formulations are not legally correct but still occasionally use them as they are in line with how the legal situation is commonly interpreted and experienced by users.

were informed about this incident and were worried that their child was consuming cannabis, too. They thus purchased several multi-drug urine tests on Amazon, with which they tested Max regularly in the following months, to make sure he was not using cannabis. Such urine tests as used by the police or for sale on the internet are a technology that, if used for the monitoring of drug users, is part of the illegal version of drugs. The infrastructure constituting and maintaining this version thus goes beyond the legislative and executive measures of the state but also encompasses things like test kits that are used in people's private homes. This is indicative of how pervasive the idea is that using drugs is wrong and should be sanctioned. While Max was not tested by the policeman that night, he told me that he was also consuming cannabis at that time and had to stop doing so when his parents began testing him. Rather than stopping drug use altogether, he switched to substances that he knew would not be detected by the urine test, in his case truffles containing psilocybin. As home tests only spot a few of the most common illicit drugs, the drugs as identified by the test differ from the drugs defined as illegal in Austrian law or the psychoactive substances consumed by users. Knowing about this mismatch, Max adapted his drug use to keep consuming without his parents noticing. His ability to circumvent his parents' drug control indicates how users try to subvert the systems installed to monitor them by making use of the blind spots that exist if two versions of drugs do not coincide entirely. While Max and Julian found ways to use drugs despite their encounters with the police, their experiences show how powerful the illegal version of drugs is in that it significantly influences how and whether someone can consume which substances.

Finding strategies to navigate the illegal status of drugs is common among drug users and can be considered a coordination practice through which one can use drugs while also remaining a wellbehaved and respected citizen without criminal charges. Most users spend considerable efforts to organize their drug use in a way that is least likely to conflict with the illegal version. While Max tried to hide the fact that he was using drugs, Costa, another user I spoke to, was more concerned about how to purchase substances without anyone noticing. As Costa does not have many friends who use drugs and does not know any dealer he would trust, he usually buys the substances he wants to try online in a shop on the darknet. To stay as anonymous as possible, he orders his purchases to the address of a vacant holiday house and then picks up the parcel from the mailbox, which he made sure is easy to access. If drugs were legal, he obviously would not have to do so, which is why these strategies to buy drugs secretly are also part of the many practices that come with and constitute the illegal version of drugs. The people I spoke to had different ways of buying drugs - some got them from friends while others bought them online. What all of them shared, however, was a fear of being caught by the police and the uncertainty of what exactly they were purchasing, since there is no 'customer protection' in place for illicit goods to regulate their sale and quality. Due to the illegal status of drugs, users are not only hiding their use from the state, but they are also lacking all of the protective measures that they usually enjoy as citizens when buying a product. As I will discuss later, offering consumer advice and quality checks for illicit drugs are some of the ways in which drug checking influences how people can know and practice their drugs.

The fact that drugs are illegal in our society thus does not only become visible when people come into contact with the police, but shapes every aspect of drug use, including its purchase, and turns users into criminals. The knowing space that facilitates practicing and understanding drugs as illegal is thus very large. It comprises institutions like courts and police stations, tools like drug tests, legal discourses and narratives of social order, as well as social and cultural norms. Within this socio-material network, objects and activities are valued according to their legal status as codified in the law. Even though there are some minor variations in how different kinds of drugs are legally defined and dealt with by the police, especially regarding large quantities, the category of drugs enacted through law is usually a singular one as all illicit drugs are illegal, disregarding their effect, harmfulness, or modes of use. Since the legal framework applies to all of Austria, there is no location that is outside this regulatory space and users have to constantly worry that they may be sanctioned for their drug use. Even if one disagrees with this conceptualization of drugs, which most users do, one has to play by the rules to not risk a fine or an entry into the police register. Drug users are thus constantly presented with a conflict as they live in and are part of a society that enacts drugs as illegal, while they themselves reject this understanding and practice drugs very differently. Apart from materially and spatially restricting users in how they can acquire and use drugs, the illegal mainstream version also results in a tense, frustrating, and confusing situation for many, in which their own understanding of their identity does not conform to how it is defined by the law.

7.1.1.2 Drugs as enacted through norms, values, and education

The clients I spoke to not only prefer using drugs in secret because of the legal consequences but also because of the social stigma surrounding that topic. Even though drug use is not uncommon in Austria and practiced across all social classes, as the checker Manuel noted, within mainstream society, illicit drug use is considered something deviant and improper. I will refer to this version, which primarily rests on a normative value judgment of what behavior is adequate and good as the *moralizing* one. Within this version, drugs are considered dangerous and bad, an image that has been constructed and maintained for decades through political and medical discourses, education, and public campaigns. In the 1970s, there was even a special issue stamp produced in Austria with a skull and the title "Stop! Drugs are suicide!" (Halt! Rauschgift ist Selbstmord!)⁴. While such campaigns from a few decades ago seem almost comical when compared with contemporary framings of drugs, even today the representation of substance use is still very negative and moralistic. When I asked the interview partners how they think society perceives drug use, many mentioned experiences or narratives in which it is portrayed in this way. Julian, for instance, recalled seeing an election TV spot by the far-right party FPÖ, which warned against a win of the green party by showing "a Turkish man with a cap and a beard and glasses who goes into a pharmacy to buy a joint!" As Julian interpreted the FPÖ spot, for this party and their

⁴ Interestingly, the term 'Rauschgift' is used instead of 'Drogen', which is a more deterring term.

supporters, drug use and immigration equally constitute representations of cultural and social demise. While he found this negative depiction of drugs absurd, he was also aware that for a large part of society drug use is something they are worried about. He said: "Such a cliché! [...] But an old grandma who watches this video won't see a difference between me and that guy in the video, I am also only a Turkish man with a beard and cap, you know?", noting that such campaigns not only demonize drugs but combine all sorts of stereotypes and discriminations that are part of the public imagination of 'the bad'. Such discourses and political representations are part of and constitute a knowing space within which drugs and their use are practiced and valued as inappropriate, inherently dangerous⁵, and morally wrong.

One institution that is closely tied to and often operates within this moralizing framework are schools and other educational settings. As my interview partners told me, almost all of them had received a drug education that relied on an understanding of drugs as bad and wrong, and which was all about teaching young people how and why to resist drugs. Emma recalled, for instance, that the drug education she received in school was carried out by a policeman who told the pupils, as she put it, that "everything [drugs] is shit and everything is bad, and you're not allowed to do that". Max' experienced a similar approach to drug education, which he described as primarily resting on scare tactics in that drugs were enacted as extremely harmful to a point where the statements made about them were factually incorrect. While the main message of drug 'education' like these is that drugs are dangerous and should by no means be consumed, there is usually no real explanation of the health effects of drugs, and it is often unclear what exactly the danger is that drugs pose. Max told me that the moralizing approach to drugs in his school also took place outside the drug education itself. For instance, one of his teachers was openly accusing him of dealing with cannabis when he was arguing in favor of legalization as part of a debate on the topic in a German lesson. For Max, the school was a place where drug use was practiced as something bad and wrong, and where he himself as someone who enjoyed consuming drugs, did not feel comfortable. Just like Emma, Julian, and Max, other users made similar experiences and felt like the mainstream understanding of drugs, which is propagated through campaigns and drug education, is moralizing, often inaccurate, and portrays users as deviant and irresponsible.

Although such moralistic narratives are not as streamlined and codified as the law, they still significantly shape how people understand drugs. The example of a policeman 'educating' pupils about how bad drugs are shows how closely connected the illegal and moralizing versions of drugs are. They overlap and reinforce each other or, to use the language of ontological politics, they add up, meaning that they are not the same but can be combined easily and are often implicated in each other. While there is some variation in how different drugs are perceived morally, for instance, cannabis is more tolerated than heroin, within the mainstream discourse the main message is still that drugs in general are bad. In

⁵ Throughout thus thesis I challenge the idea that drugs are inherently dangerous. As I hope to make clear, I by no means want to relativize or deny the risks that come with drug use but rather argue that the depiction of universal and inherent drug harm is incorrect and unhelpful.

that, again, drugs are practiced as a single category, a single object, which is a common feature and problem of drug education, as I will elaborate on in the second part of this chapter. Although the legal and the moralistic knowing spaces constitute the framework within which the mainstream version of drugs as bad and illegal is practiced, this does not mean that every Austrian shares exactly this understanding of drugs. After all, many use or have used drugs themselves. Still, the official and public depiction of drugs, and the discursive and material practices constituting these mainstream versions, are shaped by a moralizing narrative of drugs and the legal structures that monitor and sanction people who use them. While the moralizing narrative of drugs primarily limits how people think about drugs, what they know, and what they can openly say, the legal structure shapes where and how drugs can be purchased and used on a material level by restricting the spaces in which such practices can take place relatively safely. Together, these knowing spaces are thus pervasive on multiple levels and constitute the setting in which people in Austria understand, value, and consume drugs.

7.1.1.3 The influence of the illegal and moralizing approach on users' practice of drugs

Even though my interview partners were rejecting this version of drugs when I spoke to them at the drug checking facility, many of them told me that when they grew up the idea that drugs are bad and to be avoided was so self-evident and pervasive that they did not question it. Emma, for instance, told me that she had always condemned drug use and that in her circle of friends and family it was clear that drugs are something one should never use. Witnessing people consuming drugs in real life for the first time was thus a very challenging situation for Emma, in which the moralizing version, which she had been practicing up until then, clashed with how the people around her were enacting drugs. She described the situation as follows:

"When I first saw people taking drugs, what, people are snorting drugs over there, I was also thinking to myself like: What the hack? What is going on with them? I really felt my heart racing and that's just because society and all sorts of people talk you into believing that it's wrong!"

The idea that drugs are something bad was so ingrained in Emma's worldview that witnessing other people using drugs made her physically sick, indicating that practicing things like drugs does not only take place on a material and discursive level but also affects people's emotive experiences. Only when Emma began spending more time with people who used substances and watched them doing so, she slowly changed her mind about drugs and realized that in this setting, they were something very different from the inherently bad drugs that she had been warned of growing up. She subsequently felt like the idea of drugs she had learned about in school and that was enshrined in Austrian law is a misrepresentation of what they really are, or at least of what they are as practiced in her own social environment.

Many of the users I spoke to had made similar experiences. They learned about the danger and unlawfulness of drugs in school and through the media and condemned drugs like one seemingly should, and only later began to question this official narrative. Costa told me that he did not only consider drugs

inappropriate before he began researching the topic himself, but that he was also thinking of drug users as bad and deviant people. He described his prior understanding of drugs and drug users as follows:

"My own understanding of it was that it is dangerous, that one should just stay away from it. Why exactly, that was, that was not clear to me, because it was just this general image of drugs that one has in one's mind: No, caution! Stay away! Better not use it!! Yeah, and as an image of drug users, I think you have some heroin addict in the corner who would do anything to get his next fix."

As this quote shows, the moralizing version of drugs is closely connected to an understanding of drug users as bad, in this case in the narrative form of a 'junkie in the corner' who cannot do anything but think about his supply of drugs. This is an example of what Mol calls interferences, which are entanglements of different objects that are often implicated in the enactment of one another. In this case, practicing drugs as wrongful and illegal goes hand in hand with enacting drug users as bad criminals. Thus, drug education and public representations of drugs are never only about drugs but always also come with implicit ontological valuations of those that are consuming them. The image of the 'junkie in the corner' came up repeatedly in the interviews and was mentioned by both the clients and the checkers when I asked them how they would describe the dominant public imagination of drug users. Such recurring themes can be considered narrative infrastructures, which are powerful and stable in shaping how a society perceives and represents an object over time. Since these narratives are so established, their classification and description of things are often taken for granted and, as Max notes, one rarely questions why drugs are bad and illegal or why users are social misfits.

The knowing space of mainstream society is thus marked by narratives, practices, and objects that shape people's knowledge and valuation of drugs as defined by their illegal status and their social inappropriateness. Even though the clients I interviewed were all drug users themselves and considered drugs as something that can be consumed in a sensible manner, many of them grew up with quite a different understanding of drugs. This illegal and moralizing enactment of drugs constitutes the backdrop for how most people in Austria know and do drugs and significantly shapes how users consume even when they themselves do not agree with this understanding (anymore). In that, any drug use in Austria is shaped by these versions.

7.1.2 The enactment of drugs among users

While the material and discursive structures of mainstream society are powerful and pervasive, there are also other subcultural and private communities, spaces, and discourses in and through which people know and use drugs. These become particularly important once users reject the dominant version of drugs and look for alternative, more fitting ways to make sense of their use and identity. Some important alternative sources for making sense of drugs are the practices and common cultural references in one's circle of friends, the depiction of drug use in popular culture, or information on drugs found on the internet, for instance in forums and scientific publications. While there is great variety in how people

understand and use drugs, in most cases, users try to adapt and subvert the negative image of drugs or disprove and reject it, for instance by relying on scientific arguments, or choose to hide their use altogether. Either way, most of these alternative enactments of drugs can be understood as reacting to and challenging the dominant drug versions, i.e., the illegal status and condemnation of drugs in mainstream society.

7.1.2.1 The selective enactment of drugs

As I learned through the interviews, many users do not stick to one version of drugs but switch between several ones, depending on the context and social group they are in. Many of the users I spoke to keep their drug use secret in public or within their families because they fear that people would condemn it and view them in a bad light. This is a particularly common strategy for people who are part of very different social groups. Emma told me, for instance, that she grew up in an environment where drugs are considered something very bad, but then moved away and subsequently changed her view on drugs. She now has two main circles of friends: one in her hometown and one in the city that she moved to, and only the latter knows that she consumes drugs. As she told me: "Well, for me it is actually very divided. I have friends that I know from before that don't know that I use drugs, I also wouldn't tell any of them voluntarily that I use drugs." While using drugs is something prominent and accepted in her new friend group, it is considered inappropriate and dangerous in the community where she comes from. She notes that "there actually are that kind of people that low-key give you the feeling that, uhm, you are somehow really kind of like a druggy." She thus prefers to remain quiet about her own use as she suspects that people would not understand what drugs are for her and why she chooses to consume them. In such situations, she also does not speak back to negative comments about drugs in general as she assumes that people are not open to change their mind or, as she puts it, "with some people you just cannot really talk about this topic so well." To prevent people from thinking badly of her, Emma thus often pretends to not use drugs and aligns herself with the majority opinion in the respective social setting. She thereby enacts drugs in a way that she does not agree with, but which allows her to maintain her social relations and role.

Thinking with Mol's concept of ontological politics, Emma thus coordinates her own identity as a user and the understanding of drugs in society by enacting different versions depending on the context she is in, thereby distributing them across separate social environments. She is forced to practice drugs in their conventional way, i.e., as bad and illegal, which she actually rejects, and has to deny her own identity by acting as if she would agree with the common imagination of drug users. Otherwise, she fears that her understanding of drugs would clash with the one of her friends and family. Actively switching between enactments thus constitutes a strategy to prevent clashes. While all objects are multiple, this is particularly visible for things that are outlawed or carry a great social stigma, as this pushes people to keep their activities secret and to, in some sense, live a 'double drug life'. Interestingly,

this highlights the fact that objects are made through people's performances – even if the performance is staged as those by users who enact drugs in ways they do not condone. While they may consider these versions of drugs as wrong, in these situations they are themselves involved in creating them, which points to the complexity and ambivalence of how many users practice drugs. Among my interviewees, Emma was not the only user adapting her enactment of drugs to the group she is in, even though her switching between versions was the most significant one among the clients I spoke to. While there are social groups in which users prefer to keep their use secret, there are other situations in which the opposite is the case and, as I will outline in the next paragraphs, drug use may be viewed in a very positive light.

7.1.2.2 The social and cultural meaning of drugs

Since the use of drugs is illegal and socially sanctioned, people usually consume in private or in semipublic spaces like clubs. As there is no positive mainstream version of drugs, but only ones that focus
on why *not* to use, people's use practices and understanding of drugs are strongly shaped by their
immediate social circle. Often, drug users begin consuming with peers, they buy their substances from
them, and share their knowledge and experiences with each other. While there are users who frequently
use drugs by themselves, most drug use takes place with friends or in larger groups and is thus a practice
that is enmeshed with social and cultural meaning⁶. Drug use is more than the consumption of a
substance for its psychoactive effect as it is part of a wider assemblage of discourses, habits, social
relations, and identities. As drug users usually do not agree with the dominant representation of drugs
in society, their social groups and subcultures figure as spaces where (new) meaning and value is
assigned to substances and their use. As the socio-material contexts in which users (learn to) use drugs
shape their ontological understanding of them, it is important to also take into account these knowing
spaces when studying how people know and practice drugs.

One point of reference that users commonly draw on when searching for other ways to understand drugs and those who consume them are depictions in popular culture, such as in movies, literature, or music. Within popular culture, drug use is often associated with coolness, style, and rebellion. Adopting this identity for themselves, while at the same time subverting and stylizing it, drug users can play with and reappropriate the dominant moralizing and illegal framings of drugs. This constitutes a coordination strategy that allows them to enact drugs as something positive while still being compatible with the mainstream narrative of 'badness'. Actively choosing to be the bad drug user is an empowering way to accept this representation. Drugs, being generally perceived as wrong, are thus a symbol of protest for some and used almost like stylistic attributes to mold a specific identity.

⁶ It also depends on the nature of a drug whether it is usually consumed alone or in groups as some drug like MDMA are commonly associated with more social activities than, for instance, psychedelic like DMT, which have a more inward-directed effect.

Interestingly, this pop-cultural image of drugs does not only allow users to make sense of drugs, their use, and identity, but it can also be a reason for people to consume drugs in the first place. Max told me, for instance, that when he was a little kid, he knew already that he wanted to use drugs because of how they were depicted on television and in films. He started consuming drugs frequently at a very young age, often combining different substances, which is commonly referred to as poly-drug use and is very harmful. While he was interested in experimenting with the effects of different drugs, he also liked the idea of himself as a heavy, poly-drug user, which made him feel rebellious and as challenging the rules of society. As Max always talked openly about his drug use and everyone in his school knew that he was smoking heroin, for instance, drug use defined his identity up to a point where he was afraid of what would remain if he stopped using. For him, drugs and their intoxicating effects were a symbol of protest, through which he could play with and challenge social norms while also constructing a distinct identity for himself. The version of drugs enacted by Max is thus defined by their socio-cultural meaning and entangled with the illegal and moralizing framings while at the same time seeking to subvert them. In this context, drugs are thus something different from how they are practiced through the law or drug education. Taking this stylistic or pop-cultural version of drugs into account is crucial when studying people's understanding of drugs, their reasons for using them, and how this is related to their identity constructions in a society that condemns drugs and their users.

As many of my interview partners told me, drugs and drug use also often serve as indicators of a person's character, lifestyle, and sociability. Nora noticed, for instance, that many people in her environment associate the use of specific drugs with certain personality traits. She often made the experience that others considered her a cool and relaxed person when they found out that she uses cannabis, a drug that is known for its relaxing properties, among others. Overall, she had the impression that in her social circle people's personality is defined based on their drug use up to a point she found problematic:

"There are a lot of personal characteristics, that are associ-, like somehow connected with drug use, like this... openness to the world, this being relaxed, adventurous, these are all personality traits that, for many, are extremely strongly associated with drugs. And I find that a little bit questionable sometimes, because for me that does not mean the same as those personality traits."

Similar to Max, who consumed in a harmful manner because he identified with the rebellious connotation of that practice, users thus also use drugs for their social and cultural meaning, rather than (only) for their effects. When practiced in this *social* version, drugs do not figure primarily as chemical substances or as inducing experiences but as markers of personal qualities that go beyond the immediate context of use, indicating the entanglement of drugs and identities. The practice of drugs can thus be closely tied to the social values in a certain subculture or group.

While this can be positive, for instance as members of a group develop a shared identity and sense of community, some of my interview partners perceived the relationship between drugs and social

roles as problematic. Since unsafe drug practices, like sniffing cocaine from a phone with a bill, are often associated with being cool, fun, and bold, people sometimes feel pressured to consume drugs in harmful ways just to maintain their status in the group. Nora said, for instance, that she often used drugs to conform to an overall group dynamic rather than because she actually wanted to. In retrospect, she wished to have "stayed strong and to really ask [her]self, whether [she] really wants to do it" more often. The harms associated with peer pressure were also mentioned by Maria, one of the drug checkers, who considers them one of the main risk factors of drug use among teenagers and young adults. Especially when people have little experience with drugs, the environment within and the people with which they consume are very important and often an integral part of their drug practice, understanding, and experience.

In this social version, drugs are thus practiced and valued with regard to their social role and meaning within the group rather than how they feel for the individual. Depending on the social setting, the meaning of a drug can vary as in some communities certain drugs may be considered cool or normal that are scorned in others. Such groups and settings thus constitute knowing spaces, in which particular versions of drugs are enacted that come with distinct socio-cultural meaning and respective use practices. While these social spaces are located within society and thus also influenced by the legal and moralizing narratives, they still provide an environment in which drugs are something else than in mainstream society, as people practice them in a way that is in line with the norms and habits of their group. Sometimes, the social dynamics in groups can also lead people to use drugs in harmful ways if this is associated with socially desirable attributes. Users may further choose to use drugs in an unsafe manner to rebel and play with the conventional depiction of drugs in mainstream society. The social and cultural context of drug use can also contribute to safer use, however, if group members provide support to each other and being informed and using responsibly is valued in their community. The meaning of drugs is thus also significantly shaped by the social and cultural context, or knowing space, in which users value and practice drugs.

7.1.2.3 Making sense of drugs through knowledge

Online spaces and educational material are another important source of knowledge and meaning for users. Many of my interview partners were informing themselves about drugs on the internet, mostly on harm reduction websites, YouTube, or user forums, where they learned about effects, risks, and how to use drugs more safely. Such information is usually very different from what people learn about drugs in schools or similar settings, which can lead to confusion and surprise among users. Costa said, for instance, that he began reading scientific literature on drugs, specifically MDMA, because he expected to find arguments he could use to convince a friend not to use it. Although he wanted to prove to this friend, who had suggested taking MDMA, how harmful this drug is, he only encountered information

indicating that the drug could be used in a relatively safe manner, which was not in line with his assumptions about drugs at that time. As he told me:

"And I then read into it [MDMA] accordingly and in the beginning, I was rather averse to it and I thought, ok, just look for some arguments with which I can easily say "no", but then I realized that in principle it's actually really not that bad, not as it is, how it is always-, like at school or from all the other, from all the stigmata, what you usually hear about it."

As Costa recalls, this representation of MDMA he found in research online did not match with how he had known drugs up until then. Confronted with this clash, he decided that the research on drugs was more trustworthy and accurate than the illegal and moralizing understanding of drugs he had acquired through mainstream media, politics, and his social environment. In other words, he privileged the version of drugs he encountered in online resources over the mainstream version. This experience of realizing that the dominant narrative about drugs is not as accurate or self-evident as assumed was shared by many of my interview partners. While there was great variety in how much the users I spoke to knew about drugs, all of them agreed that the current mainstream approach to drugs was not in line with the information and evidence they found when looking into the topic more closely.

In most cases, users got their information from official websites like the one by Checkit! or by reading through summaries of scientific research. Apart from informing themselves about specific substances, and their effects and risks, many drug users were also interested in how harmful illicit drugs are compared to other socially acceptable drugs like tobacco and alcohol. Finding that the latter are often more addictive and toxic surprised many users at first. One scholar that makes exactly this argument, i.e., that the risk of some illicit drugs is not necessarily higher than that of other substances or practices, is David Nutt. He even argued that horse-back riding is riskier than taking ecstasy (Nutt, 2009) – a claim that cost him his position as the head of the Advisory Council on the Misuse of Drugs to the British government. Overall, the finding that alcohol and other socially accepted activities can be more harmful than some illicit drugs is an important argument in users' strategies to reject and disprove dominant imaginations of drug use as bad and dangerous, and of drug users as unhealthier and more irresponsible than others.

Emma, for instance, who grew up in an environment that condemns drug use, emphasized that just because she uses illicit drugs she is not less healthy than others. She said:

"And the more I looked into it, the more I realized that our society, which acts like alcohol is super unproblematic - yes, you can binge drink as much as you want - but if you see how any other kind of drugs [...], well, then you're rather on the fringes of society, like, what's wrong with you? And things like this. But just because I don't drink alcohol and instead of that use something else, that doesn't mean that I live any unhealthier than other people."

Emma explicitly compared society's attitude towards alcohol with that towards illicit drugs like MDMA or LSD and challenged the distinction between the alcohol drinker and the drug user. Her own understanding of drugs as something that can be used sensibly conflicts with how drugs are practiced in mainstream society and her social surrounding, which is something she struggles with. Emma thus

argued that the dominant societal depiction of drugs is inaccurate because it frames her as less healthy than those drinking alcohol, thereby reassuring herself that she is not a bad citizen. To legitimize her use, she explicitly evaluates the risks and harms associated with different drugs in the scientific literature, thereby enacting drugs in a way that can be described as *risk*- or *health-focused*. While she noted that any drug use comes with risks, she argued that she would rather "take LSD, for which no harmful effect is known, except for a psychological one" instead of "drinking alcohol and smoking cigarettes", which she described as proven to come with more negative effects.

Drawing on scientific research, a source of knowledge that is socially respected, Emma and other users justify their own drug use and identity as 'good' users. In doing so, they privilege the version of drugs as represented in the literature they consult over the one enacted by mainstream society, which, they argue, rests on an inaccurate distinction between illegal and legal drugs. Costa, for instance, argued that he himself, who uses drugs like LSD or MDMA, is no different from someone who drinks alcohol and should also be seen like this in society. For him, a drug user is

"a completely normal person, who stands in his life just like everybody else, and takes drugs. Just like most people do, there is hardly anyone that doesn't drink alcohol. But yeah, I have, I then informed myself, not only about alcohol, but also, I also take other substances and inform myself about them accordingly."

In addition to arguing that drug users are no worse than alcohol users, he also emphasized that he informs himself about the substances he uses, indicating that he understands drugs as something that should be used with care and sufficient information. Just like Emma, he enacts drugs not as inherently bad but as coming with certain risks that can be minimized when consumed in an informed and reflective manner, which is the case for all psychoactive substances. As these examples show, the internet and other communities that provide users with information about drugs constitute important knowing spaces that enable them to challenge the dominant narratives. Such information was important for the users I interviewed, as it served as a counterargument against the image of the irresponsible and irrational drug users, which they are often confronted with. Enacting a version of drugs that does not conflict with their self-understanding as responsible and normal people allowed them to construct a positive and coherent identity as users.

7.1.2.4 Distrust in drug education

The information that drug users find about substances and safer use online does not only conflict with the common illegal and moralizing versions but is also different from what they have learned in school and other drug education programs. Similarly, the social and cultural meaning that people ascribe to drugs differs strongly from dominant narratives. The versions of drugs that users enact thus often clash with those practiced in mainstream society, both regarding information on drugs and their socio-cultural meanings. This has significant consequences as once people make experiences that are inconsistent with their prior understanding of drugs, they distrust this source of information and tend to question

everything they have learned from it. This often leads to a general distrust in authorities that warn about the harms associated with drugs, which may include parents, teachers, and public campaigns up to a point where users believe that *all* drugs are *completely* harmless, which is not the case. This problem that drug education often fails to take into account how users practice drugs has also been identified by scholars, as I outlined in Chapter 2 (cf. Nicholson et al., 2013). Many of my interview partners also raised this point, some of which made the experience that they started to doubt any information they received, which eventually made them underestimate the risks that come with drug use.

Max specifically criticized the so-called 'scare tactics' of drug policy that try to prevent people from taking drugs by exaggerating their negative effects. He described the consequences of a drug education that does not correspond to people's own experience and knowledge as follows:

"Ehm, and I would actually say that education in the sense of, one tries to prevent someone from using drugs by scaring them, is very, very problematic, because if one then realizes, especially as a young person, that what one has been told isn't true, then one tends to apply it to all drugs, and if one then applies it to all drugs, then it can also be the case that one also doesn't take very reasonable warnings seriously."

Interestingly, Max specifically underlined the danger of generalizing drugs by practicing a singularized version, which subsumes all illicit drugs under one category. Such a singularizing takes place when 'drugs' are enacted as a single object that is dangerous and should not be consumed, for instance via slogans like "drugs are suicide" as if 'badness' was an inherent feature of all drugs. Apart from stigmatizing drug users, this narrative also implies a clear relation between drugs and negative effects and leaves no agency for users to shape their drug experience. The result of this can be that when people's experience with and knowledge about *one* drug conflicts with this representation, they do not trust any information on drugs and may think that *all* drugs are similar to the one they have tried. Incorrect or simplifying drug education can thus be very harmful and make people flip their view from "all drugs are harmful" to "all drugs are harmless". When offering information on drugs it is thus crucial to take into account users' knowledge and experiences, i.e., the versions that they practice, which, as I will show later, is what the drug checkers at the Z6 try to do.

7.1.2.5 Drug use in practice: Overlaps and clashes between user enactments

As the depiction of drugs and users in the dominant legal and societal discourse in Austria does not include a positive or socially appropriate version of drug use, people make sense of and experience drugs in alternative knowing spaces. While I have introduced the social and cultural knowing space and the one focusing on risk, knowledge, and harm reduction in separate sections, these two are not mutually exclusive. In fact, many of my interview partners are interested in the effects of drugs and how to reduce associated risks while also enacting drugs as part of a social practice with cultural meaning. For instance, Max, the heavy, poly-drug user, was enacting drugs as a means of rebellion while also being extremely knowledgeable about the chemical structure and pharmacological properties of different substances.

Knowing a lot about drugs was part of his social identity and exchanging knowledge with his peers was part of how they made sense of and practiced drugs. This indicates that different knowing spaces and enactments of drugs often overlap and add up as users re-assemble different aspects of drug versions into new configurations. It also indicates that knowledge about drugs and their effects is not sufficient to encourage safer use.

So far, I have mainly focused on users' understanding of drugs and the meaning they assign to them so far. These ways of knowing and valuing drugs are intricately linked to how users consume drugs in practice. This comes as no surprise, especially when thinking with Mol's ontological politics, where practice, knowledge, and valuation are part of the same processes. The users that understood drugs as something that should be used safely, like Emma or Costa, were usually very careful and well-prepared when consuming a substance. Costa, for instance, argued that it is important to have the right equipment for measuring the weight and dose of a drug and Emma noted that she makes sure to eat healthily and do sports some days before taking psychedelics. Nora and Leo, who self-identified as responsible drug users, told me about certain supplements that can be taken to reduce the negative feelings that many experience after an MDMA trip. What all these users have in common is that they practice drugs as something that is not inherently dangerous, but still carries some risk and should thus be used in a careful and sensible manner. Other users, like Julian, who primarily understood their drug use as a social activity were less concerned about how risky their use was and often consumed without much preparation. Since my interview partners were partaking in drug checking, all of them had some basic knowledge about the potential harms of drugs and were interested in reducing them by getting their substances tested. After all, using drug checking is part of practicing drugs in a risk-sensitive manner.

While the versions of drugs enacted in a peer group are usually quite similar, as users learn with and from each other, when people with different understandings of drugs consume together there can be disagreements about how drugs should be used. This was the case for Leo and his flatmates, who, it turned out, enacted versions that conflicted with each other. While Leo considered it important to be aware of and actively try to reduce the risks of drugs, his flatmates consumed in a way that he found "glorifying" and "extremely unhealthy". He felt like they were not sufficiently informed about the risks of the substance they were using and did not consume it in an appropriate way. While he would only use drugs carefully, in the right setting, and with a good mindset, his flatmates consumed, as he described it, "extremely irresponsibl[ly]" as they would "snort everything that is one the table, [...] anything could be in there, it's really only just about getting as high as possible". In these situations, the versions of drugs enacted by Leo and his flatmates clashed as he perceived their way of practicing drugs as wrong and harmful. In this case, it was clear for Leo that his version of drugs is the right one while the others are "glorifying" and thereby misrepresenting drugs for what they really are. It is likely that his flatmates were thinking the exact opposite. This shows that there can also be significant differences in how users understand and practice drugs, depending on the spaces in which they learned to make sense of and use drugs. The fact that there is no positive mainstream narrative of drugs that could be shared by users thus

leads to a great diversity in how people understand and use drugs. This becomes especially visible if people consume together who learned to do drugs in different environments, or knowing spaces, as was the case in Leo's flatshare.

While most of my interview partners had not experienced such an outright clash between their own understanding of drugs and that of others, many noted that their friends usually consume in what they consider an unresponsible manner. Such behavior includes, for instance, snorting drugs from unclean surfaces and sharing the snorting tubes with others, mixing substances, measuring drugs without the right equipment, or consuming when one is in a bad mood. The users I spoke to also noted that there are only very few people in their social circle that partake in drug checking and that the vast majority consumes without knowing the content and strength of their drugs. This is the case since the illegal status of drugs forces people to buy unregulated substances on the black market and to consume them in private or semi-private places. Even if there is a drug checking facility in one's area, which is most likely not the case, getting one's drugs tested requires considerable effort since one needs to bring the drugs on Monday and wait until Friday for the result, which is not how most people consume drugs. As Emma pointed out, many immediately use the substances they buy since they do not want to carry something illegal around. This is a big problem since knowing a lot about substances, their effects, and how to use them in theory does not help if one does not know the content of the drug at hand. Even though drug users can resist the dominant narratives in society by practicing alternative versions of drugs, the material and legal structures they live in often still force them to choose between not consuming drugs at all or without knowing their content, thereby making users consume in more harmful ways than they would like to.

7.1.2.6 Making sense of drugs through experience

The mainstream enactment, which criminalizes and stigmatizes drug use, does not only influence how users conceptualize drugs in general, however, but also how they evaluate the substances they use, their quality and effects. For users, the conventional knowing space of society is actually a non-knowing space that leaves them ignorant about what exactly they are taking. There is no standardization, no consumer protection, and no control of what is sold on the black market so that users have to make guesses about the quality of a product, its dose, and effect. Although there exist some home testing kits for drugs, these are of limited use as they usually only show whether a specific substance is present and not how strong the drug is or whether it is adulterated. As current legislation prevents users from knowing the content of their drugs, it forces them to resort to other methods of identifying and assessing their substances, the most common of which is by ingesting them. This makes drug use in its current form a risky practice that comes with many uncertainties. As briefly mentioned above, the growing number of accidents with drugs because users misjudged their content was one of the main reasons for setting up the drug checking facility in the first place.

This lack of knowledge does not only increase the risks of drug use, however, but also shapes how people practice and understand substances and the experiences they induce. When users speak about their drug preferences or what doses they consume, such claims are usually only based on what the dealer has told them about a drug and not about what it actually contained. While most of my interview partners emphasized that one can only really know the content and quality of a drug through a chemical analysis, they had also developed alternative ways of judging and classifying drugs for situations in which they could not get them tested. The checkers Manuel and Maria told me, for instance, that some of their clients claim that they can identify a substance by its look, smell, or taste. The users I interviewed, however, did not trust this method. Instead, their most common approach to knowing a drug was by evaluating one's own or others' experience using it, which I refer to as the *experiential* version of drugs. How a drug feels is thus a proxy for its assumed content and substitutes actual information about its chemical composition, which is usually not available. Enacting drugs in this experiential manner, users do not only have an epistemologically different perspective on drugs but the drug in question is ontologically different as practiced and valued differently to one of which the content is known.

This version was also practiced by Nora and Leo, who were planning their first ecstasy trip together. They explained to me in detail how they received the tablets from friends who got them from a dealer whose drugs, their friends assured them, had been of high quality so far. As Nora recalled:

"Yes, they simply had it sent to them via mail, just because there is more choice that way, because they had this, this contact and then said, ok, we'll order more [ecstasy tablets] right away if we know that it's good. And that was now the second order, and with the first one everything was fine already. And about this one now they were really enthusiastic, and so they just said: Hey, if you want to consume that for the first time, I think we have the right thing for you."

Nora's friends thus assessed the quality of their drugs based on how they experienced them and, concluding that they were "good", ordered their next batch from the same dealer. Being even more "enthusiastic" about this second batch, they recommended it to Nora and Leo. In doing so, they enacted and valued drugs based on their subjective experience and not with regard to their chemical content. While the fact that the second order felt differently from the first one could have made them question what exactly each of the batches contained, they were only interested in the induced experience and thus happy that the second one felt even better. For them, a good drug is one that induces a nice feeling, and Nora and Leo relied on this understanding and valuation of drugs when planning their own use.

The strategy to rely on other people's experience with a drug of the same batch⁷ to assess its quality was very common among my interview partners, particularly with regards to cannabis, which is

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⁷ A batch are drugs that are assumed to have been produced at one time in the same manner and are thus expected to have the same quality and strength. Ecstasy tablets are usually pressed with a particular logo and color, which people take as indicators for which ones are from the same batch.

usually not tested at the Z6 as it is an organic drug. Due to the increasing prevalence of synthetic cannabinoids in the past years, many cannabis users I spoke to worried that their products could be adulterated or extraordinarily strong. In response to this trend, the Z6 had just recently begun to also test cannabis samples if users suspected an adulteration with synthetic cannabinoids. Most of my interview partners did not know about this new offer, though, and were primarily relying on reports from others to assess the quality of their cannabis. Emma, for instance, told me that she had changed her use behavior in response to the rising prevalence of synthetic cannabinoids as "from that [one] can easily die, although it is just weed." She now only buys from people she knows and only consumes the cannabis after a few days when none of the other customers have reported any negative effects. Relying on other people's experiences is thus not only a way to know whether a drug feels particularly good, as was the case for Nora and Leo, but also constitutes a safety measure that helps users identify potentially harmful drugs. Being unable to know about the content of the drug they are consuming, users thus develop alternative ways of knowing and valuing that include the exchange of experiences among peers, a heightened awareness of dangerous drug trends, and an adaptation of one's use practices. The knowing spaces facilitating this enactment of drugs are usually users' peer groups and other spaces like online forums, which provide the informational, physical, and narrative infrastructures through which experiences are shared and interpreted.

The experiential enactment does not only constitute a common strategy to evaluate the quality and potential harm of a drug before taking it but is also enacted as users try to make sense of their drug experiences in retrospect. Since the feeling that a drug induces is usually one of the main reasons it is consumed in the first place, it also is the benchmark for whether users consider a substance good or bad. In other words, if the experience a drug induces is not pleasant or does not meet one's expectations, the drug is usually considered faulty or of low quality. Costa, who approaches drugs in a curious, systematic, and experimental manner, told me about one LSD experience that did not meet his expectations. In retrospect, he made sense of this situation by arguing that something was wrong with the drug and that it did not work as it should have. He described the experience as follows:

"Then we just took them, but there, I already noticed something very slightly, that I just feel mentally different and would do things that I usually wouldn't really do, but I think that that was due to the sweets, because LSD is quite an unstable molecule, that it had decomposed and accordingly no longer had the effect that it should have had."

Even though Costa experienced some kind of effect, he was sure that this was not how LSD should feel and rationalized his unsatisfying experience by assuming that the drug was bad. Just like Nora and Leo's friends, he enacted and valued drugs through the experience they produced in him. When enacted in its experiential version, the drug in question is thus evaluated according to how it feels and its ontology and value, e.g., whether it is good or bad, is defined by the user's subjective experience. The fact that Costa had consumed LSD with a particular anticipation of how it would feel further shows that he had informed himself about what to expect by drawing on information and reports of other users. How

people experience drugs is thus an important aspect of how they enact them ontologically, both when gathering information and preparing for a trip as well as when trying to make sense of their experiences in retrospect.

These practices of valuing drugs, sharing information, and anticipating harm are alternative ways of making sense of drugs that users rely on in a society that prevents them from knowing the actual content of their drugs. Doing so allows them to resist the ignorance imposed upon them by finding their own strategies of knowing and valuing drugs, which also has ontological implications. While relying on how a drug feels is an established and often useful practice, there are some moments in which this strategy does not work smoothly, for instance when users experience the same drug differently. Since the experiential approach values a drug based on experience, it implies that the effect of a drug is stable and the same for all users. Nora and Leo's friends, for instance, recommended a drug as good because it felt good to them, and thereby assumed that Nora and Leo would have the same effect. A good drug, it is assumed, will lead to a good experience for everyone using it. In that, this version is similar to how drugs are conceptualized within the mainstream discourses, namely as having clear and predictable effects. This idea of the *one* drug effect is very common among users, who are then confused when a drug feels different to them than to other people. Almost all the users I spoke to reported that they had experienced some drugs differently than how they are usually described in info material or experienced by friends.

For Leo, this was the case when he first smoked cannabis with his friends. In contrast to the others, he had an extremely strong psychedelic effect, which did not match his expectation of how the drug would feel like and is also not in line with how its effect is commonly described. He was confused by that and, trying to make sense of why the drug worked differently for him, even asked his parents whether he had a genetic predisposition for reacting strongly to cannabis, which was not the case. Leo was not the only one whose individual experience of a drug varied from how others describe it. For Emma, it is cocaine and speed that work differently on her than on her friends. She finds this weird and noted that "because, well, on speed or coke, when people say: Yeah, they become happy and cheerful and blah, blah - I just don't feel that way." Conceptualizing and valuing drugs based on experience only works in a generalized manner but fails to account for the individual variation in how a substance feels for different people. If people take the same substance but one person feels well while the other doesn't, the strategy to use one's subjective experience as an indicator of a drug's quality does not work anymore. After all, one would believe that a drug cannot be good and bad at the same time. Interestingly, however, these occasional mismatches between the experiences of users do not seem to challenge the perceived validity of this method of assessing drugs. Occurring tensions are usually resolved by users describing their own reaction as exceptional, just like Leo did when he was searching for a genetic explanation, which allows them to maintain a singular understanding of drugs as inducing predictable effects.

Even though my interview partners often relied on their experience for evaluating drugs, some of them also noted that they are aware that doing so is not reliable and should only be used when no better option is available. The fact that all the users I met at the facility get their substances tested indicates that they do not consider the experiential way of knowing drugs ideal. Max explicitly noted that he thinks one can estimate the quality of a substance based on one's feeling only "up to a certain point" and that in most cases experience is not a good indicator. While the knowing spaces constructed by users are important in that they allow them to conceptualize, value, and practice drugs in their own ways, the alternative strategies of practicing and valuing drugs are limited and do not suffice to ensure safer use. As there are only very few drug users who have access to drug checking – in Austria, there are only two facilities - the experiential version of drugs is still the most common way in which drugs are known and evaluated by consumers. Without any knowledge about the contents of a drug, people have to rely on how it feels, similar to someone who deduces the quality of food from its taste rather than its ingredients. Apart from increasing the risk of overdose and bad trips, this also has ontological ramifications as it shapes how people understand drugs and their effects.

The dominant enactments of drugs as illegal and bad thus not only criminalize and stigmatize drug use, but also shape how users know, value, and make sense of drugs. As I have outlined in this section, drugs can be associated with cultural and social meaning, they can be understood regarding their health risks or assessed based on how users experience them. While people are speaking about 'drugs' in all these instances, the object is a slightly different one in each of the situations as the sociomaterial networks in which the enactments take place vary. While this is an interesting conceptual insight, it also matters in that it shows that the current legal and cultural classifications of drugs make it almost impossible for people to know the chemical content of their drugs and thus force them to adopt unsafe use practices, which pose significant health risks. As I will argue in the next section, the drug checking service offered at Z6 addresses many of these issues.

7.2 Part 2 – Drug checking as a knowing space: Knowing and enacting drugs differently

In this second section of the empirical chapter, I will focus on the drug checking facility itself, its setup, people, and processes. Conceptualizing drug checking as a knowing space I will explore the network of actors, objects, and discourses that constitute the service and how drugs are known and practiced therein.

7.2.1 Drug checking as a safe space

7.2.1.1 Assembling a drug checking facility

As the reader knows by now, drug checking is a service that allows users to get their drugs tested. While this sounds like, and to some extent is, a straightforward and easy procedure, drug checking is actually a very special and uncommon practice that runs counter to the dominant understanding and regulation of drugs in Austrian society. It requires considerable work to bring together the people, institutions, tools, spaces, and discourses needed to set up such a facility where the conventional versions of drugs do not hold and people are allowed to bring and handle illicit psychoactive substances. One essential part of this network are the institutions and spaces in which the reception of drugs, their scientific analysis, and the counseling sessions with clients of the service take place. The interaction with users is situated in the rooms of the youth center Z6, which offers various youth programs, support, and activities since the 1970s. Being a part of this institution, the drug checking service is integrated into an existing and respected structure of psychosocial care that is financially supported by several official bodies like the city of Innsbruck. While the contact with the drug users takes place in the Z6, the chemical analysis of the drugs is performed by the Institute of Legal Medicine in Innsbruck, which is part of the Medical University Innsbruck and also involved in teaching and research. The institute is a well-established scientific institution, whose methods and equipment conform to the highest standards of research. The drug checking service is thus situated at the intersection of two institutions and can thereby bring together expertise in psychosocial work for the interaction with users at the Z6 and scientific know-how for the analysis of the substances at the Institute of Legal Medicine. In that, it creates new relations between existing actors and discourses and is able to draw on their knowledge, reputation, and material infrastructures, such as the lab equipment and rooms. These institutional and material aspects are crucial parts of drug checking, without which the service would not exist in this form, and which significantly shape its processes and practices.

Manuel and Maria told me that apart from setting up the institutional, material, and spatial framework for drug checking, there was also strong political will and effort as well as financial resources needed to establish the service. In the case of drug checking at the Z6, it was Christoph Gstrein, the drug coordinator in Tyrol at the time, who pushed for the introduction of the service in Innsbruck and negotiated with the public prosecution bodies and the police to coordinate their interests with those of the Z6. To ensure that the work of the facility would not conflict with the law, the Z6 team also ordered a legal opinion from a scholar from the University of Innsbruck to prove that their service operates in a

legal grey zone and that, as Maria put it, they "have the right to do it." What further played into establishing the drug checking service was the rise of new psychoactive substances at the time, which led to a growing number of overdoses, hospitalizations, and some deaths, and sparked a debate on the risks of adulterated drugs and a fast-changing drug market in the region. Within this public discourse, it was easier to highlight the value of drug checking as a health initiative that would help reduce immediate harms associated with drug use while also allowing to monitor and potentially respond to new drug trends. This framing of drug checking as a harm reduction measure that can save lives gave, and still gives, it the political legitimacy needed to grant it its exceptional legal status. Setting up the facility thus also required an interplay of political, legal, and discursive factors that, taken together, carved out a space in society where drug checking can take place.

7.2.1.2 Gaining trust

Although the drug checking facility Z6 tries to actively counter the common societal representations of drugs and users, it is still situated within these structures of society, which also influence the processes and trustworthiness of their service. Being stigmatized and criminalized, many users feel misunderstood by official authorities and tend to distrust services provided by the state, including the drug checking service at Z6. Manuel, one of the checkers, recalled that when they started receiving drugs for testing in 2014, it took some time until people began coming and handing something in. As outlined above, drug users are used to being condemned and prosecuted by official bodies like the police and are often skeptical towards drug-related institutions that are state-run. Since the ownership of illicit substances is a crime, many users find it difficult to believe that there could be a place where they are welcome and encouraged to bring their drugs. The offer of the drug checking service conflicts with how users experience the conventional approach to drugs taken by the government, which is why many clients were at first, or still are, suspicious of it. As Manuel told me, especially in the beginning, many people thought that the drug checking service was cooperating with the police and that bringing their substances would have legal consequences. There have been and are many rumors about their work like "that there are cameras in the flowerpots", as he noted, and there are users who still believe that and therefore do not use the service. Even though the checkers explicitly do not enact drugs in an illegal or moralizing manner, these versions still influence their work as they lead to a general distrust among users towards authorities.

This initial skepticism towards drug checking was also mentioned by some of my interview partners. Julian, for instance, remembered that for many years he also believed that drug checking was actually a way to trick users into openly carrying drugs to then indict them. This suspicion, he said, is also the main reason why most of his friends would never use drug checking. He said:

"Yes, so one has always had thought about it [the drug checking at the Z6], but the trust just wasn't there, so... Even in my circle of friends, if I now-, if someone doesn't know that [drug checking] and has never been here, well, then he won't trust it, because they are always afraid

because of the cops and so on. That's actually the main reason why people don't quite accept it."

Having internalized a fear of the police and being used to authorities like teachers blaming and shaming them for consuming drugs, users find it difficult to believe that an official institution could deal with drugs in such a fundamentally different way. While drug checking is a knowing space that is separate and different from the mainstream approaches to drugs mainly enacted in Austrian society, it is still located within this environment and thus has to take into account the experiences and doubts that users bring with them. Thus, even harm reduction measures that seek to counter negative views on drugs can be rejected by users, who usually do not cooperate with authorities within the current legal setting and social climate. Gaining trust and establishing a relationship with their clients was thus one of the first challenges that the checkers had to tackle when establishing their service. This is especially true since the users and the substances they bring are crucial parts of the drug checking assemblage without which the service would not work. Setting up the facility thus involved not only assembling the right institutions, equipment, and knowledge, and ensuring political, legal, and financial support, but also convincing drug users to make use of the service and to thereby contribute to and learn within this knowing space.

7.2.1.3 Drug checking as a safe and accepting space

Even though drug checking at the Z6 draws on established and trusted institutions like the Z6 and the Institute of Legal Medicine, the space it creates is something new and special in that it keeps out the mainstream enactments of drugs and allows users to do things they are usually not allowed to. While recreational drug use is condemned and outlawed in public and private spaces in Austria, at the Z6, users are encouraged to bring the substances they want to consume and to speak openly about their use. These are practices for which they would be sanctioned anywhere else. This leads to the interesting situation that upon entering the facility, the ontological meaning of the substance carried by the user changes from an illegal good to a sample that is tested as part of a harm reduction program. In this setting, the use of the drug is no longer enacted as a crime but as a personal choice that, however, should involve careful consideration. Likewise, the users themselves are no longer criminals for owning drugs but are considered partners or clients that are necessary to keep the harm reduction service running. Providing a space in which the drug laws do not apply, drug checking thus allows for practicing drugs, drug use, and user identities in unconventional ways. The facility does not only constitute a safe space for users from a legal perspective, however, but also with regards to the moral enactment and valuing of drugs and those who choose to consume them. While users are usually criticized for their drug use and feel like they are perceived as less responsible and respectable members of society, the checkers at the facility adopt an approach grounded in the ideas of the accepting drug work (Akzeptierende Drogenarbeit). This means that they do not judge their clients for how and why they consume but respect every person's individual decision and reason to do so. In that, they view drug users as "completely normal people", as users like Costa see themselves, who can make their own choices. At the drug checking facility, drugs and drug users are thus stripped of the legal and moralistic judgments they usually carry in society, which makes clients feel safe and accepted and is a crucial prerequisite for running the service.

Another aspect of the drug checking facility that contributes to a safe and welcoming atmosphere is the location of the Z6 and the house and rooms in which the users hand in their substances and receive the test result. The building in which the youth center of the Z6 and their drug checking service is situated is close to the city center of Innsbruck in a beautiful street right next to a church, a river, and some student housing. The overall atmosphere is peaceful and calm and the youth center, which has some graffiti sprayed on its walls, looks like a place where young people would like to hang out. During my fieldwork at the drug checking facility, there were several activities going on at the Z6, such as a band rehearsal, and the drug checking facility seemed like an extension of this cozy and cool space rather than a place where illegal drugs are received for scientific analysis. The rooms, in which the users hand in their drugs and talk to the checkers, are furnished like living rooms, with a big sofa, some plants, and a couch table with magazines. While the checkers act in a very professional manner, the conversation between them and the users has a casual vibe, similar to as if one would talk to an older and more experienced friend. This trusting and relaxed, yet professional, atmosphere has also been mentioned by the users, some of which were surprised by the personal aspect of the discussion with the checkers, who also asked questions that go beyond the substance itself. While the fact that drugs are not enacted as illegal or stigmatized is important to make drug checking a safe space, the location, material setup, and the overall vibe also contribute to making users feel comfortable to come, bring their substances, and talk about their use.

For many of my interview partners, the rooms in the Z6 are one of the few places where they can speak openly about drugs, ask questions, and get advice on how to use in a safer way. While the drug testing is the central part of the service, the checkers also emphasize the importance of speaking to the clients about their experiences and use practices. While this could be interpreted as intimidating, most of the clients I spoke to enjoyed being able to tell someone else about what drugs they had taken, how they consume them, and why. Emma told me, for instance, that she liked when the checkers asked her about her prior drug experiences when she used the service for the first time, as this is something that she rarely talks about with other people outside her friend group. Since drug use is a taboo in our society, users are happy when someone is interested in their opinion without judging them. Acknowledging the clients' perspectives, needs, and experiences, the checkers at the Z6 thus treat drug users as normal, rational people who are capable of using drugs in a sensible manner. In doing so, the drug checking service adopts an image of drugs and those who consume them that is in line with how most users understand themselves and would like to be perceived more generally, especially those that

I described as eager to use responsibly. The safe space that is established at the drug checking facility thus makes a difference in how users can practice drugs and enact their own user identities.

This non-judgmental and accepting approach is something that the clients appreciated, and which was often stated as a reason for why they would use drug checking but no other drug programs. Max, for instance, described that for him it is important that drug checking does not imply that one should change one's use practice, even though that might be an outcome, but is primarily a service to users to know what they consume. He said:

"I go to drug checking to know what it actually is that I'm consuming, but that doesn't mean that I have to change anything about my use behavior. But once you're there and, uh, you're using drug checking, you can talk about whether you might want to change something. But you don't have to, and that, I think, that's the point."

Since information about the content of one's substance is relevant for everyone who considers using drugs, the target audience of drug checking is broader and more heterogeneous than that of other harm reduction initiatives like addiction counseling or needle exchange program. As Maria noted, drug checking does not specifically target people with heavy or problematic use patterns but all kinds of users, including occasional and so-called recreational users. Offering a combination of a use-oriented testing service and an accepting approach to drug use, drug checking reaches a larger group of users, which increases its potential positive impact on the safety of drug use in the region.

While this accepting approach is well received by users, who feel safe and taken seriously, for those that view drugs as inherently dangerous and bad within the mainstream narrative, it is difficult to understand the purpose and philosophy of the drug checking service. In fact, the version of drugs practiced through drug checking, which one could describe as an accepting and normalized version, clashes with the illegal and moralizing ones, which can lead to conflicts and misunderstandings. Manuel told me, for instance, that it can be challenging to explain their approach and service to parents who often think that the job of the checkers is to tell their children "that all of this is shit" and that they should stop consuming illicit substances. This sometimes leads to tensions between what parents expect and what the checkers do. Manuel emphasized, however, that a moralizing approach to drug use, which is usually practiced by such parents, does not work to improve a user's situation as every person consumes for a reason, which needs to be acknowledged. "If you do not acknowledge that, you will not get into a conversation", he added, noting that talking to people is the best way to understand their motivation for use, their habits, and to potentially adapt these. Assuming that an official harm reduction initiative would be in line with the mainstream narrative, many parents are puzzled when they learn that drug checking at the Z6 adopts an approach to drug use that is completely different from what they believe to be right. The drug checking facility, the service it offers, and the versions of drugs it thereby enacts can thus clash with people's conventional understanding of drugs. As such conflicts are some of the consequences of running a drug checking service in a society that criminalizes drugs, understanding and managing them is also part of the checkers' work. From a conceptual perspective, such clashes are valuable in that they

make visible how unsettling it can be for people when their ontological framework is challenged, which hints at the resistance one usually experiences when trying to change people's established understanding of the world and things like drugs.

The drug checking facility thus constitutes a safe space where users are accepted as they are, their opinions and feelings are taken seriously, and they can engage in conversations about drugs without being criminalized or judged. The first way in which drug checking intervenes in the ontological politics of drugs is thus by constituting an official and respected place where the conventional versions of drugs are actively ,kept out', thereby making room for other ways of knowing and practicing. This allows users to enact drugs in line with their identity, understanding, and experience. As the safe space of drug checking is thus a prerequisite for users to feel welcome and accept the service, it is a central part of its socio-material network, without which there would be, drastically speaking, no users to engage with and no drugs to be tested.

7.2.2 Drug checking as a testing space

While this safe and accepting atmosphere is an important aspect of drug checking, it is usually something else that people come for, namely the drug test. Testing the drugs is not a simple procedure but encompasses a variety of practices, tools, discourses, and people that all contribute to producing the test result. This network also includes the users themselves who bring their substance, the checkers who prepare them for the analysis, and the laboratory with its staff and equipment, in which the actual analysis takes place. Lastly, the result of the test is interpreted by the checkers again.

7.2.2.1 Preparing the drugs

Even though the chemical analysis of the drug is performed by the Institute of Legal Medicine in Innsbruck, the testing procedure as I conceptualize it already begins when the clients bring their drugs to the Z6. As noted before, users can hand in drugs on Monday evenings. When receiving the substance, the checkers ask the clients some questions about what drug they think their sample is, which dose they believe it is, where they got it from, and how much they paid for it. Some of this information is then written on a small paper sheet that is attached to each sample and serves as an indicator for the chemists about what compounds they can expect to find. The information provided by the users is further important for the internal statistics of the Z6 as well as for the monitoring of drug trends and the identification of harmful and mislabeled substances. By bringing a drug and providing information about it, the users are part of the testing procedure performed through drug checking, as they contribute knowledge and material. During and after the conversation with the clients about the drugs they have brought, the checkers prepare the substances for the analysis. They have to weigh and photograph them, for which they use a high-precision scale and a professional camera setup, which allows them to take photos on which the logo of an ecstasy tablet is visible, for instance. They then crush the drugs if they

are in the form of a tablet, transfer a small amount of the drug into a separate tube, and fill out the info sheet for every sample. This process takes place in the same room in which the substances are handed in and the test result is communicated, and the clients are usually present and can watch how their substances are measured, classified, and prepared for the chemical analysis.

These steps, which are now performed by the checkers were formerly conducted in the Institute of Legal Medicine and were only later transferred to the Z6. As the chemist Herbert Oberacher, who leads the research group that performs the analyses, told me: "In the beginning it was, so only the drugs were handed in [at the Z6] and the rest was done at our place." The preparation of the substances is thus work that is usually performed by scientists and considered a part of the testing procedure, which is a good example of how the testing space of drug checking extends beyond the laboratory and also encompasses the work of the checkers. Preparing the substances thus also contributes to what Latour and Woolgar (1979) refer to as the inscription of "a material substance into a figure or diagram" (p. 51). The high precision scale and the camera setup are part of the inscription devices that will eventually transform the drugs that users brought to the facility into standardized test results. While the procedure that takes place at the Z6 is only the preparation for the actual test, it already changes the meaning or ontology of the drug in hand as the checkers and users practice it in a systematic and scientific manner, rather than, for instance, enacting it as an illegal good or part of a social situation. In fact, through this process, much of the social, cultural, and personal meaning of the drug is stripped off the drug as the info sheet only contains the details that are relevant for the scientists and the data bases of the Z6. The drug is enacted as a research sample that is to be defined and classified with scientific methods, which I will refer to as the *scientific* or *chemical* version of drugs. The users are thus witnessing and are part of a process in which drugs are practiced in a scientific manner that is ontologically different from how they usually enact drugs in their own knowing spaces.

After the drugs have been collected and prepared by the checkers, one of them brings them to the Institute of Legal Medicine in Innsbruck, where the laboratory is situated and the chemical analysis is performed. Both the drug checkers and Herbert Oberacher, the chemist responsible for performing the scientific tests, described their cooperation as running smoothly and were content with the work of the other partner. Both also told me that they have only little insight into what exactly is taking place at the other institution, i.e., at the laboratory and the Z6, respectively. While Oberacher noted that "we told them of course how it works, so that they also have a little bit of information about what we're actually doing", the checkers do not know exactly how the drugs are analyzed and usually only receive the test results. Although the processes taking place at the Institute are not visible to the checkers and users and are usually framed as a service that is provided to the drug checking facility, I still consider it useful to take a closer look at what the chemists do and how they understand and enact drugs through their work. After all, these practices are an essential part of the testing space, and drug checking as a whole. In the next part, I will thus try to open the 'black box' of the scientific test a little bit by exploring the practices

and perspectives of the scientists, thereby mostly relying on the information I gathered in the interview with Herbert Oberacher.

7.2.2.2 Testing the drugs

At the Institute of Legal Medicine in Innsbruck, Herbert Oberacher is the one responsible for ensuring the smooth operation of the chemical analysis. He is the leader of the Bioanalytical Mass Spectrometry Group at the Institute, which, as it says on their website, "provide[s] expertise and state-of-the-art technologies for the qualitative and quantitative analysis of small bioorganic molecules" (Institute of Legal Medicine, Medical University of Innsbruck, n.d.). Being part of drug checking, the researchers use their expertise and technology for the analysis of the drugs that users hand in. In that, they are a central actor within the testing space that drug checking creates, even though the work taking place in the laboratory is usually 'black-boxed' and invisible to the other members of the network. Analyzing the drug samples from the Z6 constitutes a large portion of the work performed by Oberacher and his team throughout the week. Even though the method they rely on is, as Oberacher says, "ready-to-use" and the machines just need to be started, he and his team still spend considerable time preparing the samples and running the analyses, which occupies their equipment. Even though Oberacher describes their involvement in the drug checking project as more like a service provision than scientifically interesting research, he notes that running the analyses for the Z6 is still a good opportunity to evaluate their methods and to extend their in-house spectral library, especially when they identify new psychoactive substances they have not tested before. He adds, however, that his team does not depend on the drugs provided by the Z6 as they receive enough other samples from the police or the judiciary. Being an actor within the drug checking network thus also shapes the work of the research group, the kind of samples that they analyze, and the overall direction of their work. This shows that setting up a service like drug checking also has effects on other actors that are involved in the project.

As the quote from the website indicates, at the Institute drugs are defined and understood based on their chemical features and practiced as "small bioorganic molecules". The drugs received from the Z6 are analyzed and treated in the same way as other substances and only differ with regards to where the samples come from and where the test result is communicated to. In the laboratory, drugs are enacted as objects of scientific interest that are valued and classified based on the existence and quantity of specific chemical compounds. For the scientists, the drugs do not have any meaning beyond their scientific value and are dealt with in the same way as other substances that are routinely analyzed. Oberacher himself described their work as taking place in an "analytics bubble" that is disconnected from other features or meanings of the drug. He said:

"We really do pure chemical analysis. Although it's interesting to read when it says, I don't know, he got sick when he took that or it's, that's of poor quality, that's nice, but bottom line it has no, no impact on our analytic work, in that sense."

Every sample is thus equally exciting or interesting for Oberacher as he has "no emotional connection to the substances because [doesn't] know the stories behind them." The method that the team is using is called mass spectrometry and is one of the most reliable ways to identify all kinds of small bioorganic molecules. Using this method, the team can identify the molecules that are present in a sample and determine the quantity of those that are relevant to the user. Another project, in which Oberacher and his team use their methods to identify illicit drugs, relies on wastewater analyses to estimate the consumption of drugs in a city. As Oberacher told me, their analytical processes have been running well and smoothly for a long time and, since the drug market is not changing significantly, they do not consider adapting them. The processes used in the laboratory thus follow an established, standardized, and well-tested routine of chemical analysis that is used for a variety of purposes and reliably transforms material samples like water or drugs into scientific results.

The scientific or chemical version that is enacted by the researchers, and to some extent by the users and checkers, constitutes a particular way in which drugs can be understood, valued, and handled. Practicing this version, the scientists draw on expert knowledge and high-tech equipment, which then enables them to transform the material substance into a test result. In that, the equipment used in the laboratory, just like the one used for preparation, can be understood as an inscription device in that it translates a material object into a standardized and readable format, which can easily be communicated to other actors, like the checkers at the Z6. Though the material drug has vanished through the analysis, it is still somehow present, albeit in another format. While the preparation at the Z6 turned the users' 'street' drug into a research sample, the chemical analysis further transforms or inscribes the research sample into a literary format, thereby enacting yet another version of drugs, namely the drug as the information provided in the test result. In the laboratory, drugs are thus practiced in different related ways, including as a material sample and as the information provided in the result. Within the knowing space of the laboratory, these two formats signify different sides of the same thing, which shows that even the scientific version itself is multiple. While the testing is a central part of drug checking, as it enables knowing the content of a sample, the checkers and users usually have little contact with the processes taking place at the institute. What they receive is the test result, which is part of the scientific version in that it defines drugs according to their chemical compounds but is decoupled from the practices and discourses that went into producing it. The test result is thus an "immutable mobile", as Latour (1987, p. 227) calls it, which comes in a standardized, readable format that can travel easily and is smoothly integrated into other contexts. The drugs that the scientists work with in the laboratory and the scientific representations they produce of them are thus ontologically different from how drugs are enacted in other knowing spaces, such as by a group of friends at a party or by the officers in a police station.

Interestingly, even though the version of drugs practiced by scientists is very different from the ones enacted by users or the police, it does not clash with them, while the other two are often in conflict. One reason for this is that the laboratory and its entire setup is separated from the rest of society,

constituting a knowing space in its own right. Usually, people only interact with the laboratory when they bring samples and receive test results, just as the drug checkers do, while the processes taking place inside are black-boxed. Similar to the drug checking facility, the Institute of Legal Medicine also constitutes a space where the usual drug laws do not apply and the scientists can enact drugs in ways that would otherwise constitute a criminal offense. This is largely due to the scientific authority of the lab and its function in the legal system, where it performs tests for the police and judiciary bodies. Being distributed across separate locations and enacted through specific discourses and tools within defined professional jurisdictions, different versions of drugs, such as the legal and the scientific ones, can exist next to each other without clashing, and even complement each other. Throughout the interview, Oberacher noted several times that their involvement in drug checking is a scientific one and that they provide the test results in an objective and neutral manner. For the analytics team, it is important to keep this neutral position as the drug checking service is not the only institution they conduct analyses for. As Oberacher and his team also work for the police and the judiciary they, somewhat paradoxically, analyze drugs for drug users to use more safely while also analyzing drugs to prosecute drug users or dealers. This odd dual role of the laboratory is indicative of the state's ambivalent approach to drug use, which at the same time seeks to improve the health of users through initiatives like drug checking but still executes the existing drug laws that criminalizes them. The laboratory thus constitutes an interesting and important part of the testing space, within which scientists transform material drug samples into immutable and mobile test results.

7.2.2.3 Interpreting the test result

After the samples are analyzed by the analytics team in the laboratory, the test results are sent back to the checkers at the Z6. When I asked Manuel about the content of the result and whether it is difficult to understand, he had to chuckle, noting that people usually assume that they get a "monstrous evaluation" (Mörderauswertung). Actually, the information they receive from the lab is straightforward, containing a list of all detected substances and, in most cases, their quantity. Even though the chemical analysis is a complex process, the test result itself is simple and understanding it does not require extensive chemical knowledge. Oberacher even argued that "technically, one only needs to be able to google the name [of the detected substance]" to make sense of the listed information.

While the test result travels smoothly and is easy to understand, it is not so simple to interpret this information and to make sense of it in relation to people's actual drug use and the risks that come with consuming the respective drug. Although it is extremely helpful to know how pure and strong a drug is, this information only becomes meaningful if one has additional knowledge about how a drug works, which doses are less risky, and how to best consume it. The checkers thus have to interpret the test result in light of other pharmacological, medical, psychological, and social knowledge, as actual drug use and its effects and risks are messier and more difficult to assess than the standardized and

precise information obtained through the analysis. For the most common drugs like MDMA and cocaine, there are established rules for how one should dose the substance, what the usual physical and mental effects are, and how to best reduce associated risks. Some other substances, however, are less common, so that the checkers need to do some research themselves about their effects and risks before communicating the test result and its meaning to the clients. As Maria told me "that [researching] never ends, one still has to permanently, again and again... For every announcement there are some things that I have to read about again." The main sources of knowledge for Manuel and Maria are books about drugs or websites by other official institutions like the Viennese drug checking facility Checkit!. Sometimes, the checkers cannot find any reliable information on how a drug works and what its concrete risks and effects are, especially for new substances like NPS, for which only very little research is available. As the checkers told me, there are so many new substances introduced each year, that researchers cannot keep up with this development and there is considerable uncertainty concerning their risks and effects.

Another challenge that the checkers face when interpreting the test result is to determine whether it should be classified as normal dose, high dose, or extremely high dose. For those drugs that contain the psychoactive substances in an unusually high amount, which are high or extremely high doses, the checkers issue warnings that can be found on their website and Instagram page and are put up in clubs. The checkers at the Z6 determine the threshold for when a drug is considered highly dosed in cooperation with the drug checking team in Vienna. As Manuel told me, their classification is based on medical considerations and the average doses on the market, which can lead to difficulties when the drug market is changing but the health risks remain the same. He noted that they had considered raising the threshold value for cocaine

"because it's just, because we actually warn about or publish a warning for pretty much every cocaine sample because of high dose, but then we decided, actually for medical reasons, that we keep our low threshold, that we stay at the 40%."

Whether a drug is considered potentially harmful for users is thus not determined by the test result alone but also requires interpretative work by the checkers. This includes evaluating whether a drug is so highly dosed or pure that users are likely to take too much, which is a valuation of drugs that cannot be performed by the scientists who are unaware of a drug's effects, potential use contexts, or trends in the drug market. Defining such thresholds, the checkers practice drugs in a way that goes beyond the information provided in the test result, i.e., the scientific version, and also takes into account how drugs are usually consumed by users and which doses thus may pose high risks. In doing so, they assign additional meaning to the test result to make it relevant for the use context, so that the drug practiced by the checkers, even if still in the form of the test result, is different from the one enacted in the laboratory. This version could be described as an enriched or interpreted scientific version.

Since the threshold values for highly dosed drugs are determined by local harm reduction facilities and not by a central authority, there can be great variation among the values set by different

facilities. Some drug checking projects, for instance, also need to consider that too many warnings about highly dosed drugs may be perceived negatively by the public or those sponsoring them. This is the case for the British program The Loop, which performs drug checking on festivals and is not financed by public bodies but by the festival itself. As Manuel told me, The Loop has defined its threshold values differently from the ones used at Z6, which is also due to their different funding structure:

"The Loop tests, they only issue a warning, for example, if the Ecstasy has over 200 [microgram per tablet]. Because if they publish a warning for every ecstasy, that - we warn starting at 100 - if they issue warnings at a festival for every [ecstasy] over 100 [...] then that's not good for the festival. So that means that this can also, so to speak, have economic factors. That doesn't apply to us, because we are financed in a completely different way. So, we are publicly, well, publicly financed, um, and there are some differences and that's of course the challenge in the European context that the, that they all have very different realities."

No matter how precise and 'immutable' the test result is in itself, there are various other factors that eventually define and value the drug in hand and its potential harm. As the example of The Loop shows, the institutional and material network that constitutes drug checking, including its economic structure, also influences how drugs are classified and performed, even if the test result is exactly the same as at the Z6. This shows that it is important to take into account the institutions, actors, and tools as well as political and financial relations when investigating drug checking, as these shape how drugs are known and defined within the respective knowing space. The scientific and chemical version thus works well within the bounded walls of the laboratory but needs to be reconstrued to be meaningful for other settings, in which a variety of social, medical, and economic factors need to be considered.

The testing space that drug checking provides thus comprises a range of processes and actors that include the users who bring their drugs, the preparation performed by the checkers, the scientists that analyze the drugs in their lab, and the checkers that then gather knowledge about what the test result means for the harmfulness of a drug and how it should be consumed. During the testing procedure, the drug is enacted slightly differently in each step. While the test result that is communicated to the users is based on the scientific version as practiced through the lab analysis, it has been re-interpreted by the checkers to make it meaningful for the users. That being said, the test result and the information it contains about the quality and quantity of a substance is still the central piece of knowledge within this testing space, as it enables the interpretation and classification that comes afterward. The testing space of drug checking that I have outlined in this section thus comprises the processes that take place after the user hands in the substance on Mondays and before the test result is communicated on Fridays.

7.2.3 Drug checking as a learning space

While the safe space and the testing space of drug checking constitute knowing spaces in their own right, they also lay the grounds for the following situation, namely the interaction between the checkers and users when the test result is announced and made sense of. This direct exchange between checkers and

users, which I will refer to as a learning space, is one of the most important aspects of drug checking, as the checkers told me. While the test result is the reason for the users to come to the facility, the conversation they have with the checkers during the announcement goes beyond the result itself and includes the various contextual factors that influence the harmfulness and effect of a drug. In this learning space, I will argue, the checkers enact drugs in a *contextual* manner, which allows them to connect the scientific version of the drug as represented by the test result with the users' individual experiences, knowledges, and drug practices. In the following section, I will outline the different aspects that constitute this learning space of drug checking, and the coordination practices that are employed to combine and align the test result with how individual users understand and practice drugs. As I will show, while the clients usually come to the drug checking facility to obtain their test result, they learn much more than that as they are enabled and encouraged to make sense of and enact drugs in a contextual and, I argue, safer manner.

7.2.3.1 Contextualizing the harmfulness of drugs with users

The first way in which the checkers contextualize the test result is by interpreting it in light of how harmful and risky the consumption of the drug at hand is. Even though the chemical analysis gives crucial information about whether a drug is adulterated or highly dosed, this alone does not determine how the use of the substance affects the users' body and health. When I asked Manuel about his understanding of risk in the context of drug use, he emphasized that "there is no use without risk. [...] That means that every consumption has a risk, if you want to avoid the risk, then don't consume anything." Even if the drug as enacted through the test result is of good quality and average strength, this does not mean that the use of it cannot be harmful, which again shows that the scientific version of drugs differs from the one that assesses drugs as consumed. As Manuel told me, the harmfulness of a drug for the user is dependent on how it is consumed, for what reasons, and in which frequency. He described some of the most important of these risk-reducing practices as follows:

"That is, that is the dose, that is poly-drug use, which one should avoid, if possible, [...] that is the regularity of use, that is to ideally get [one's drugs] tested, so that I also know what I am consuming, that is taking breaks, that includes such things like checking, how am I doing? [...] if it is about, that the use has a function, to cope with stress, to regulate emotions, because otherwise I can't sleep and so on and so forth, then that's already more problematic."

These tips on how to consume more safely, which are referred to as the safer use rules within the discourse on harm reduction, are the basic kind of information that is provided in info material and online on how to reduce the risks of drug use. Some of the users I spoke to also mentioned these rules, without clearly naming them though, when I asked them about how they usually consume.

Since the harmfulness of drugs is thus not only dependent on the drug itself but also on how it is used, the checkers make sure to discuss these safer use tips with the clients alongside the test result. Although the Z6 also offers the option to announce the test result digitally, Maria and Manuel prefer

speaking to the clients directly as this allows them to discuss in detail the meaning of the result depending on how, if at all, the user plans to consume the tested substance. This also allows them to get an understanding of the user's level of knowledge on drugs and their motivation to use. As Maria and Manuel told me, some users are extremely knowledgeable about the effects and risks of the drugs they want to consume while others have next to no knowledge about the substances, their effects, or the safer use rules. Maria put it like this:

"So, some people, I often have the impression, don't know anything, they've just heard somewhere that it's great, something like this, or maybe they've already used it a few times and have made their own experiences, but they have no clue about safer use or harm reduction or, I don't know, [things like] dosage or what other things could matter or how it changes the hormonal balance in their brain... so they just don't know anything. And some of them really know a lot, they are really like, that they say: Ok, I want to experiment with a lot of things, I have decided that this is okay for me, I just want to know from you if it really is this substance. So [they come] really with this clear request."

Despite a shared interest in the content of their drugs, there is thus great variability in how clients approach their drug use, what they know, and how they understand drugs in general, which is also due to the lack of a comprehensive and user-centered drug education in Austria. As there is no user-friendly mainstream version of drugs, people are likely to adopt the understanding of drugs practiced in their circles of friends or in the internet communities they are part of.

Due to these great differences between how users consume drugs and what they know about safer use, the checkers usually begin the announcement session by asking the clients some questions, such as: What will you do with the test result? How would you dose and measure the drug? Did you inform yourself about its effects and risks? Where and in what setting do you plan to use the drug? Why do you want to use it, what do you expect from it? With these questions, the checkers seek to find out why and how the client uses drugs and what their level of knowledge is. Based on the answers, they can then share some information on the best use practices for the respective drug and what the users should take care of when consuming it. Being able to respond to and take into account the experience and level of knowledge of the individual user is one of the main strengths of drug checking, as Manuel argued:

"And that's the cool thing, that you can then individualize [the advice] very much, that you can adapt it to [...] the experiences and the level of knowledge of the person [...] and accordingly then give the information to the person in such a way that it is meaningful to them. And that you reflect and ask the questions in such a way that it makes sense to them with their level of knowledge and their level of reflection."

When announcing the test result, the checkers thus tailor their approach to the users' understanding of drugs and adapt their advice so that it makes sense to the user and enables them to learn the things that are relevant to them.

Apart from the general tips that Manuel mentioned above, the checkers also give some more practical advice for the situation of use, which includes testing a small bit of a drug before using a first

full dose ("Antesten"), measuring the drug with a high-precision scale or diluted in a liquid, only using clean equipment like sniffing tubes, and choosing a safe and pleasant setting. They emphasize that the drug itself is only one factor among many that determine the harmfulness of one's use, thereby enacting drugs as *relational* or *contextual*, i.e., as also defined by the context of use. In the announcement that I witnessed, the two clients, Emma and Max, had used the drug checking service frequently before and were thus aware of these tips on how to use more safely. When they answered all the questions that the checkers asked correctly, i.e., in a way that conforms to the principles of safer use, Maria had to chuckle a bit as she realized that they had already internalized the advice she always gives to clients. Drug checking is thus different from conventional drug education not only because it focuses on drug use instead of abstinence, but also because it takes into account users' level of knowledge and provides a space that people come to repeatedly and thus continuously learn about safer use. Manuel and Maria told me that they can see the progress of clients that come regularly and slowly adapt their understanding and practice of drugs to a more contextual one. Since drug checking is a service that is continuously relevant to users, as each substance has to be tested anew, the checkers can establish a long-term relationship with their clients, which allows for more in-depth interaction and support.

While these tips for using more safely are established and well-known in the community, they especially make sense in relation to the common drugs, for which there is knowledge about associated harms and risks. As I have mentioned earlier, for some substances like NPS there is very little information about their effect and associated risks. In these cases, the checkers communicate openly that they do not know the drug and its effects and have not found any reliable information on it, and thus advise their clients against the use of it altogether. Interestingly, Maria told me that this lack of knowledge about a substance can also be a starting point for a more in-depth conversation about other important factors, such as one's motivation and the context of use. In our interview, she gave me some examples of the questions she would ask to navigate the discussion into such a more personal direction when someone hands in NPS:

"Ok, why is it like that, why do you consume that, what do you see in it, how far do you want to go? Is it experimenting? Why are you experimenting with your own life? In quotation marks, maybe... Or is it just, that you need an adrenaline rush? Are you trying to prove something to somebody? Is, what is behind it, because there can be so many reasons for why a person does that."

These questions go beyond the immediate moment of use and the drug itself but consider drug use in its entirety by also addressing the personal and social motivations for consuming at all. While Maria mentioned them in the context of NPS, the checkers discuss such aspects of drug use also in relation to other drugs, even if information about their effects and risks is available. In the learning space, the checkers are thus able to discuss the social and cultural context in which a user usually consumes and talk about issues like peer pressure or motivation for use, thereby taking into account the various factors that can influence the harmfulness of a drug.

7.2.3.2 Contextualizing the effects of drugs with users

During the announcement session, the drug checkers not only contextualize the drug regarding its harmfulness but also concerning the effect it has on a user. As I have outlined earlier, users tend to equate the quality or content of a drug with the feeling that it creates, so that a negative experience is usually explained by arguing that something was wrong with the drug. When applying this reasoning to drug checking, the users are likely to think that a drug that is of good quality and strength according to the test result, will automatically cause a pleasant and relatively safe drug experience. As Manuel and Maria emphasized, however, the effect of drugs is not that stable and predictable and depends on many other factors next to the substance itself. This is especially the case for drugs like MDMA, which the body has to recover from in order to generate the same experience with the same dose. Taking the same drug on two consecutive weekends will thus lead to different feelings as the neurological 'start conditions', so to say, are not the same. This is also the reason why Manuel argued that one should be careful when reading about the doses that users describe and recommend on the internet in trip reports "because you don't know who the guy is that is writing that and you don't know how he's doing, [...] what his tolerance level and habituation is and how he's doing in life." Just like the harm caused by a drug, the effect it produces is contextual and depends, for instance, on how frequently a user consumes the drug.

Focusing on the brain

To explain this variation among the effects of the same drug, the checkers sometimes draw on neuroscientific knowledge to help users understand how the drug they consume affects the brain. They have built a brain model, which they also bring along when doing 'party work' in clubs and which they use to illustrate the neurological processes that are triggered by different substances. In their consultations, the checkers sometimes draw a brain on a piece of paper with the clients and explore together how one's experience is related to the neurochemical effects of a drug. Manuel told me that giving users this scientific explanation of why a drug feels the way it does can make a big difference in whether they understand and accept the information that the checkers provide.

"So basically, they have an explanation, and a scientifically sound explanation, because we simply explain what happens neuro-, neurologically. And, and what does the substance do in your brain. And... just always try to apply that: Look, yes, that's exactly why you were so happy, because the serotonin fully flooded [your brain] and fired like crazy. And through that, you released the serotonin of the next three months, so then it's clear that you're completely sad and exhausted afterwards, because you don't have any serotonin left. And accordingly, harm reduction measures are very comprehensible for people, when we then say: Hey, a six weeks break at least [until you take MDMA again], because you need that to recover, so that the serotonin, the serotonin balance can rebound again."

Pointing to the processes that take place in the brain when one is using a drug is thus a way to illustrate why higher doses or frequent use may lead to unpleasant or unexpected experiences, in this case feeling

sad after taking MDMA. The checkers thereby make visible that the test result in itself is not enough to predict and plan a drug experience, because the neurological processes in the brain that produce a drug's effect are influenced by other factors as well.

Julian, one of the users I interviewed, mentioned that he had learned most of his knowledge about drugs and their effects in a counseling session at the Z6, when a checker explained to him how cannabis works on the brain. This scientific approach helped him understand the underlying mechanisms that made him feel a certain way, for instance why he did not dream when he smoked a lot of cannabis. For him, "that just made sense altogether, the puzzle has been put together." Learning about the neurological effects of a drug is thus a way to connect the substance as such and the experience it creates into a coherent narrative that makes sense to users and supports them in managing their use. Even though the neuroscientific explanation of how drugs work in the brain conceptualizes drug effects as singular and as following clear modes of action, the checkers are well aware that individual experiences can differ from the neurological script and that their brain model is a schematic simplification that cannot account for the complexity of drug use. Nevertheless, drawing on neurological explanations and educational tools like a brain model is one strategy used by the checkers to contextualize drugs and their effects.

The test result and users' experience

Manuel and Maria further emphasized that drug use is a psycho-social practice that is also significantly shaped by contextual factors like one's mood when consuming or the environment one is in. Within the discourse on harm deduction, these factors are usually referred to as the 'set' and 'setting' of use and are considered to be just as important as the 'substance' in influencing a drug experience. There are differences between drugs in how strongly the set and setting affect one's feeling, as a trip on psychedelics is more susceptible to outside factors than, for instance, one on cocaine. The checkers still argue that any drug experience is always an interplay between the substance itself, the material and social setting within which it is consumed, and the mindset or mood of the user. The checkers thus reject the idea that there is a direct and clear link between the content of a substance and the feeling it induces in users, without denying that there are common and scientifically proven the pharmacological and biological effects of drugs. They also emphasize that it is not possible to deduce the quality, content, or strength of a drug from how it feels, which is, as I outlined earlier, a common strategy among users to assess a drug's quality. Instead, Manuel and Maria hold that only a chemical analysis can determine what the content of the substance at hand is. As Marias replied to my question on whether one can see if a drug is adulterated: "No, you just don't see it. You only see what's in it with a chemical analysis." Manuel made the same point, adding that when clients argue that they indeed can estimate the quality of a drug, "then each of us has 10 examples where this has been disproved."

While many users rely on their experiences to estimate the quality and strength of a drug when they do not have access to testing, the clients of the drug checking service usually share the checkers' belief that only a test result can give insight into what a drug contains. Otherwise, they would not feel the need to get their substances tested. Nora and Leo, for instance, who received their ecstasy tablets from friends that recommended them based on their pleasant effects, still decided to get the drugs tested. Since their friends live in Germany and do not have access to a testing facility, Nora and Leo were quite interested in how the drug's quality as defined by their friends' experience would compare to the one determined by the chemical analysis. As Nora told me, "it is also nice to know, okay, what did they tell me and what does the test actually show!" As I have already mentioned above, Max shared this understanding, arguing that a drug experience made with an untested drug cannot be considered reliable, as there are too many factors that can influence the effect. Just like the checkers, these clients consider the test result as the actual representation of what the drug really is, thereby giving it ontological primacy over other enactments, like the experiential one. As I will outline below, this does not mean, however, that other aspects are considered irrelevant in shaping one's experience. On the contrary, the mismatch between the experiential and scientific versions actually provides a good opportunity to explore and acknowledge the impact of contextual factors on how a drug feels like.

While users like Nora, Leo, and Max theoretically understand drugs as defined by their chemical properties, Manuel and Maria noticed that many clients still tend to explain unexpected experiences by assuming that the drug they consumed was not normal. It is possible that the same person believes that theoretically one can only know the quality of a drug through drug checking while also basing their assessment of an untested substance on their feeling. Manuel told me, that people sometimes bring substances that they have used and believe to be extraordinarily good or bad, which can lead to interesting and productive conflicts when the test result does not match with people's experiences. In fact, in most cases when people assert that their drug must be special, the chemical analysis shows that it is actually of average dose and quality. The test result, i.e., the scientific version of drugs, thus clashes with the user's experiential enactment, which then requires some coordination work to restore or maintain the idea of drugs as a coherent object. As Manuel argued, such direct clashes are very productive as they allow the checkers to critically explore with the user the various factors that can shape their drug experience.

For Manuel, these are some of his favorite drug checking moments, as they make visible the contextuality of drugs and usually make users reconsider their understanding of drugs. He described these encounters as follows:

"When people come and say either that it's insanely bad or it's insanely good, the substance must either be insanely good or insanely bad, and we can then prove the exact opposite based on the result and then, um, reflect with them that it is not just the substance that matters, but that it is very, very much about oneself. [...] Especially when you know the client a bit better, and he says: I have brought the best speed this time. Then I say: "Look, your speed, that's 75%

caffeine, ha!" Then it's just kind of funny, it's a bit of fun for us [...] and then to think about that together and to go a bit deeper: So, what does that mean now? Because look, you can't trust yourself. [...] And then to think about how it all came together that the effect was created."

As Manuel argued, the conflict between the test result and how the user has experienced the drug is a good opportunity to reflect on why the quality of the feeling was different from the one that the test result assigned to the substance. If one does not know what exactly one is consuming, it is hard to understand whether one's experience was shaped by the drug itself or something else, especially as it is sometimes difficult to know in advance whether one's mood or a setting is good. Providing information about the content of a substance, the drug checkers are thus able to reflect with the user on the other factors that may have influenced their experience. As Manuel said, it is "very much about oneself", highlighting that much of a drug's effect depends on the users themselves. In this case, the test result thus figures as the starting point for a conversation on the user's understanding, valuation, and practice of drugs, which they are likely to adapt since this clash showed them how easy it is to misinterpret one's own experience of a drug.

In this situation, there are thus different versions of drugs - the experiential and the chemical one - that are in conflict. To resolve this clash, Manuel and the users privilege the test result version of drugs over the experience, arguing that this is what the drug really is, while also accepting the experience as valid and true. What is challenged is the direct link between these two versions. In order to make them work together, the checkers emphasize that the effect of a drug is not only shaped by the substance itself but also by other contextual factors, thereby resolving the conflict by introducing the idea of drugs as contextual. Within this framework, the test result is not expected to conform completely to the experience. This enactment of drugs as contextual thus integrates the experience of the user and the test result, while also accounting for the social meaning of drugs, and thereby points to the many aspects that should be considered when using drugs. Since this version shifts the sole 'responsibility' for determining a drug experience from the drug's content onto other factors like one's mood or the surrounding, it also gives the user some level of agency to actively shape their drug experience by adapting the aspects that one has control over. Such a personal reflection on the causes of a drug effect is only made possible through the test result and the in-depth conversation with the checkers when they announce the result. Enacting drugs as contextual in this way is thus only possible due to the assemblage of knowledge, tools, people, and experiences that constitute drug checking as a space in which a scientific test result is set in relation to the psycho-social dimensions of drug use.

While the situation took place as the user had tried the drug before testing it, drug checking also encourages a contextual enactment when people consume a drug *after* it is tested, since knowing the content of the drug allows them to reflect on their experience in a different way. This is the case, for instance, if two tested drugs that are chemically the same turn out to feel differently when consumed in different occasions. Knowing that the drugs cannot be the cause of this variation enables users to think

about other aspects of their use situation that may have influenced their feeling. Max, for instance, told me about two experiences he had with the drug 3-MeO-PCP8 that were different although the substances were both tested and of the same quality and dose. As he recalled, "there the effect has actually been very different, but I knew at both times that I have the substance 3-MeO-PCP and it has been tested both times." When asked about how he explains this variation, he answered that "the personal condition certainly has a strong influence, but also the setting, in which I consume." Being able to test his drugs, Max was thus able to reflect their effect in a contextual way and was aware of other factors. The fact that he uses the term ,setting' in his explanation, further indicates that he is familiar with the concept of set and setting himself. In fact, he told me that he has used drug checking about 100 times already, so he had plenty of time to speak to and learn from the checkers about the harmfulness and effects of drugs and how to use more safely. Drug checking thus also enables users to reflect on a drug's effects and the contextual factors that influence it beyond the space of the facility itself, as the users take the test result with them and integrate the knowledge into other situations. This indicates that the learning space of drug checking is elastic and includes all situations in which users make sense of and learn about their drug experience based on the information and advice they receive at the Z6.

7.2.3.3 Drug checking as a space of mutual learning

Even though the users' understanding of drugs is the focus of drug checking, the clients are not the only ones that learn something. As Maria and Manuel told me, they have also gained considerable knowledge about drugs and how people use them since the drug checking service started operating in 2014. Manuel emphasized that drug use is something very personal and it is important to remain open and flexible and to accept every person's experience and approach as valid. Throughout his work in the drug checking service, he learned a lot about the diversity of drug use, as he said:

"Of course, there are certain categories, but drug use is something extremely individual. [...] It is important that one remains flexible and also acknowledges when someone says: so for me it now has the effect, or for me it feels good like this or that. That one does not say: such nonsense, can't be. But that one actually accepts it like that. So, that's something I find very important in our work, a mutual learning. So, of course, we [the checkers] have certain, certain knowledge, certain strategies on how to approach the reduction of one's use and so on and so forth, but it is also very important that we always recognize, that we accept it when someone says: no, for me it's like this or like that."

People's use practices are very diverse, which, as I noted before, is even more so the case since there is no shared narrative of drug use in Austria.

While the checkers are experts on safer use and the psychosocial dimensions of drugs, Manuel emphasized that the users are also experts as they know about their own experiences and the effect that a drug has on them. For him, it is important to acknowledge this personal and experiential expertise as

⁸ This is a new psychoactive substance.

legitimate, too, and to learn from it. When speaking with users about their personal approach to drugs, the checkers learn a lot about the different ways in which people consume, as every user has a different personal history, drug preferences, reasons for use, or use habits. It is thus not only the users' view on drugs that changes through drug checking but also the checkers' understanding of it as they get to know the various ways in which people consume and experience drugs. Adopting a contextual approach to drugs allows the checkers to blur the line between experts on drugs and laypeople and make drug checking a space for mutual learning. This does not only allow them to acquire knowledge about the diversity of drug use but also influences the overall atmosphere at the facility as users are taken seriously and valued as equal partners. Within the learning space, the drug users are thus not only recipients of advice and information but also figure as informants and experts, whose knowledge and experiences are valued by the checkers.

Another aspect of drug use that the checkers learn about through their work are the drugs themselves. Both Manuel and Maria are not trained in a natural science and did not have much knowledge about the chemistry and pharmacology of drugs before they started working in the project. Since joining the drug checking service, they both have acquired an extensive general knowledge of drugs by reading books, articles, and information material. Before each announcement of a test result, the checkers do some research on substances that they do not know or refresh their knowledge, so that they can share comprehensive and up-to-date information with the users. As Maria told me, through this continuous research on the drugs that users hand in, she has learned a lot about the different substances and their effects and also discovered many drugs she did not know existed.

"Yes, mhh, yes ... that is, so I have to say personally, I have learned very (!) much, in the sense of, all the ways in which substances can be consumed, or what substances. Or the fact that, well, it has certainly also changed over time, like NPS, that has grown without any limit, in my eyes. So there is an endless number of substances where I myself don't know what it is, where I really sit there and think to myself, okay, I really have to look that up."

As the drug market is constantly changing, the drugs that are handed in also change throughout time, so that the checkers need to update their knowledge on substances, which also includes looking out for new research on drugs they are already familiar with. Being part of the drug checking project thus also requires or enables the checkers to learn about the general market trends, to continuously refine their understanding of drugs, and research the effects, risks, and safer use rules associated with new or uncommon substances.

While the checkers do their own research to stay up to date, sometimes they are not able to find any useful information on a specific substance. Even if they can gather some information about its properties or chemical structure, it is often difficult to find reliable sources for what effects a substance has on users. Since some of the clients of the drug checking service are extremely knowledgeable about drugs and even study a related discipline, the checkers sometimes ask them whether they can share some

information about a new substance, regarding both its pharmacological properties and effect. As Manuel told me:

"And every now and then there are of course also consumers who are extremely knowledgeable, especially the psychonauts, who are most likely to experiment with NPS, many of them are also actual chemists or doctors or pharmacists by training or are studying it [...] and that's where we learn something. And then it can also sometimes happen that we, that I say: Hey, now I've received this and that substance for drug checking, can you tell me something about it? And I think that's cool, if I know that, that I have these people, then it's actually a mutual learning. He's happy, and [...] we're happy too, because then it's such a mutual thing."

In this case, the checkers do not only consider the clients as knowledgeable about their own drug experience but also as professional experts in the field of chemistry or pharmacology. Manuel uses the conversation he has with clients to learn something about new substances that he did not know yet. In addition to that, he told me, he sometimes also asks how a user experienced an unresearched drug and how they would describe its effects and risks to include this information in the warnings they issue. This allows the checkers to receive information that is usually only accessible to people who have used a substance and cannot be found online yet, as the drug is too new. In that, the learning enabled through drug checking goes both ways as both the users and the checkers gain knowledge from the interaction. It is a space of "mutual learning", as Manuel put it.

Drug checking as practiced at the Z6 thus creates a learning space, where both clients and checkers exchange knowledge and experiences about drugs, the harm and effects of different substances, and how to use them more safely. Announcing the rest result is thus much more than merely 'announcing the test result'. Practicing drugs as contextual, the checkers aptly bring together the scientific version of the test result and the experiential, social, and cultural meaning that drugs can have for the user. In doing so, they resolve potential clashes between conflicting versions and create a space where multiple versions of drugs are valid and relevant, e.g., both how a drug feels to the user and how it is defined through the chemical analysis. In the framework of ontological politics, this coordination strategy is an instance of addition, which is when "different objects [are] added together and thereby turned into one" (Mol, 2002, p. 70). While this contextual understanding of drugs is also mentioned in other sources like the internet or harm reduction material, drug checking is special in that it allows users to reflect on and learn about drugs based on the test result of a specific substance that they want to use or have used. As Manuel put it, "without drug checking, the person can always say: No, that was the substance. And that is the huge difference, which allows us to work in-depth in a completely different way than before." In that, drug checking is a special kind of drug education in that it facilitates a user-centered, accepting, indepth, and concrete kind of learning by relating the test result to a user's personal understanding of it. Drug checking is thus a learning space, in which different kinds of expertise on and experiences of substances are aptly coordinated to make visible the relationality of drugs, allowing both users and

checkers to continuously learn and develop further their understanding of what drugs are and how to use them.

7.2.4 A 'safe' 'testing' and 'learning space' – Drug checking as a knowing space

7.2.4.1 The ontological ramification(s) of drug checking

Drug checking thus constitutes a knowing space, which provides a safe environment for users to bring their drugs and talk about their use, which enables the testing of these drugs by drawing on scientific expertise and tools, and which then allows the checkers and users to engage in a conversation about the meaning of the test result for a drug's effect and harmfulness. Before discussing the implications of drug checking on a wider scale, including its impact on users, I want to briefly recap the different knowing spaces that I have outlined so far and how they relate to each other. I will do so by outlining the 'journey' that drugs take and the different versions in which they are enacted as they travel through the drug checking process. To understand the impact of drug checking, it is important to keep in mind how drugs are usually practiced before they are handed in at the facility, which I outlined in the first part of the empirical chapter. While the mainstream understanding of drugs in Austrian society is defined by legal and moralizing discourses and practices, in users' own knowing spaces drugs often carry pop-cultural and social meanings. There are also users that primarily draw on risk-focused explanations to make sense of drugs and their user identities. What all users share, however, is the inability to know what it is that they consume, which increases the risks associated with drug use.

The first way in which drug checking influences this status quo is by providing a safe space, in which carrying drugs and talking about one's use is accepted and even encouraged. One ontological impact of drug checking is to actively keep out the illegal and moralizing versions and to make room for other ones, which influences how users feel and can practice drugs. Second, the testing procedure, which follows a standardized scientific method, turns the material drugs into the format of the test result, a process referred to as inscription. Throughout this process, the checkers, users, and chemists enact drugs in a chemical or scientific version that defines drugs according to their chemical components. Third, in the learning space, the checkers re-contextualize the scientific, standardized test result, make sense of it with the users, and discuss its meaning in light of their individual experiences and situation. Having access to information about the content of a specific drug enables users and checkers to reflect on the different aspects that shape a drug's effect and harmfulness, thereby enacting drugs as contextual. Moving through the process of drug checking and its safe, testing, and learning spaces, the drug is thus first stripped off its illegal and moralizing meaning to enable users to bring their drugs, then the social, cultural, or personal significance is removed as it is inscribed into the scientific format of the test result, which is, lastly, contextualized as the checkers and users explore the various factors shaping a drug experience and associated risks. Even though the contextual enactment of drugs is at the core of drug checking, as this is the understanding that the checkers encourage the users to practice, the other ontological versions of drugs (or the fact that they are kept out) are crucial, too, as it is their interrelation that enables the service.

Drug checking, and the knowing space it constitutes, is an assemblage of different discourses, objects, and people that are distributed across the three spaces that I have introduced as separate in the previous parts. These three aspects of drug checking can be considered knowing spaces in their own right, as they, for instance, contribute to the forming of new drug user identities (safe space) or the production of scientific knowledge (testing space). While each of these spaces fulfills a particular function within the assemblage of drug checking, they can only do so as they are part of the overall network and thus also depend on each other. In that, the knowing space of drug checking encompasses and depends on all of them to provide the service in the way it is done at the Z6. For instance, the safe space that is provided at the Z6 can only exist because the drugs that the users bring are then analyzed in an official laboratory as part of a harm reduction project. Without that, there would be no reason to grant drug checking this special legal status. Likewise, the testing space is dependent on users to trust the service and to hand in drugs that can then be analyzed by the scientists. Without the cooperation with the Z6, where users feel welcome and accepted, the lab would analyze different substances for other actors. The learning space further depends on both the safe atmosphere at the Z6 as well as the test result that is produced through the testing procedure since each of these spaces gives access to different kinds of knowledge. More specifically, the fact that users are and feel safe when they use drug checking encourages them to share their thoughts and experiences, while the chemical analysis provides scientific information about the content of the drug. Only by bringing together these two different versions can the drug checkers then make visible and discuss the contextuality of drugs with their clients. In return, the purpose of the entire project is to educate users about how to use drugs more safely, so that the learning space provides the legitimacy for the special legal conditions and the lab cooperation of the drug checking service. This shows that although there are different sub-parts of drug checking, the facility depends on all of these to provide its service to users.

Through this complex network of spaces, tools, people, and knowledges, drug checking enables the checkers and users to enact drugs as a combination of different aspects like the chemical composition of the substance, the user's mood and mindset, the material and social setting and method of use. As noted above, the contextual version integrates other drug versions into a coherent whole, thereby resolving potential clashes. The contextual version is thus special in that it is singular and coherent yet still allows for individual variation. While multiplicity is a feature of this version, as no context of drug use is the same, the narrative framework of drugs it provides is stable as only the different factors therein vary. Within this version, drugs are not only enacted as contextual regarding their ontology but also their value, as a 'good' drug is no longer only defined by its chemical composition, by how it makes a user feel, or by its social meaning, but by a combination of all these factors. After all, as Mol has argued, valuation is intricately linked to practices and thus to the ontology of things. Lastly, this version also comes with a different imagination of the drug user than, for instance, the illegal, pop-cultural, or

moralizing one. Instead of stigmatizing and criminalizing the users, it posits them as capable of actively shaping their use, and gives them the agency to influence, if only to some extent, the harmfulness and effect of a drug. Drug checking as a knowing space thus enables practicing drugs in ways that are usually prohibited or made impossible within the common regulation and framing of drugs in Austria, which has, as I argued throughout this thesis, significant ontological implications.

7.2.4.2 The impact of drug checking on users

While the clients of drug checking may not be aware of the various parts that constitute the drug checking service and the versions of drugs that are enacted throughout its processes, they themselves are one of the central actors within this assemblage. Moreover, the users are the reason that drug checking exists in the first place as the goal of the service is to make them use drugs more safely. The contextual enactment that the checkers practice and encourage is thus not an end in itself but a way to support users in reflecting on the risks of their use, its psychosocial dimensions, and how to reduce drugrelated harm. The most direct way in which drug checking does so is by enabling users to know what they consume, thereby preventing them from accidentally ingesting adulterated, mislabeled, or highly dosed drugs. All the clients I spoke to noted that receiving information about the content of their drugs was the main reason for them to come to the drug checking service, as they want to make sure "that there is no crap in there", as Leo put it. Using drug checking allows them to receive information that they are usually unable to obtain but which is crucial for safer use and thus directly linked to their wellbeing. Julian further used the information he got from drug checking to confront his dealer with the fact that the cocaine he bought was adulterated with Levamisole. He said that he "then actually went to where [he] got it from and told him, what the matter was." He jokingly added that he thereby made a "reclamation" and had "left a review, two stars." As this indicates, for users, the test result is not only a way to prevent the consumption of unwanted substances but also strengthens their position as consumers on the drug market, especially in relation to their dealers. The first and most obvious way in which partaking in drug checking affects consumers is thus by providing them with information about their drug, which they can rely on to prevent harm and ensure that the substances they purchase are of high quality.

Another aspect of drug checking that users noted as important to them is the education it provides on substances, their effects, and how to consume them more safely. Anyone using drug checking, for whatever reason, will also receive an in-depth drug education that is tailored to their level of knowledge and personal situation. This is an important aspect of the service since the education users receive at school or in other educational settings is usually perceived as inadequate if not counterproductive. Nora argued that "education plays an extremely important role" in the context of drug use and that one cannot blame users for using irresponsibly if they have never been educated about it. She said:

"And if it is simply not dealt with in such a way that one informs oneself [about a drug], but that one simply takes it, then I don't think the person really bears a responsibility for it, but it's rather just a bit like depending on how he or she gets introduced to it."

Costa also argued that, in contrast to what critics claim, drug checking, including the education it provides, has a positive effect on users

"because, as I said, at drug checking one gets informed about the risks of a substance, and it is often the case that one has no idea about what one has bought somewhere and that there may be substances in it that can be really harmful to one's health."

Drug checking gives users tips on how to consume and useful additional information that makes them aware of risks that they had not known before. Importantly, it does so in a non-condescending way as it values drug users as rational and capable citizens, which is how the people I spoke to also see themselves. The educational approach of drug checking is thus particularly accepted among users as it also enacts users differently from mainstream society. It thereby empowers users through respect and knowledge so they can take active decisions and, as Nora noted, take responsibility for their use and health.

While the clients come primarily for the test, they usually appreciate the additional information and advice they receive. Moreover, many users told me that they liked the personal conversation they have with the checkers since there are not many places where they can talk openly about their drug use. For some, discussing their use habits can be eye-opening as they may not be aware of how problematic their own use is since they do not have any reference point for how sensible drug use looks like. This was the case for Max, who described his drug checking experience as follows: "So, somehow it was kind of like coming back down to earth, because I realized that what I am doing is actually much less normal than I had thought." Through his continuous interaction with the checkers - he had used the service around 100 times already - he became aware of how harmful his use was and was then able to direct his behavior in a safer direction. The checkers also provide support for users that want to change or reduce their use, which some of their drug checking clients choose to do, even if this has not been their initial motivation to come. Max, for instance, took part in a regular counseling session and learned how to conceptualize and practice drugs differently to change from practicing a heavy, poly-drug use to what he described as a more informed and reflective one. Just like Max, Julian also initially came to only get his drugs tested but after the conversation with the checkers decided to take part in a program to reduce his cannabis consumption. Partaking in drug checking can thus also be the starting point to work on one's use habits in a more long-term and in-depth way, if one chooses to do so.

As these examples show, the clients of drug checking experience the service very positively and many find that it has had a practical, educational, and personal impact on the way they think about and consume drugs and see themselves as users. For some, these effects of drug checking can be rather subtle while for others they may be life-changing, as was the case for Max. When I asked him what his drug use would look like if he had never heard of drug checking, he answered, quite drastically: "So, I think

I would have a bad use practice and maybe, uhm, I would be dead." For him, using drug checking, engaging in the conversation with the checkers, and learning to know and use drugs differently made a big positive impact on his use behavior, health, and life. Although he initially only came for the test, drug checking and its accepting and contextual enactment of drugs eventually made him slowly change his understanding and practice of drugs. The impact of the service thus goes beyond the level of the test result and drug education and operates on an ontological level that starts from the personal and psychosocial situation of the user rather than imposing a stigmatizing and criminalizing framework on them. This is possible, as outlined before, since the contextual enactment leaves enough room for individual differences and acknowledges the user's perspective as valid. How we as a society choose to practice drugs is thus not only an ontological question but has actual impacts on people's lives as it can exacerbate or reduce drug-related harm - and is thus a political question.

8. Discussion and Conclusion

I started my research with an interest in the different meanings that drugs have in our society, for instance as illicit goods, as something dangerous and bad, as something with certain social and cultural connotations, or as chemical compounds. I was puzzled by how drugs could mean so many different things while still being considered a stable and coherent concept, which we use to talk about 'drug policy', 'drug education', or 'drug-related harm', for instance. Based on this general interest, drug checking attracted my attention because it seems to contradict the conventional ways in which drugs are dealt with in our society. I thus decided to study a drug checking project in more detail, including its organization, practices, and approach to drugs, to understand what it takes to establish such an exceptional service that offers users to test drugs that they are technically not allowed to own in the first place. I was interested in how drugs are understood, valued, and handled at the facility, and what influence participating in drug checking has on users. To make sense of the relation between the sociomateriality of the service and the ways in which people enact drugs through it, I drew on Mol's ontological politics and combined it with the concept of knowing spaces. Throughout my fieldwork, which I conducted at the drug checking facility Z6 in Innsbruck, I had the chance to get to know the project and its processes, and to conduct interviews with the checkers working there, the clients of the service as well as the leader of the scientific group conducting the analyses. I learned about how users experience and deal with the dominant attitudes towards drugs in society, about the network of actors, institutions, and things that constitute and make possible drug checking, and about the different versions of drugs that are practiced within this knowing space.

In this last chapter, I want to take a step back and revisit my empirical findings regarding each of my research questions and explore how my findings contribute to the academic discourses I drew on. I will further discuss the relevance of my thesis from a more practical perspective and offer some thoughts on its implications for drug education and policy. I will conclude by outlining which aspects of the topic I was not able to address in this thesis and discuss potential avenues for future research.

8.1. Revisiting the research questions

8.1.1 The illegal and moralizing enactment of drugs and its impact on users

My first sub-question addressed the ways in which drugs are usually practiced in Austrian society and how this shapes users' understanding and use of drugs. As my interview partners told me, the most pervasive knowing systems they encounter are the illegal one, which outlaws drugs, and the moralizing one, which stigmatizes their use and imagines users as irresponsible people. Both of these significantly influence the understanding and valuation of drugs that people grow up with while also constituting the space in which people consume drugs, even if they disagree with these dominant narratives. While the moralizing enactment of drugs as something bad can be partially circumvented by choosing different social groups, the criminalization of drugs is enshrined in the law and has material consequences for

users. The Austrian dominant discourse on drugs is thus similar to the Swedish one, which Rødner (2005) describes as "construct[ing] all illicit drugs as social evils", thereby creating an environment "that does not accept that [normalized drug use] is possible" (p. 333). Despite the dominance of the illegal and moralizing versions of drugs, there are many people who still consume drugs but do so in secret to not be caught by the police or others. The mainstream narratives and handling of drugs affect the use practices of users in that they force them to purchase their substances on the black market and to consume them in a way that is less likely to be seen. This includes using drugs in private right after buying them to not carry them around for too long. Moreover, the dominant enactment of drugs as illegal also severely limits the information that users can have about their substances, as they are unable to know the content of their drugs. The tendency in Austrian mainstream society to moralize drug use, which is practiced through drug education in schools, for instance, further has the result that many users grow up with little practical and use-centered knowledge of drugs. This leaves them unaware of the complex personal, mental, and physical effects of drug use, its actual risks, and how to minimize them.

Since mainstream society lacks a narrative on drugs that appeals to users, they make sense of and practice drugs in their own alternative knowing spaces, for instance within their social circles, subcultures, or online. Drawing on the pop-cultural representation of drugs, some users, for instance, practice drugs as a sign of protest, in a glorifying way, and as part of their identity as a rebel. In other instances, drugs are enacted as a marker of one's social role and personality, which can contribute to positive collective experiences but also pressure people to consume even though they do not want to. The internet constitutes another source of knowledge that users draw on to educate themselves about illicit and licit drugs alike and find resources that disprove the claim that illicit drugs are more harmful than, for instance, alcohol. This allows them to enact drugs in line with their self-understanding as rational and responsible people in contrast to the common 'junkie' image that is reproduced through the moralizing discourse. These findings support Dwyer and Moore's (2013) claim that the mainstream versions of drugs, in their case methamphetamines, do not conform to how users themselves enact them. The observation that users turn to other knowing spaces to make sense of drugs further conforms to Bancroft's (2017) argument that online forums, such as the one of a darknet crypto market that he studied, play an important role for users to develop a shared understanding of drugs and their risks, and how to manage them. Even though the legal and cultural infrastructures of mainstream society are powerful and pervasive in shaping people's understanding of drugs, users still find ways to challenge these narratives and to practice drugs in ways that are in line with their identity, beliefs, and experiences. Importantly, this does not necessarily lead to safer use as dynamics in user groups can also lead to more harmful behavior.

While users can reclaim some level of agency over the meaning of their use and identity, there is one central aspect that they cannot influence, namely what it really is that they are consuming. Even within their own knowing spaces, users are thus unable to take full control over their use and are forced to consume with significant additional risk and uncertainty. Lacking actual information about their

substance, users need to rely on their feelings to assess a drug's quality and can only estimate its content after consuming it. Thus, also users' valuation and assessment of a drug and its effect is influenced by the illegalization of drugs as they have no means to disentangle the contextual factors that play into their experience. The dominant illegal and moralizing enactments of drugs thus shape how users understand and practice drugs in that it limits what they can know and makes them purchase, store, carry, and use drugs in ways that prevent conflicts. Although the conventional approach to drugs is often claimed to reduce drug-related harm by keeping people from using altogether, the findings of this research indicate that this approach does not work and actually increases the risks of drug use. After all, this is exactly why there is the need for projects like drug checking that try to ameliorate the harmful situation for users that is created and enforced via the mainstream enactments of drugs.

8.1.2 The socio-materiality of drug checking

The second sub-question of my thesis focused on the socio-material network of drug checking, its components, and how they relate to each other and the societal context. I have addressed this question in the second part of the empirical chapter as I disentangled the different parts and processes that constitute drug checking and analyzed how each of them contributes to the service. I have identified three main aspects of the drug checking facility which, I have argued, can be conceptualized as knowing spaces in their own right, namely drug checking as a *safe space*, a *testing space*, and a *learning space*. Investigating the material setup, people, discourses, and practices involved in each of these spaces allowed me to understand what drug checking in this particular instance at the Z6 is and what went into establishing the service. While I have discussed the socio-materiality of drug checking in relation to the versions of drugs that people practice within these spaces, which is the focus of the third sub-question, I will only focus on the network of drug checking at this point to specifically answer the second sub-question. This allows me to highlight the usefulness of each of these conceptual lenses - one focusing on networks and the other on practices - for studying and making sense of drug checking.

The safe space of drug checking connects actors, institutions, and discourses that allow for the running of the service in the first place. These include politicians and their will to establish a drug checking facility in Innsbruck, financial support, and the legal confirmation that within this space illicit drugs can be owned, received, and sent to the laboratory for testing. Other relevant actors within this network are the police, who agreed to not interfere with the work of the Z6, and the Institute of Legal Medicine, where the drugs are tested. Apart from these institutional relations, the location of drug checking in a calm street and as part of a youth center with a friendly and welcoming atmosphere further contributes to creating a space, in which users feel and are safe to bring their drugs and talk about their use. One factor that helped legitimize the service was the growing number of drug accidents in the region, which made visible that adulterated and mislabeled substances constitute a significant health risk that drug checking can help reduce. The first part of the drug checking assemblage, which makes it a

safe space, thus comprises political actors, financial means, legal expertise, discourses on health risks and harm reduction, as well as the material location, setup, and atmosphere of the facility at the Z6. The fact that establishing such a service on the local level in Innsbruck is desired and possible also indicates that the mainstream understanding of drugs is not necessarily shared by all politicians.

The testing space, in which the scientific analysis of the substances takes place, is the second part of drug checking that I analyzed. This space is more bounded in that it is largely identical with the laboratory at the Institute of Legal Medicine in Innsbruck, and includes the equipment, scientists, methods, and knowledge of the Bioanalytical Mass Spectrometry Group. Although I did not visit the laboratory myself, I learned about its processes from my interview with the chemist Oberacher. As he told me, the analytics team uses their standard methods for the analysis of small molecules, thereby drawing on and extending their in-house spectral library. This scientific process is time- and cost-intensive and requires a lab with suitable equipment and a team with the corresponding know-how. Running a drug checking service with such a high-quality analysis as the one in Innsbruck is thus only possible if there is a lab infrastructure in the area that one can rely on. The testing process does not only include the lab analysis, however, but begins already when users bring their drugs and the checkers prepare, photograph, and weigh them. Thus, the users and their drugs, as well as the checkers and their tools and knowledge are also essential parts of the testing space. The role of the users in the testing process also shows how the different spaces that I have identified depend on each other as the testing is only possible because the users feel comfortable and safe enough to come to the facility in the first place.

The third aspect of drug checking that I discussed in detail is what I call the learning space, which comprises all elements present in the situation when the checkers announce the test result and discuss contextualize it with the users. This part of drug checking builds upon the safe and the testing space, since this is where the test result is produced that is then communicated and discussed. The learning space is primarily constituted by the psychosocial expertise and drug knowledge of the checkers that is needed to discuss the result in a way that makes sense to the user and is in line with their own experiences and expertise. The users' perspective and knowledge are equally important, however, as it is through the exchange between these two parties that learning takes place. On a material level, the learning space is situated in the rooms of the Z6 and thus rests on the infrastructure I have outlined when discussing the safe space. The most important aspect of this part of drug checking is the interaction between the checkers and the users, which is why I will elaborate on the learning space in more detail below when discussing people's practices of drugs, as addressed in the third sub-question.

To make sense of the complex network that constitutes drug checking and its different functions and processes, I have divided it into three spaces. None of these can exist on their own, however, and drug checking as practiced at the Z6 in Innsbruck relies on all of them together to run the service as they do. While zooming into each of these parts allowed me to analyze them in detail, in practice, they are all part of the same network and co-constitute each other. Interestingly, even though drug checking is a service that allows for the testing of illicit substances, and thus challenges the conventional enactments

of drugs in society, its socio-material infrastructure is strongly entangled with existing institutions, like the laboratory, the youth center, and politics. This shows that setting up such a service requires the support and will of powerful actors as establishing and running a drug checking facility is a complex and costly endeavor. Moreover, the entanglement of drug checking with existing infrastructures shows that, somewhat paradoxically, drug checking is well-integrated into the society, whose approach to drugs it questions and seeks to correct. While this comes as no surprise as the harm reduction measure is statefunded, this finding is still interesting as it shows that even within the same network, in this case the network of Austrian or Innsbruck society, seemingly conflicting versions of drugs can exist next to each other if they are successfully distributed.

8.1.3 The multiplicity of drugs as practiced through drug checking

The last sub-question asks how the actors within the socio-material network of drug checking conceptualize, value, and practice drugs, and whether participating in the service has an impact on users. This question addressed the ontological ramifications of the drug checking assemblage or, put differently, focuses on the 'knowing' in knowing spaces. Being interested in the multiplicity of drugs, I wanted to learn about which versions are enacted by the people involved in drug checking, how these are coordinated, and what the implications they have for how users can know and practice drugs.

The first ontological impact of drug checking is that it actively rejects the illegal and moralizing versions of drugs, thereby creating a space where users do not feel misunderstood and criminalized, which makes room for other ways of enacting and valuing drugs. Non-enacting these versions, the checkers interact with the users as normal and reasonable people rather than as criminals or junkies, which sets the stage for all following practices and conversations. It further indicates how closely tied the ontology of drugs is with that of the drug users, something Mol describes as an interference. Instead of punishing the ownership of drugs, at the facility, users are encouraged to bring substances; which are handled, looked at, and discussed like ordinary goods, without denying their potential risks, however. The version that is practiced in the safe space is thus one that is defined by what drugs are not, namely not something illegal, morally wrong, or inherently dangerous. While people often keep their drug use secret as they fear that their understanding of drugs would clash with that of the other people, at the drug checking facility they can talk openly about their experience. I referred to this as an accepting and normalized enactment of drugs. This open attitude at the facility and the fact that users are encouraged to bring drugs instead of being punished for it is something very special in Austria, which is why some users find it hard to trust drug checking as the dominant versions are so pervasive and powerful. Drug checking as a safe space thus enables people to practice drugs as something that is not illegal and not bad, thereby making room for accepting and reflecting on users' enactments of drugs as well as for the versions practiced through the following steps of the drug checking process.

The first of these steps is the transformation of the users' material drug into a standardized scientific test result, a procedure that is enabled through the network that I have described as the testing space. Disregarding users' own understanding of drugs, through the testing process their substance is practiced as a sample for scientific analysis and translated into the scientific version of drugs. Through this process, which begins as the users share information about their substance and the checkers prepare it for analysis, the personal, social, and cultural meaning of the drug is removed and only the data that is important for the scientists and the Z6 remains. The users are thus also involved in enacting drugs in a scientific manner, so that when they leave the Z6, their drug is already ontologically different from when they came. The most important process of the testing takes place in the laboratory, where the scientists value and treat the substances they receive from the Z6 in the same manner as any other samples they analyze. Through the chemical analysis, another layer of meaning is removed from the drug, as its price or assumed content is irrelevant to the researchers, and new meaning is assigned to it, namely its chemical composition, which is how the scientists know drugs. Practicing and modifying the drug with the help of high-tech equipment and technical knowledge, thereby enacting it as a subject of scientific investigation, the researchers inscribe the material drug into a new standardized, readable format, which can be disseminated and interpreted more easily. The drug that enters the lab thus leaves it in an immutable and mobile format and with different ontological meaning.

The test result is then sent back to the checkers whose task is to interpret it and make it meaningful for users. Since the test result in itself defines drugs based on their chemical compounds, it gives information about their content but not about how they work on the body and how they should be used to reduce risks. Before the drug enters the learning space, the checkers thus enrich the result with general information on the effects and risks of the drug and classify it according to the dose thresholds they decided to use. The version of drugs that the checkers practice through this interpretative work still primarily relies on the scientific test result, but complements it with additional information, which, however, does not yet include the situation of the individual user. They enact a 'pre-contextual' version, so to say. Although this interpretation of the test result is, strictly speaking, not part of the testing, I still decided to conceptualize it as part of the testing space, as it contributes to making the test result that is then discussed with the users. Within the testing space of drug checking, the users, checkers, and scientists thus enact drugs in a more or less scientific and chemical version, which allows for the production of new knowledge on the drugs, most notably in the form of the lab test result and its interpreted version.

While the interpretation is one way in which the checkers contextualize the test result, they also do so in a more in-depth manner when it is announced, made sense of, and contextualized with the users. As argued by Felt and Davies (2020), presenting and explaining scientific knowledge in a non-scientific context requires considerable work and knowledge about the audience to make it meaningful in a respective setting. In the case of drug checking, the checkers do so by adapting the information about a drug, its effect, and the safer use rules to the level of knowledge and situation of the user. Contextualizing

the test result and its meaning for a particular use situation or experience, they can further show that the harm and effects of a drug are neither solely defined by how it feels nor pre-determined by its chemical composition as identified in the lab. Instead, the checkers practice drugs as contextual, i.e., as also shaped by the context in which they are used. In the contextual version, the harm and effect of a drug is conceptualized as the result of an interplay of various factors, including the mode and frequency of use, the material and social setting of drug use, and the mood, personal constitution, and preferences of the user. In the learning space of drug checking, the checkers encourage this enactment by setting the test result in relation to the personal experiences of the users to then reflect together on how these two versions of a drug relate to each other and what their potential mismatch indicates about the complexities of drug use. In doing so, they aptly combine and reconcile different enactments of drugs, such as the scientific and the experiential one, into a coherent and stable version.

Importantly, this does mean that drugs are singular. On the contrary, when enacting drugs as contextual, the same drug can be something different to different people or in different instances, indicating that the contextual version is in itself multiple. Being able to integrate different versions of drugs while at the same time allowing for and acknowledging individual variation in how people know and experience drugs is, I believe, one of the great strengths of this version. Enacting drugs as contextual also means valuing and taking seriously the expertise and experiences of users, as they play an important role in creating the effect, harm, and meaning of a drug. As outlined before, an accepting and respectful attitude towards users is a central feature of the drug checking service Z6. In the learning space, users' knowledge is also considered relevant when it comes to the modes of action and effects of novel drugs and other questions that the checkers cannot answer by consulting the literature. The contextual version thus also comes with a different understanding of drug users than the illegal or moralizing ones as it values users' individual experience and knowledge and thereby challenges the conventional understanding of who counts as an expert on drugs. The learning space that is created through drug checking is thus a space of mutual learning, in which the checkers and users exchange and produce knowledge about the multitude of substances, use practices, individual preferences, and drug experiences.

The last part of my research question focused on whether participating in drug checking influences how users know and practice drugs. Even though it is difficult to assess what exactly users do when they leave the facility, they certainly have more knowledge than before and are able to reflect on their use in a way that is usually inaccessible to them. At the drug checking facility, users also handle drugs differently than they usually can, including showing them and laying them openly on the table, which further takes away the stigma and illegality usually assigned to them. In my research, I identified three main impacts or functions of drug checking: First, it allows users to know the content of their drugs, second, it provides drug education in a user-friendly and personalized manner, and third, it enables users to reflect on drugs, their harm, effects, and psychosocial ramifications in new ways. In that, I argue, drug checking offers the positive, yet risk-sensitive narrative of drugs and drug use that is

missing in mainstream society. Partaking in drug checking is thus much more than receiving a test result or learning about the effects and risks of drugs. It means entering a space that allows for talking about and treating drugs in a way that is usually prohibited and inaccessible to users. It means being part of a socio-material assemblage, in which the drugs one brings are enacted and valued as scientific samples and translated into a test result. It means engaging in a conversation with the checkers, who aptly draw together various versions of drugs to make visible their contextuality and to reflect on the meaning of the test result for one's own situation and experiences. It means practicing drugs as something contextual, as something that is not solely predefined by chemistry or culture but also constituted by how one practices and consumes it. Taken together, drug checking gives users the information, support, and, most importantly, agency to actively shape the safety and experience of their drug use.

8.2. Situating my findings within STS

I approached the case of drug checking by drawing on STS literature that helped me conceptualize my empirical findings and situate my research endeavor within the field. I hoped that my research would not only refer to these strands of literature but also contribute to them by revisiting and expanding on STS insights based on this case study of drug checking. On a conceptual level, I combined Mol's (1999, 2002) ontological politics with Law's (2016) notion of knowing spaces, which allowed me to understand the socio-material network that constitutes drug checking and the versions of drugs people enact in this space. While Mol's conceptual approach is grounded in Actor-Network-Theory and rests on a sensitivity toward practice and materiality, the lens of knowing spaces was particularly useful to study a relatively bounded space like the drug checking facility and its sub-spaces, including the laboratory. This combined conceptual framework turned out to be helpful for studying drug checking and the work that goes into establishing and maintaining spaces in which things are practiced and known differently than in mainstream society. While I initially approached drug checking as *one* knowing space, I soon realized that it is more complex and heterogeneous than I had initially thought. I thus decided to identify subknowing spaces within the main knowing space of drug checking, which allowed me to study in detail the processes and practices in each of them while also exploring their interdependencies. The notion of ontological multiplicity further enabled me to make sense of the fact that even in one space, in this case drug checking, people may enact different versions of drugs and to understand the coordination strategies needed to prevent clashes and misunderstandings, for instance by separating the lab from the rooms of the youth center or by integrating multiple drug enactments into the contextual version. Combining the sensitizing concepts of knowing spaces and ontological politics thus proved useful for my research on drug checking and, I believe, can also help investigate the socio-material setup of other facilities or institutions and the ontology of objects known, enacted, and valued therein.

One space within the drug checking assemblage that I studied in more detail is the laboratory at the Institute of Legal Medicine in Innsbruck, which performs the analyses for the drug checking service.

Within STS literature, the laboratory is a space that has gained considerable attention due to its interesting position as seemingly separated from the world while at the same time producing representations and facts about it. While I was not able to observe the processes taking place in the lab, I learned about them through the interview with the leading chemist of the analytics team, who told me about how he and his colleagues understand and handle drugs. In line with STS research, the laboratory within the drug checking network holds a peculiar place in that it is essential for the functioning of the service while also being largely disconnected from the processes that take place outside its own walls. As Oberacher told me, the version of drugs enacted by the scientists is one grounded in chemical knowledge that defines drugs according to their molecular structure while all other meaning that users or checkers attribute to a substance, for instance where it was bought or how to consume it, is irrelevant and actively kept out. The practices taking place at the laboratory are further interesting because they enable the transformation of the material substance into a standardized and readable test result, thereby translating a 'street drug' into a so-called "immutable mobile" (Latour, 1987, p. 227). Latour and Woolgar (1979) describe this process as an inscription. When viewed through the lens of ontological politics, this inscription process also modifies the ontology of a drug by changing how it is known and valued, even though both the material and the inscribed version coincide and add up to the scientific enactment of drugs. Conceptualizing the laboratory as a knowing space in its own right thus helps understanding how the test result gets produced and opens the 'black box' of the scientific analysis at least a little.

The laboratory, and scientific knowledge production in general, has often been criticized as operating from a privileged, seemingly universal position that fails to account for the diverse standpoints and concerns of people, thereby silencing the voices of the marginalized (cf. Haraway, 1988; Harding, 2008). In the case of drug checking, however, the lab is integrated into an assemblage that works with and for drug users, a group that is usually criminalized and stigmatized. This indicates that rather than looking only at the locus of scientific knowledge production, which often is a laboratory, one should consider the network in which it is situated, where the scientific findings travel, and how they are interpreted and put into relation with other versions of the object in question. Since the lab is wellintegrated into the assemblage of drug checking, there are processes in place that allow for the translation and contextualization of the scientific information back into the users' world. This work is performed by the drug checkers who make sense of the test result together with the clients and reflect on its meaning for their personal use, which is a process that can also be understood as science communication. In doing so, the checkers aptly set the scientific knowledge in relation to users' experiences and expertise and are thereby able to explain the relevance of the test result without silencing or devaluing the perspective of the user. Again, Mol's ontological politics helps conceptualize this process as a successful coordination of different versions, which are combined or added to form the coherent contextual enactment of drugs. Since this interaction between users and checkers thus allows for enacting drugs in new ways, it is also a space where new insights are generated. This case thus shows that (scientific) knowledge can also be used and produced to actively support marginalized people like drug users if the socio-material network through which the information flows and within which it is made sense of is set up accordingly.

While drug checking is a way to empower users through knowledge, reflection, and support, the structures that govern drugs in mainstream Austrian society do the opposite. As STS scholars like Rajagopalan, Nelson, and Fujimera (2016) and Bowker and Star (1999) have shown, the classification of things and people in society, such as through laws or cultural norms, can have harmful effects on those that are thereby defined as deviant. My research has shown that this is also the case for drugs that are classified as illegal and socially unacceptable, which are attributes that are then also applied to those using them. This is a good example of how the ontology of one object, in this case drugs, is entangled with that of others, such as drug users, what Mol describes as an interference. The mainstream approach to drugs does not only influence the public image of users and their self-understanding but also affects them on a material level by limiting the spaces in which they can purchase or consume drugs and by punishing them with fines or other measures if they get caught with drugs. Despite the prevalence and power of these classifications and regulations, users still find ways to make sense of drugs in their own way and to assign meanings to them that are in line with their understanding and identity. There is a considerable body of STS work on the perspective of patients and users and how they resist the dominant structures that are imposed on them, including Epstein's (1998) work on AIDS activism or Wynne's (1996) study of Cumbrian sheep farmers. Sometimes, such user or patient movements are successful in that they challenge and change existing systems. Although drug checking does not influence Austrian drug law as such, it can still be considered an achievement of the harm reduction movement and drug user activism, whose work contributed to establishing a space that represents the interests of the users. The very existence of drug checking can be understood as challenging the conventional approach to drugs in Austrian society in that it makes room for and values the views and experiences of those that are usually silenced and considered deviant. In other words, it makes visible that which versions of drugs we enact is a choice, even if sometimes not a straightforward one (cf. Mol, 1999), and that this choice is indeed political and has significant implications for the safety of users.

This research on the drug checking facility in Innsbruck thus ties into many discourses and sensitivities within STS. While the multiplicity of drugs and the political significance of choosing which versions to enact was the starting point of my interest in the topic, taking a closer look at the sociomaterial network of drug checking also allowed me to learn about the work that goes into establishing such a service and the knowing practices it enables. Through my ethnographic observation at the facility and the interviews with different actors, I learned that drug checking does not only allow users to test their substances but also provides drug education in a user-centered, practical, and reflective manner that conceptualizes drugs as contextual. In that, it has ontological implications for how users can understand and consume drugs. Drug checking is thus an interesting practice and space that integrates numerous kinds of expertise, objects, people, and valuations, and thereby enables users to take agency over their use practices, safety, and health. My case study thus illustrates how power, knowledge, and

our ontological and normative understanding of the world hang together, and how crafting alternative socio-material networks like drug checking can challenge dominant societal structures and make room for new, and potentially better, ways of making and knowing reality.

8.3. The relevance of my findings for drug policy and research

My findings are not only interesting from an STS perspective but also relevant in relation to discourses on drug policy, harm reduction, and education. Speaking to different actors within the drug checking assemblage, I learned about users' experiences with the criminalization and stigmatization of drugs, what kind of drug education they have received and how they and their friends use and understand drugs under the current conditions. All the users I interviewed were dissatisfied with how Austrian society views and governs drugs since current regulations force people to buy their substances on an uncontrolled black market and to consume in secret without adequate education. The illegalization of drugs actively denies users knowledge about their drugs and thereby increases the risks of their use. Due to the stigma associated with drugs, many users do not speak openly about their use, which moves much of the conversation on drugs into their social groups or the internet, where users find other ways of meaning-making. While this gives them some agency over their identity and use, the social and popcultural associations with drugs can also lead to peer pressure, a general unawareness of potential risks, or deliberately harmful use practices. Although the current drug policy approach is usually claimed to protect the population from drug-related harm, it creates a setting that makes it impossible to consume more safely and thus leaves no choice for people who want to use except doing so in a more risky manner. In that, it *makes* the substances more harmful that it claims to outlaw *because* they are harmful. Importantly, this is not to deny the pharmacological effects of drugs and their addiction potential but to argue that drug policy itself can exacerbate or help reduce such risks. Conceptualizing drug-related harm through the lens of ontological politics thus not only allows us reflecting on the multiplicity of drugs but also shows the political significance of choosing which versions to enact, especially on the macro level of law and politics. To craft a drug policy and a societal climate that can reduce the risks of drugs, one thus also needs to take into account the ontological impact that the policy itself has on shaping what drugs are and how they are used.

Attending to societal macro structures is important since the drug education that is provided in schools, as my interviewees told me, usually perpetuates the mainstream narrative of drugs and drug use as illegal and bad. Rather than highlighting the complexity and contextuality of drugs and giving users practical tips on how to minimize risks, educators often present drugs as inherently harmful. Sometimes, the risks of drugs are exaggerated or misrepresented, a strategy commonly referred to as scare tactics. Drug education thus focuses on why to not use drugs rather than exploring how, if one chooses to consume drugs, to do so more safely. This is not only unhelpful for drug users, but it also diminishes their trust in the overall information provided by authorities when their own experiences do not match

with what they are told. As I learned, the checkers at the Z6 had to slowly gain their clients' trust in their service by creating a welcoming and accepting atmosphere and adopting a user-centered and non-judgmental approach. Instead of discussing drugs in a way that potentially contradicts users' understanding of drugs and themselves, the checkers are open, listen to their clients, and take seriously everyone's individual perspective, which allows them to deliver an education that is meaningful to the respective user. To reach users and to encourage them to reflect on their use, drug education thus needs to take into account their views and work *with* and not against them. Drug checking as it is practiced at the Z6 offers a good example of what user-centered, realistic, and sensible drug education can look like. Considering that the majority of people in Austria does not have access to such a service, or may not consider going there, it is crucial to also rethink the ways in which drugs are discussed at schools and in other educational settings, so that people can make well-informed decisions about whether and how they want to consume psychoactive substances.

While better drug education is certainly an important factor in reducing drug-related harm, it has significant limitations if not combined with a testing service. Even if users are knowledgeable about the modes of action, effects, and risks of drugs in theory, they can only rely on this expertise in practice when they know what they are consuming. The testing is thus one central aspect of drug checking that cannot easily be replaced by other educational or harm reduction interventions. Drug checking not only gives users access to knowledge about their drugs that they are otherwise denied, but it also enables them to reflect on their drug experiences and to learn about the various factors that contribute to what a drug is in a given instance, how it feels, and how harmful it is. It thus constitutes a harm reduction measure that stands out from other initiatives in that it provides concrete and user-centered information, which is embedded into an assemblage of practices that enable and encourage users to understand drugs as contextual. Although drug checking supports its clients in developing a reflective and sensible approach to drugs, it can only offer its service to a limited number of people who live in proximity to Innsbruck and have the resources to come. The vast majority of users, however, has to continue finding their own strategies to understand and practice drugs within a legal and societal setting that leaves no room for something like normal and reasonable drug use. While my findings thus highlight the positive impact of drug checking on users, they also show the limitations of such a local project, and how risky drug use still is for people who are unable to get their drug tested. Despite the importance of harm reduction measures like drug checking and their value for individual users, there needs to be structural change on a political, legal, and socio-cultural level to support and protect users on a larger scale.

As I have argued throughout my thesis, drugs are not a stable thing and their effects and harm is not solely predetermined by their pharmacology also influenced by how practice and consume them. Rather than clinging to the idea of drugs as singular and stable, our society should work on nurturing a culture and understanding of drugs that does justice to their complexity and contextuality and gives users the knowledge and skills needed to be able to shape their use experience and reduce drug-related harms. Put differently, instead of locating the harm solely within and illegalizing the material drug, we should

understand drugs, and their effects and risks, as also shaped by practice, and thus as ontologically multiple and plastic. Again, this does not mean that a drug's harm and effect are not dependent on its chemical and pharmacological properties but that these aspects are only some among many other contextual factors, including the macro structures one consumes in. While risky use practices are often blamed on individual users, my findings indicate that harmful drug use, or the harmfulness of drugs, is also a structural problem that is (re)produced through the political, legal, and social infrastructures that constitute the knowing spaces in which users are criminalized, stigmatized, and denied agency over their use. This is in line with Hartogsohn's (2017) argument that the societal environment, including "factors such as values, beliefs, media coverage, drug laws, social trends, and cultural discourse elements" (p. 10) can significantly shape users' drug experiences, which he therefore describes as the "collective set and setting" (ibid.). Conceptualizing drugs as multiple, as I did in this thesis, thus makes visible the limitations of current drug policy in protecting the health of drug-using citizens and indicates that crafting the legal and societal changes needed to enable safer use requires changing how we understand and practice drugs on an ontological level. In that, I hope that my research on drug checking contributes to discourses on drug policy and education by showing the positive impact of drug checking and the value of its contextual approach to drugs.

Lastly, my research also has conceptual and methodological implications for the field of drug studies as it shows the need for attending to local specificities and differences when studying drugrelated health interventions like drug checking. As I have argued, drug checking is not a predefined and fixed service that looks the same in every instance but a socio-material network that draws on and is entangled with local institutions, discourses, and people. Thus, every drug checking project will be different since the conditions it is embedded into, its processes and practices, as well as its goals vary across local contexts. This is not only the case for drug checking, however, but applies to every health intervention, as a direct implementation from theory into practice is never possible. When analyzing or evaluating a harm reduction measure or policy, it is thus important to acknowledge its local context and specificities and to qualify one's findings accordingly. As Rhodes and Lancaster's (2019) argue, "interventions are never fixed nor stable or universal but always in process as matters of becoming" (p. 6), and it is thus crucial to attend to the local setting of the project one is studying. My research on drug checking thus not only highlights the value of drug checking, but also underlines the importance of paying attention to the socio-materiality of health interventions and their ontological implications more generally. In that, a greater sensibility to the local variations among different instances of the 'same' harm reduction measure is needed, as the setup, approach, and impact of the drug checking facility at the Z6, and the versions of drugs practiced therein, may differ from other ones.

8.4. Limitations and outlook

In this last part of my thesis, I want to discuss some of the limitations of my research and focus on aspects of the topic I was not able to address. I have already touched upon some of these points in Chapter 5 when introducing my methodological approach. The first limitation of my study is that I focused on one drug checking facility only. As noted, there is great variety in how drug checking is practiced in different local contexts, so that the findings of my research at the facility in Innsbruck only hold for this particular context and may not apply to other instances. While focusing on one facility is in some way a limitation, it is also a strength as it allowed me to investigate the processes and practices of one case site in detail and to give a more nuanced account of it that attends to the local conditions. Still, it would be interesting to compare the approach of drug checking in Innsbruck with that of other facilities and to learn about whether and how specific aspects of the service, and their variations, influence how drugs are practiced by checkers and users. A comparative angle would further allow researchers to understand whether there are regional differences in how drugs are consumed and understood in different countries, cities, or user groups, and how a drug checking facility needs to be designed to take these into account. Such a comparative investigation of drug checking and its ontological impact would offer interesting insights into the multiplicity of drugs on yet another level and could thus be an interesting topic for future studies on drug checking.

Another important limiting aspect of my research that needs to be considered is that the group of users that participates in drug checking is not representative of the population of drug users in general. The drugs tested at the facility are synthetic ones that are commonly used for recreational purposes, which usually does not include cannabis and opiates. The user group targeted by the service is commonly described as recreational and occasional users and most of the people coming to the facility have the time and resources to think about the safety of their drug use. Moreover, they are likely to have been interested in harm reduction already before using the service, otherwise they would not consider it necessary to test their drugs. It is thus likely that many users practice and understand drugs very differently from the ones I have interviewed, including people that are dependent on a substance, people that primarily consume opiates like heroin, or those that only smoke cannabis, who are not in the target group of the service. While my research gives insight into how the clients of drug checking who I spoke to experience the societal regulation and valuation of drugs, it is important to keep in mind that there are multiple other living situations, experiences, and thus enactments of drugs that I have not covered. Further research, potentially on harm reduction measures that target different user groups, is thus needed to get a better understanding of the ontological implications of drug policy and health interventions for other user groups. This would also allow exploring the intersection between the criminalization and stigmatization of drug users and other forms of discrimination that they may experience on a social, cultural, or economic level.

While one of the aims of this thesis was to explore the multiplicity of drugs, I have largely abstained from discussing the different substances that people use and bring to the facility, i.e., I have not differentiated between an MDMA tablet, a cocaine sample, or an NPS. I have also not explored how the ontology of drugs, and people's ways of using and understanding them, differs depending on the specific substance in question. I decided to not attend to the differences between drugs or drug groups as this would have exceeded the scope of this thesis. Although this may seem odd, especially since my findings challenge the singularizing narrative of drugs and highlight their multiplicity, I do not consider this problematic. After all, I was interested in how people practice drugs, a well-established category in our society, rather than how they enact cannabis or MDMA. Nevertheless, I believe that research on the ontology of different substances would be highly valuable and allow for a more nuanced discourse on the ontological politics of drugs and drug policy, thereby further deconstructing the idea that 'drugs' is something singular and stable. As different substances come with different narratives and social meanings and produce different effects, such a research endeavor would nicely complement the more general framework of the multiplicity of drugs I have laid out in this thesis. Some of the literature I introduced in Chapter 2 adopts such a substance-specific approach to explore the multiplicity of drugs like methamphetamines (Dwyer & Moore, 2013) and methadone (Gomart, 2002, 2004). Further research into this direction, which could also pay attention to the different spaces in which a drug is practiced, would contribute considerably to understanding the complexity of drugs and drug use and allow for a more nuanced exploration of the risks and harm associated with different substances.

As my research indicates, the topic of drugs and drug use lends itself well to an STS analysis, as it sits at the intersection of scientific, political, and personal concerns and allows for an exploration of the entanglement of social and material order. Studying drugs also offers an interesting case for investigating the entanglement of bodies and minds with tools, technologies, and natural stimulants. The fact that some psychoactive substances are derived from plants and others are the product of sophisticated scientific procedures further allows for an exploration of the distinction between natural and 'artificial' products, or between nature and culture more generally. In that, STS research on illicit, but also licit, drugs may productively add to the literature on pharmaceuticals, food and eating, or selfoptimization and -alteration. Another perspective on drugs that can fruitfully be explored from an STS perspective are the legal and political discourses on drugs and related processes of regulation and legitimization. This includes how governments draw the line between the harm of a substance and its curative potential, which is a topic that has gained ground especially in recent years. These are only some examples of how studying drugs allows exploring the distinctions and binaries that society tends to establish, such as between the good and the harmful, the natural and the social, the material and the experiential, or the objective and the subjective. I hope that my thesis has shown the political and intellectual value of investigating drugs from an STS perspective and may thereby inspire further research on this topic.

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Appendix

A. Abbreviations and acronyms

3-MeO-PCP - A new psychoactive substance

AIDS - Acquired immunodeficiency, a chronic disease

ANT - Actor-Network-Theory

LSD - Lysergic acid diethylamide, a common psychedelic drug

MDMA - 3,4-Methylenedioxymethamphetamine, a recreational drug

NPS - New psychoactive substances

SMG - Suchtmittelgesetz, Austrian drug law

STS – Science and Technology Studies

Z6 - The youth center Z6 in Innsbruck, which offers drug checking among other drug-related interventions

B. Original quotes

Original quotes with 40 words or more, i.e., those that are depicted in block quotes

Emma, Nora, Costa, Max, and Julian are drug users. The names are pseudonyms.

Manuel and Maria are drug checkers.

Oberacher is the chemist in charge of organizing and conducting the drug tests.

- 1. "[...] wo ich es das erste Mal mitgekriegt habe, hä, da ziehen Menschen Drogen, da habe ich mir auch so gedacht: What the hack? Was ist mit denen los? Da hab ich richtig Herzrasen gespürt und das ist einfach, weil einem die Gesellschaft und alle möglichen einem eben einreden, dass das falsch ist!" (Emma, p. 55)
- 2. "Meine eigene Vorstellung davon war, dass es gefährlich ist, dass man davon einfach Abstand halten soll. Warum genau, das wurde, das war mir nicht klar, weil es halt einfach dieses generelle Bild, was man im Kopf von Drogen hat so: Nein, Achtung, Abstand halten, lieber nicht nehmen!! Ja, und als Bild von Drogenkonsumenten hat man, glaube ich, irgendsoeinen Heroinabhängigen in der Ecke, der alles tun würde, um seinen nächsten Schuss zu kriegen." (Costa, p. 56)
- 3. "[...] sehr viele persönliche Eigenschaften, die mit Drogenkonsum konn-, also irgendwie verbunden werden, so dieses, Weltoffenheit, dieses Entspannte, Abenteuerlustige, das sind so alles so eigentlich Persönlichkeitsmerkmale, die extrem stark mit Drogen im Zusammenhang stehen für viele. Und das finde ich manchmal ein bisschen fragwürdig, weil das nicht gleichbedeutend für mich mit diesen Persönlichkeitseigenschaften ist." (Nora, p. 59)
- 4. "[...] und habe mich dann da dementsprechend eingelesen und am Anfang war ich da eher abgeneigt dagegen und habe gedacht, ok, such einfach irgendwelche Argumente, mit denen ich gut Nein sagen kann, bin dann aber darauf gekommen, dass das eigentlich prinzipiell echt nicht so schlimm ist, wie es da so, wie es immer so aus der Schule oder von den ganzen, von den Stigmatas, wie man das mitkriegt." (Costa, p. 61)
- 5. "[...] je mehr ich mich damit halt beschäftigt habe, desto mehr bin ich drauf gekommen, dass unsere Gesellschaft, die so tut als wär Alkohol voll chillig, ja was kannst saufen wie sonst was, aber wenn du siehst wie irgendwelche anderen Drogen dann auch -, ja, bist du halt eher am Rand, so, was ist mit dir falsch und so. [...] aber nur weil ich jetzt kein Alkohol trinke und dafür was anderes, dann heißt das jetzt nicht, dass ich ungesünder unterwegs bin als die anderen." (Emma, p. 61)
- 6. "Ganz normaler Mensch, der halt wie jeder andere auch einfach im Leben steht und Drogen nimmt. So wie es halt die meisten machen, es gibt ja kaum wen, der nicht Alkohol trinkt. Aber halt, ich habe mich da, ich habe mir dann auch über, nicht nur Alkohol, sondern auch, ich nehme ja auch andere Substanzen und informiere mich dann dementsprechend darüber." (Costa, p. 62)

- 7. "Äh, und ich würd halt sagen, dass die Aufklärung im Sinne von, man will jemanden daran hindern, Drogen zu konsumieren, indem man Angst macht, ist sehr, sehr kritisch, weil wenn man dann als, vor allem als Jugendlicher draufkommt, dass das, was einem gesagt worden ist, nicht stimmt, nachher neigt man dazu, das auf alle Drogen zu beziehen, und wenn man das dann auf alle Drogen bezieht, dann kann das halt schon auch irgendwo sein, dass man hergeht und dann sehr sinnvolle Angstmache nicht mehr ernst nimmt." (Max, p. 63)
- 8. "Ja, die haben sich das einfach per Post schicken lassen, weil dort halt es mehr Auswahl gibt, weil die halt diese, diesen Kontakt hatten und dann gesagt haben, ok, wir bestellen dann halt gleich mehr, wenn wir wissen, dass es gut ist. Und das war jetzt die zweite Bestellung und bei der ersten hatte auch schon alles gepasst. Von der waren sie jetzt richtig begeistert und dann haben sie halt gesagt, hey, wenn du das das erste Mal konsumieren möchtest, ich glaube, wir hätten da das Richtige für dich da." (Nora, p. 66)
- 9. "Dann haben wir die eben genommen, aber da, ich habe da schon ganz leicht was gemerkt, dass ich mich halt einfach geistig anders fühle und Sachen mache, die ich nicht wirklich sonst machen würde, aber ich denke, dass das auf die Süßigkeiten, weil LSD ja ein recht instabiles Molekül ist, dass das sich da zersetzt hat und dementsprechend nicht mehr die Wirkung gehabt hat, die es eigentlich hätte haben sollen." (Costa, p. 67)
- 10. "Ja man hat sich schon immer Gedanken gemacht, aber es war einfach das Vertrauen nicht da, so. Auch in meinem Freundeskreis, wenn ich jetzt, jemand das nicht kennt und auch noch nie da war, na, traut der dem auch nicht drüber, weil sie immer wegen Bullen und so Angst haben. Das ist eigentlich der Hauptgrund, warum die Leute das nicht ganz so annehmen." (Julian, p. 71-72)
- 11. "Beim Drug Checking gehe ich hin, um zu wissen, was konsumiere ich eigentlich, aber das heißt nicht, dass ich irgendwas an meinem Verhalten ändern muss. Aber wenn man dann einmal da ist und, äh, das Drug Checking in Anspruch nimmt, kann man ja darüber reden, ob man vielleicht was ändern möchte. Aber man muss es nicht, und das ist, glaube ich, der Punkt gewesen." (Max, p. 74)
- 12. "Wir machen wirklich reine chemische Analytik, es ist zwar interessant zu lesen, wenn da steht, keine Ahnung, dem ist schlecht geworden, wenn er das genommen hat oder es ist, das ist eine schlechte Qualität, ist zwar nett, aber unterm Strich auf unsere Analytik hat es in dem Sinn keine, keine Auswirkung." (Oberacher, p. 77)
- 13. "[...] weil es halt, weil wir eigentlich praktisch ziemlich jedes Kokain wegen hoher Dosierung warnen oder in die Warnung kommt, aber wir haben uns dann eigentlich aus medizinischen Gründen dafür entschlossen, dass wir unten bleiben, bei den 40% bleiben." (Manuel, p. 80)
- 14. "The Loop testet, die machen zum Beispiel nur eine Warnung, wenn die Ecstasy über 200 hat. Weil wenn die jede Ecstasy warnen, die wir warnen ab 100 wenn die auf einem Festival jede warnen ab 100, testen sie alle, und dann kriegt, ist das nicht gut fürs Festival. Also das heißt,

das kann schon auch, sozusagen, ökonomische Faktoren haben. Das haben wir nicht, weil wir ja ganz anders finanziert sind. Also wir sind ja so öffentlich, also öffentlich finanziert, ähm, und da gibts schon unterschiedliche Sachen und das ist natürlich die Herausforderung im europäischen Kontext, dass die, dass die alle sehr unterschiedliche Realitäten haben." (Manuel, p. 81)

- 15. "Das sind, das ist dann Dosierung, das ist dann Mischkonsum, den man möglichst vermeiden sollte, [...] das ist die Regelmäßigkeit vom Konsum, das ist im besten Fall natürlich testen lassen, damit ich auch weiß, was ich konsumier, das sind Pausen einlegen, das sind so Sachen, dass man sich auch anschaut: wie gehts mir? [...] wenn es dann darum geht, dass der Konsum eine Funktion hat, zur Stressbewältigung, zur Emotionsregulierung, weil ich sonst nicht schlafen kann und so weiter und so fort, dann ist das schon problematischer." (Manuel, p. 82)
- 16. "Also manche wissen gar nichts, kommt mir oft vor, die haben einfach mal gehört, dass das toll ist, in irgendeiner Art und Weise, oder haben es vielleicht auch schonmal ein paarmal konsumiert und haben eigene Erfahrungen mitgemacht, aber haben weder Ahnung von Safer Use noch Harm Reduction noch, keine Ahnung, in dem Spektrum, Dosierung oder was das alles ausmachen könnte oder wie sich der hormonelle Haushalt in ihrem Kopf verändert oder, also die wissen da einfach gar nichts. Und manche wissen echt voll viel, die sind wirklich so, dass sie sagen: Ok, ich möchte ganz viele Sachen experimentieren, ich habe für mich entschieden, dass das für mich okay ist, ich möchte von dir nur wissen, ob es wirklich diese Substanz ist. Also wirklich so mit dem klaren Auftrag." (Maria, p. 83)
- 17. "Und das ist eben dann das Coole, dass dus dann sehr individualisieren kannst, dass du es mit, [...] den Erfahrungen und dem Wissensstand von der Person, [...], dich so pacen kannst, [...] und dementsprechend dann halt für die Person die Informationen so gibst, dass sie mit der was anfangen kann. Und so reflektierst und so die Fragen stellst, dass das für sie mit ihrem Wissensstand und ihrem Reflektionsstand ankommt." (Manuel, p. 83)
- 18. "Ok, warum ist es so, warum konsumierst du das, was siehst du dahinter, wieweit möchtest du da reingehen? Ist es experimentieren, warum experimentierst du mit deinem eigenen Leben, so quasi unter Anführungszeichen vielleicht? Oder ist es einfach, du brauchst einen Adrenalinkick? Willst du irgendwem irgendwas beweisen? Ist, was steckt da alles dahinter, es kann ja mega viel dahinterstecken, warum ein Mensch das macht." (Maria, p. 84)
- 19. "Also praktisch, sie haben eine Erklärung, und zwar eine wissenschaftlich fundierte Erklärung, weil wir erklären einfach, was passiert neuro-, neurologisch. Und, und was macht die Substanz in deinem Hirn. Und, das halt immer umsetzen, schau ja, genau deswegen warst du auch so happy, weil da das Serotonin voll angeflutet ist und das hat geballert wie blöde. Und da hast du das Serotonin von den nächsten drei Monaten ausgeschüttet, aber jetzt ist ja klar, dass du danach voll traurig und fertig bist, weil du hast ja kein Serotonin mehr. Und dementsprechend ist dann, sind Harm Reduction Maßnahmen sehr verständlich für die Leute, wenn wir dann sagen: Hey,

- sechs Wochen mindestens Pause, weil das brauchst du zum Erholen, damit das Serotonin wieder, also sich der Serotoninhaushalt wieder erholen kann." (Manuel, p. 85)
- 20. "[...] wenn Leute kommen und sagen entweder es ist wahnsinnig schlecht oder es ist wahnsinnig gut, die Substanz muss entweder wahnsinnig gut sein oder wahnsinnig schlecht sein. Und wir können dann anhand vom Ergebnis genau das Gegenteil sagen und dann eben, ähm mit ihnen reflektieren, dass es eben nicht nur auf die Substanz ankommt, sondern ganz, dass es ganz viel um einen selber geht. [...] grad wenn du die Klienten schon ein bisschen besser kennst und der sagt: Ich habe das beste Speed jetzt gebracht. Dann sage ich: Du, dein Speed, das sind 75% Koffein, ha! Dann ist das halt irgendwie lustig, es macht uns [...] schon ein bisschen Spaß [...] und das dann miteinander zu reflektieren und in die Tiefe zu gehen: So, was heißt denn das jetzt, weil schau, du kannst dir nicht vertrauen. [...] Und dann zu überlegen, wie ist das alles zustande gekommen, dass die Wirkung ausergekommen ist." (Manuel, p. 87-88)
- 21. "[...] natürlich gibt es gewisse Kategorien, aber Drogenkonsum ist halt etwas wahnsinnig Individuelles. [...]es ist wichtig, dass man flexibel bleibt und dann auch anerkennt, wenn man sagt, also für mich hat es jetzt die Wirkung oder mir tuts da und da gut, dass man nicht sagt: So ein Blödsinn, kann nicht sein. Sondern, dass man das halt auch so anerkennt, also es ist schon auch was ich sehr wichtig finde in unserer Arbeit, ein gegenseitiges Lernen. Also, dass wir natürlich schon gewisse, gewisses Wissen haben, gewisse Strategien haben, wie man jetzt Konsumreduktion angeht und so weiter und so fort, aber dass es auch ganz wichtig ist, dass wir immer anerkennen, dass akzeptiert wird, wenn der sagt: ne, für mich ist das so oder so." (Manuel, p. 92)
- 22. "Ja, mhh, ja, das ist, also ich muss persönlich sagen, ich habe ganz (!) viel gelernt, so im Sinne von wie Substanzen noch alle konsumiert werden können, oder was für Substanzen. Oder die Tatsache, also, es hat sich sicher auch mit der Zeit verändert, also NPS, das ist ins Unendliche gewachsen, in meinen Augen. Also es gibt unendlich viele Substanzen, wo ich selber nicht weiß, was es ist, wo ich wirklich dasitze, und mir denke, so, okay, das muss ich mir echt nachschauen." (Maria, p. 90)
- 33. "[...] und natürlich gibts auch immer mal wieder Konsumenten, die sich, und Konsumentinnen, die sich wahnsinnig gut auskennen, also gerade die Psychonautenecke, die dann am ehesten mit NPS experimentieren, die sind ja ganz gerne einfach einmal wirklich auch vom Studium her oder von ihrer Ausbildung her Chemiker oder Mediziner oder Pharmazeuten [...] und da lernen wir was. Und das kann dann schon auch mal passieren, dass wir, dass ich sage: Du, jetzt habe ich die und die Substanz beim Drug Checking gehabt, kannst du mir da noch was dazu erzählen? Und das finde ich dann auch cool, wenn ich das weiß, dass ich da Leute habe, dann ist das halt ein gegenseitiges Lernen, ihn freuts, und [...] uns freuts dann auch, weil dann ist es so ein gegenseitiges Ding." (Manuel, p. 91)

- 24. "Und wenn das da halt einfach nicht so gehandhabt wird, dass man sich informiert, sondern dass man es einfach nimmt. Dann finde ich, trägt die Person jetzt nicht wirklich eine Verantwortung dafür, sondern es ist einfach eher so ein bisschen, wie sie da herangeführt wird." (Nora, p. 95)
- 25. "[...] weil, beim Drug Checking wird man ja, eben wie gesagt, über die Risiken von eine Substanz informiert und das ist halt oft so, dass man keine Ahnung hat, was man die irgendwo kauft und dass da auch wirklich gesundheitsschädliche Substanzen drinnen sein können." (Costa, p. 95)

C. Interview guidelines

Exemplary guidelines for the user interviews

0 - Intro and Formalities

- Hi, cool, dass das geklappt hat.
- Duzen/ Siezen?
- Einwilligungserklärung/ Informed consent
 - alles freiwillig, kannst jederzeit abbrechen, auch im Nachhinein
 - Daten werden vertraulich behandelt
 - Die Daten werden anonymisiert, wenn du magst musst du deinen Name nicht preisgeben
- Wer bin ich?
 - Luca, mache meinen Master in den Sozialwissenschaften an der Uni Wien und interessiere mich für Drogenpolitik
 - Das Thema meiner Masterarbeit ist Drug Checking
- Ablauf des Interviews
 - wird ungefähr 1 Stunde/ 30 Min dauern, je nachdem
 - erst ein paar generelle Fragen, dann Fokus auf die Klientinnen, danach Fokus auf das Wissenschaftliche
 - wenn du dich unwohl fühlst bei einer Frage oder sie nicht beantworten willst, ist das natürlich kein Problem
- Fragen bevor wir starten?
 - jetzt oder jederzeit während des Interviews

1 - Narrative

PERSONAL INTRO

- Vielleicht können wir anfangen, indem du dich erstmal ein bisschen vorstellst. Wie alt bist du, was machst du so?
- Danke! In meiner Forschung geht es ja um das Thema Drogen. Vielleicht kannst du mir ein bisschen über deine eigene 'Drogengeschichte' erzählst! Was waren so deine ersten Erfahrungen mit Drogen? Wie hat sich dein Drogenkonsum verändert seitdem du das erste mal konsumiert hast?
- Wie ist dein jetziger Umgang mit Drogen? In welchem Kontext nimmst du Drogen? Was ist der Hauptgrund dafür, dass du Drogen nimmst? Wie häufig?
 - Was ist dir heute am wichtigsten beim Drogenkonsum, worauf achtest du? Und warum?
- Welche Drogen magst du am liebsten? Wieso?
- Hattest du auch schonmal ein echt schlechte Erfahrung?
- Wie würdest du deinen Drogenkonsum im Vergleich zu anderen Leute beschreiben? Was gibt es da für andere Typen?

DROGENARBEIT Z6

- Und wann und in welchem Kontext hast du zum ersten Mal vom Drug Checking der Drogenarbeit Z6 gehört?
- Und wie war dann deine erste Kontaktaufnahme? Vielleicht kannst du erzählen, wie es dazu kam
- Könntest du mir mal dein erstes Erlebnis mit Drug Checking bei Z6 beschreiben? Wie hat es dir gefallen, auch das Gespräch und der generelle Umgang. Wie war da so dein Eindruck?

- Hast du davor schonmal Drug Checking ausprobiert oder davon gehört, z.B. zu Hause oder über Freunde?
- Könntest du mal kurz beschreiben, wie das so abläuft, also der Prozess beim Drug Checking? Was wird genau gemacht, was wird angesprochen?
- Was sind so die Haupterkenntnisse, die du vom Drug Checking mitgenommen hast? Also, was hast du z.B. gelernt, was war wichtig für dich als Information?
- Würdest du sagen, dass du jetzt anders auf Drogen oder deinen eigenen Konsum schaust, als vor dem Drug Checking?
- Und hat sich dein Drogenkonsum dann tatsächlich auch irgendwie verändert seitdem?
- Bzw. welche Rolle hat das Drug Checking in deinem Konsum gespielt bzw. spielt es auch heute noch?
- Was glaubst du, welchen Unterschied würde es machen, wenn du schon früher von Drug Checking gewusst hättest?
- Wie oft nimmst du das Angebot von Drug Checking in Anspruch?
- Konsumierst du auch manchmal Drogen, die nicht getestet wurden? Wie ist da so dein Gefühl dabei?
- Oder hast du schonmal eine Substanz, die verunreinigt war oder überdosiert, trotzdem genommen?
- Was sind die Gründe dafür, dass du dir bei manchen Sachen denkst: "Hey, das lasse ich jetzt mal testen"?

2 - Drug User Identities

ANDERE DROGENNUTZERINNEN

- Wie würdest du deinen eigenen Konsum generell im Vergleich zu anderen DrogennutzerInnen beschreiben? Was gibt es da so für verschiedene Typen und wo siehst du dich selbst?
- Inwiefern würdest du bestimmte Drogen bestimmten Drogennutzertypen zuordnen gibt es da einen Zusammenhang?
- Wie ist das in deinem Freundeskreis? Wie gehen deine Freunde mit Drogen um und wie sehen die Drug Checking?
- Gibst du oft dein Wissen, was du vom Drug Checking hast, weiter?

RISIKO

- Im Kontext von Drogenkonsum redet man ja oft über Risiko. Was bedeutet der Begriff für dich, wie würdest du Risiko beschreiben?
- Denkst du beim Drogennehmen oft an Risiken und Gefahren? Welche Rolle spielt das und wie gehst du dann damit um?
- Was war und ist für dich persönlich am hilfreichsten oder wichtigsten um Risiken zu reduzieren? Bzw. was sind da so deine Strategien?
- Es gibt ja noch ganz viele andere Gesundheitsrisiken, denen man im Leben eben ausgesetzt wird, z.B. durch falsche Ernährung oder Sport. Ist das für dich ein Thema? Also versuchst du auch generell im Leben möglichst gesund und risikobewusst zu sein, oder spielt das für dich nicht so die Rolle?

3 - Drugs and their Effects

WISSEN/SCHAFT

- Könntest du mir einmal kurz beschreiben, was du unter "Drogen" verstehst?
- Und wie würdest du den Wirkmechanismus von verschiedenen Drogen erklären, z.B. so wie du es vielleicht auch einem Freund erklären würdest?
- Hat sich dein Verständnis von Drogen verändert, seitdem du Drug Checking gemacht hast? Inwiefern?
- Beim Drug Checking geht es dann ja um die chemische Zusammensetzung von Drogen. Könntest du mir mal ein bisschen erklären, wie du das so verstanden hast, was da gemacht wird und warum das wichtig ist?
- Wie ist so generell dein eigener Zugang zur Wissenschaft von Drogen? Ist dir diese Art von Wissen wichtig? Inwiefern verfolgst du die aktuelle Forschung zum Them Drogen selbst?
- Welche Rolle spielt Wissen oder Information über Substanzen, deren Effekte, oder die Zusammensetzung einer konkreten Pille für dich in deinem Drogenkonsum? Beschäftigst du dich viel damit?
- Gabs für dich so einen Aha-Moment durchs Drug Checking? Also hast du da mal was erfahren, was du wirklich noch nicht wusstest oder das einfach deinen Blick auf Drogen verändert hat? Erzähl mal!

QUELLEN

- Könntest du einmal kurz beschrieben, wie du so vorgehst, wenn du Infos über irgendwelche Drogen suchst?
- Inwiefern unterscheiden sich die Infos die du beim Drug Checking kriegst von anderen Ouellen?
- Kennst du auch Leute, die nicht so viel über Drogen und ihre Effekte wissen? Was hat das dann konkret für Auswirkungen?

BEZUG EIGENER KONSUM

- Inwiefern stimmt deine eigene Drogenerfahrung mit diesem wissenschaftlichen Modell zusammen? Hast du das Gefühl, dass die Infos, die du so beschrieben hast, darauf zutreffen, was du selbst erlebst?
- Hat sich irgendwas in deinem eigenen Verständnis von Drogen oder deinem Konsum verändert, seitdem du dich mit der Wissenschaft von Drogen auseinandergesetzt hast?
- Verwendest du z.B. manche Drogen nicht mehr, mischt weniger oder so?
- Würdest du allem, was du beim Drug Checking so an Infos kriegst zustimmen, oder gibt es auch ein paar Informationen oder Darstellung von Drogen, denen du widersprichst, z.B. was Dosierung oder Wirkung anbelangt?
 - Siehst du da manche Sachen kritisch?
 - Gibt es irgendwelche Infos, die du dir wünschen würdest, dass sie vom Z6 besprochen und angeboten werden?

DIE GRENZEN DER WISSENSCHAFT

- Gibt es manchmal Momente, in denen wissenschaftliche Erklärungen an ihre Grenzen kommen und z.B. andere Faktoren wichtiger werden?
- Wenn du etwas an der jetzigen wissenschaftlichen Perspektive kritisieren müsstest, was wäre das?

4 - Gesellschaft

EIGEN) VERANTWORTUNG

- Was würdest du sagen, wäre generell der beste Ansatz, auch gesellschaftlich, um Drogenkonsum generell sicherer zu machen?
 - Und bei wem liegt die Verantwortung, Drogenkonsum sicherer zu machen?
 - Oder sollten Leute eher selbst die Wahl haben, welches Risiko sie eingehen wollen?
- Würdest du generell sagen, dass sich die Leute eher selber um ihre Gesundheit kümmern sollten oder dass der Staat da in der Pflicht ist?
 - Oder sollten Leute eher selbst die Wahl haben, welches Risiko sie eingehen wollen?
- Gerade jetzt, wo es Angebote wie Drug Checking gibt, inwiefern kann man sagen, dass DrogennutzerInnen auch selbst dafür verantwortlich sind, einen sicheren Konsum zu gewährleisten?

WAHL/ CHOICE

- Viele Leute argumentieren ja für das Verbot von Drogen in dem sie sagen, dass man so Menschen, besonders Jugendliche schützen kann. Würdest du sagen, dass macht Sinn, da ist was dran?
- Beim Drug Checking lässt man den Leuten ja auch die Wahl, ob sie die getestete Droge nehmen oder nicht. Glaubst du, dass das gut so ist? Warum (nicht)?
- Manche Leute sagen ja auch, dass Drug Checking gefährlich ist, weil sich dann manche Leute in Sicherheit wiegen und nicht mehr aufpassen was würdest du dazu sagen?

GESELLSCHAFTLICHES BILD

- Wie würdest du generell beschreiben, wie sich die Gesellschaft einen Drogennutzer vorstellt? Was sind da so die Stereotype?
- Inwiefern könnte man sagen, das Drug Checking in dieses Bild passt oder es eher in Frage stellt?
- Wie sehen die Leute in deinem Umfeld generell deinen Drogenkonsum? Hat sich das mit Drug Checking verändert?
 - Würdest du sagen, Drogen nehmen ist relativ normal in deinem eigenen Umfeld?
- Hast du das Gefühl, dass sich seit der Einführung von Drug Checking die generelle Meinung von Drogen verändert hat? Z.B. in den Medien oder in deinem persönlichen Umfeld?

5 - Outro

- Danke für das Gespräch, noch Fragen?

D. English abstract

Drugs, and how to understand and regulate them, have been the subject of heated debates for decades. While prohibition is still the dominant drug policy framework, in recent years, the harm reduction approach gained ground. One increasingly recognized harm reduction measure is drug checking, which offers users to get their drugs tested to prevent harm from highly dosed, mislabeled, or adulterated substances. Puzzled by the seeming contradiction between this service and conventional drug policy, I set out to investigate the setup, processes, and practices of drug checking, how the understanding of drugs in this space differs from mainstream approaches, and whether participating in the service shapes how users know and consume drugs. I combined the framework of ontological politics with the concept of knowing spaces, which allowed me to conceptualize drugs as shaped by how people practice them in particular socio-material assemblages, thereby considering both their pharmacological properties and sociocultural meaning. The case site for my research is the drug checking facility Z6 in Innsbruck, Austria, where I conducted an ethnographic observation and eight semi-structured interviews with users, checkers, and a scientist. I learned that at the facility, drugs are known and practiced in a manner that differs from their illegal status in mainstream society and the social and pop-cultural connotations often ascribed to drugs by users. In this thesis, I argue that drug checking enables enacting drugs differently by first, creating a safe space where drugs and their users are not criminalized and stigmatized, second, by establishing a testing infrastructure through which drugs are scientifically analyzed, and third, by creating a space for mutual learning where checkers and users make sense of the test result together. Apart from sharing information about substances and safer use, the checkers emphasize the contextuality of drugs and the influence of one's personal situation, mood, and the context of use on a drug's effect and harmfulness. In that, drug checking makes room for safer use as it provides users with scientific information, encourages them to reflect on the psychosocial ramifications of their use, and thereby enables them to practice drugs in a contextual and safer manner.

E. German abstract

Drogen, und deren Regulierung, sind seit Jahrzehnten ein umstrittenes Thema. Während die Prohibition weiterhin der wichtigste drogenpolitische Ansatz ist, hat die Harm Reduction Bewegung in den letzten Jahren an Relevanz gewonnen. Eine zunehmend anerkannte Maßnahme ist das Drug Checking, das KonsumentInnen ermöglicht ihre Drogen testen zu lassen, um so dem Konsum hochdosierter, falsch deklarierter, und gestreckter Substanzen vorzubeugen. In dieser Masterarbeit untersuche ich den Aufbau, die Abläufe, und Praktiken einer Drug Checking Einrichtung, wie Drogen dort verstanden und gehandhabt werden, inwiefern sich dies vom gesellschaftlichen Umgang mit Drogen unterscheidet, und wie die Inanspruchnahme des Service das Drogenverständnis und Konsumverhalten von KlientInnen beeinflusst. Den theoretischen Rahmen der Arbeit bilden die Konzepte Ontological Politics und Knowing Spaces, die es mir ermöglichen, Drogen als dadurch konstituiert zu verstehen, wie Menschen sie in bestimmten sozio-materiellen Kontexten praktizieren, und somit deren pharmakologische Eigenschaften als auch psychosoziale Bedeutung zu berücksichtigen. Ich habe meine Forschung an und mit der Drug Checking Einrichtung Z6 in Innsbruck, Österreich umgesetzt und eine ethnografische Beobachtung sowie acht semi-strukturierte Interviews mit KonsumentInnen, Checkern, und einem Wissenschaftler durchgeführt. In meiner Arbeit zeige ich, dass Drogen in der Einrichtung anders gehandhabt werden als in der Mehrheitsgesellschaft, welche sie hauptsächlich als illegal und unmoralisch darstellt, oder unter KonsumentInnen, die Substanzen oft anhand ihrer sozialen und popkulturellen Bedeutung praktizieren. Drug Checking ermöglicht ein anderes Verständnis von Drogen, indem es erstens einen sicheren Raum bietet, in dem Drogen und KonsumentInnen nicht kriminalisiert und stigmatisiert werden, zweitens eine Testinfrastruktur bereitstellt, durch die Drogen wissenschaftlich analysiert werden, und drittens einen Ort gegenseitigen Lernens schafft, in dem die Checker und die KonsumentInnen gemeinsam die Bedeutung des Testergebnisses besprechen. In den persönlichen Beratungsgesprächen des Drug Checking teilen die Checker nicht nur Informationen über Safer Use und die Risiken und Wirkungsweisen von Substanzen, sondern betonen auch die Kontextabhängigkeit von Drogen, und den Einfluss der eigenen Stimmung, Konsummotivation, und des Konsumkontextes auf die Schädlichkeit und den Effekt einer Substanz. Dadurch, so argumentiere ich, ermöglicht Drug Checking KonsumentInnen nicht nur den Inhalt ihrer Drogen zu kennen, sondern regt sie auch dazu an, die psychosozialen Ursachen und Auswirkungen ihres eigenen Konsums zu reflektieren. Drug Checking schafft somit einen Raum, in dem Drogen auf eine kontextuelle Art und Weise verstanden und gehandhabt werden, die zu einem sichereren Konsum beiträgt.